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# Hillsboro School District: Population and Enrollment Forecasts, 2012-13 to 2025-26

Portland State University. Population Research Center

Charles Rynerson

Portland State University, rynerson@pdx.edu

Vivian Siu

Portland State University

Ryan Dann Portland State University

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



**APRIL, 2012** 

# HILLSBORO SCHOOL DISTRICT ENROLLMENT FORECAST UPDATE 2012-13 TO 2025-26

Prepared By

Population Research Center

Portland State University

**APRIL, 2012** 

### **Project Staff:**

Charles Rynerson, Research Associate, Principal Investigator
Vivian Siu, Research-GIS Analyst
Ryan Dann, Graduate Research Assistant

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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 analysis of population, housing and enrollment trends affecting the District in recent years, estimates of the impacts of housing development on Hillsboro School District (HSD) enrollment, and forecasts of district-wide enrollment forecasts annually from 2012-13 to 2025-26 and individual school forecasts annually from 2012-13 to 2016-17.

#### **Enrollment Trends**

K-12 enrollment in the HSD has been increasing annually for more than 20 years, but growth began to slow after 2007-08. During the 2001-02 to 2007-08 period, the District added an average of 276 K-12 students each year. In the four years since 2007-08, K-12 growth has averaged 137 students per year. The District enrolled 20,723 students in Fall 2011, an increase of 34 students (0.2 percent) from Fall 2010.

This year's growth of 34 students was smaller than in any previous year since the elementary and high school districts consolidated in the mid-1990s. District elementary schools experienced a net loss of 76 students (0.7 percent) in 2011-12, mostly due to a smaller incoming kindergarten grade replacing a larger sixth grade. Middle grades (7<sup>th</sup>-8<sup>th</sup>) were virtually unchanged, with a net loss of 1 student in 2011-12. District-wide enrollment in high school grades 9-12 increased by 111 students (1.8 percent).

#### 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 are residential and employment capacity based on vacant land and estimates of redevelopment and infill. We used Metro's capacity figures for land within the Urban Growth Boundary (UGB) as of October 2011 to generate rough estimates of residential capacity. Our estimate shows capacity for almost 9,800 additional housing units within the District on land within the UGB. Much of that capacity is on land that is already developed, and depending on the current intensity of development and

intentions of property owners some of that land is not likely to redevelop within the 14 year horizon of these forecasts. The level of future residential development is not simply a function of capacity (supply), but is also dependent on regional demand for housing, which has been weak following the recent recession.

Additions to the UGB that may more than double the District's buildable residential land were approved by Metro in October 2011 and are awaiting a May 2012 hearing by Oregon's Land Conservation and Development Commission. The two residential UGB expansion areas that will contribute to the District's capacity are the South Hillsboro area and the South Cooper Mountain area. These additions may bring district-wide residential capacity to more than 20,000 housing units, adequate to accommodate 20 or more years of growth at recent levels. Concept plans for these areas have not yet been completed; Table 13 on page 30 of this report presents the potential number of HSD students residing in South Hillsboro at build-out under one scenario of student generation and housing development.

#### **District-wide Enrollment Forecasts**

Under the middle series forecast, K-12 enrollment in HSD is expected to increase by 2,284 students (11 percent) between 2011-12 and 2025-26. For the 14 year period, elementary (K-6) enrollments grow by 989 students (nine percent). Growth expected for secondary enrollments amounts to 403 middle school and 892 high school students (13 and 14 percent growth rates respectively) over the 14 year period.

In the low series forecast, overall K-12 enrollment grows by 877 students (four percent). Elementary enrollments grow by 244 students (two percent), while secondary schools add 218 students at the middle school level and 415 students at the high school level (both seven percent).

In the high series forecast, overall K-12 enrollment grows by 3,571 students (17 percent). Elementary enrollments grow by 1,782 students (16 percent), while secondary schools add 555 students at the middle school level and 1,234 students at the high school level (18 and 20 percent growth rates respectively) over the 14 year period.

Table 1 summarizes historic and forecast K-12 enrollments for the District. Table 2 compares the historic and middle series forecast growth for the District by school level (elementary, middle, high). Appendix A contains detailed annual forecasts by grade levels for each of the three scenarios.

Table 1
Historic and Forecast K-12 Enrollment
Hillsboro School District

		Actual		Forecast			
	2001-02	2006-07	2011-12	2016-17	2021-22	2025-26*	
LOW SERIES	18,519	19,887	20,723	21,171	21,548	21,600	
5 year change*		1,368	836	448	377	<u>877</u>	
MID SERIES	18,519	19,887	20,723	21,722	22,547	23,007	
5 year change*		1,368	836	999	825	<u>2,284</u>	
HIGH SERIES	18,519	19,887	20,723	22,138	23,474	24,294	
5 year change*		1,368	836	1,415	1,336	<u>3,571</u>	

\*Note: 2025-26 column shows change for entire 14 year forecast period.

Source: Historic enrollment, Hillsboro School District; Enrollment forecasts, Population Research Center,

PSU, February 2012

Table 2
Historic and MIDDLE SERIES Forecast Enrollment
Hillsboro School District by School Level

		Actual		MID SERIES Forecast			
	2001-02	2006-07	2011-12	2016-17	2021-22	2025-26*	
K-6	10,520	10,956	11,292	11,732	11,975	12,281	
5 year change*		436	336	440	243	<u>989</u>	
7-8	2,711	2,972	3,164	3,369	3,497	3,567	
5 year change*		261	192	205	128	<u>403</u>	
9-12	5,288	5,959	6,267	6,621	7,075	7,159	
5 year change*		671	308	354	454	<u>892</u>	
Total 5 year change	18,519	19,887 1,368	20,723 <i>836</i>	21,722 <i>999</i>	22,547 <i>825</i>	23,007 2.284	

\*Note: 2025-26 column shows change for entire 14 year forecast period.

Source: Historic enrollment, Hillsboro School District; Enrollment forecasts, Population Research Center,

PSU, February 2012

#### **Individual School Forecasts**

Over the five-year forecast period for individual schools most elementary schools are expected to gain enrollment. Five elementary schools: Witch Hazel (gain of 118 students), Quatama (gain of 71 students), Minter Bridge (gain of 62 students), Rosedale (gain of 57 students), and Orenco (gain of 54 students), are expected to gain more than 50 students each from 2011-12 to 2016-17. During the same period, Butternut Creek, Lenox, Lincoln Street, and W.L. Henry are each forecast to gain between 20 and 50 students. While enrollments for almost all other elementary schools are forecast to remain stable (with a change no more than 20 students) in the next five years, Imlay is forecast to lose 43 students. Much of Imlay's loss is because its largest classes are currently in 4th, 5th, and 6th grades.

Middle school enrollment growth is greatest at Poynter and Evergreen, followed by South Meadows (gain of 84, 81, and 55 students, respectively) related to growth in feeder elementary schools, as well as potential new housing development. Brown is forecast to experience a loss of about 31 students. Enrollment at each of the four high schools is expected to increase in the next five years. Century and Glencoe High Schools' enrollment forecasts are fairly stable, while more growth is forecast for Liberty and Hillsboro High Schools. Table 22 on page 47 presents the enrollment forecasts for each school, grouped by school level (elementary, middle, and high).

#### INTRODUCTION

The Portland State University Population Research Center (PRC) has prepared enrollment forecasts for the Hillsboro School District (HSD) to serve the district's planning needs. The current study updates the work PRC conducted in 2006, providing a snapshot of the demographic, housing, and school enrollment patterns and trends. This report also presents district-wide enrollment forecasts for the 14 years from 2012-13 to 2025-26 and individual school forecasts for the five years from 2012-13 to 2016-17. Information sources include historic enrollment from HSD, demographic and housing data from the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, city and county population estimates produced by PRC, housing development data from the cities and counties, and residential capacity data from Metro.

The District's boundaries include more than 90 percent of the population of the City of Hillsboro, all of the City of North Plains, about 30 percent of the population of the City of Cornelius, and portions of unincorporated Washington County. The HSD portion of the city of Hillsboro in particular, accounts for 67.3 percent of the District's population; the city of North Plains and the city of Cornelius have small shares of 1.6 percent and 2.7 percent of the HSD population, respectively. Most of the District is within Washington County; portions in Multnomah County (with a population of four in the NE part of the district) and Yamhill County (with a population of 58 in the South part of the district) contain less than 0.1 percent of the District's total population.

In the next two sections, overviews of local area population and housing trends and historic HSD enrollment trends will be presented. Subsequent sections present the average number of HSD students by housing type and estimates of the number of potential students in the South Hillsboro plan area. Next, the methodology for the district-wide and individual school enrollment forecasts is described, followed by the results of the forecasts. The final section contains a brief discussion of the nature and accuracy of forecasts. Appendix A includes the district-wide enrollment forecast for the low, medium, and high growth scenarios; Appendix B contains a one page census profile for the District and each of its high school attendance areas.

#### POPULATION AND HOUSING TRENDS, 1990 to 2010

The HSD area experienced rapid population growth in the past two decades. Population grew from 69,574 in 1990 to 104,261 in 2000 and then increased further to 125,486 by 2010. The District's population grew by 50 percent between 1990 and 2000. Although the growth between 2000 and 2010 was not as robust as the growth between 1990 and 2000, total population within the HSD still grew by 20 percent. This growth rate was higher than the Portland metropolitan area's 15.5 percent growth in the decade. In 2010, more than 99 percent of HSD residents lived within the Washington County portion of the District (125,424 persons). Multnomah and Yamhill counties account for the rest (62 persons). The District's rate of population growth during the 2000s was slightly higher than the 18.9 percent growth experienced by Washington County overall, and greater than the 11.3 and 16.7 percent growth rates in Multnomah County and Yamhill County respectively.

Numeric and percentage growth in all of the areas shown in Table 3 was smaller in the 2000s than in the 1990s. The District added 21,225 residents between 2000 and 2010, compared with growth of 34,687 residents between 1990 and 2000.

Tables 4, 5, and 6 present additional population and housing characteristics for HSD based on the 2010 block level census data that was published in August 2011. Totals for 2010 are based on our aggregation of census block data to approximate the current District and elementary attendance area boundaries.

Table 3
City and Region Population, 1990, 2000, and 2010

				Avg. Annual Growth Rate			
	1990	2000	2010	1990-2000	2000-2010		
HSD Total <sup>1</sup>	69,574	104,261	125,486	4.1%	1.9%		
City of North Plains	972	1,605	1,947	5.1%	2.0%		
City of Hillsboro	37,520	70,186	91,611	6.5%	2.7%		
HSD Portion	N/A	N/A	84,396	N/A	N/A		
City of Cornelius	6,148	9,652	11,869	4.6%	2.1%		
HSD Portion	733	2,215	3,384	11.7%	4.3%		
HSD Unincorporated	N/A	N/A	35,759	N/A	N/A		
Multnomah County	583,887	660,486	735,334	1.2%	1.1%		
Washington County	311,554	445,342	529,710	3.6%	1.8%		
Portland-Vancouver- Beaverton MSA <sup>2</sup>	1,523,741	1,927,881	2,226,009	2.4%	1.4%		

<sup>1.</sup> School District population determined by PSU-PRC based on aggregation of census blocks within the HSD boundary. The 2010 HSD population published by the Census Bureau is 125,462.

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

Table 4
Hillsboro School District
Housing and Household Characteristics, 2000 and 2010

			2000 to 20	to 2010 Change	
	2000	2010	Number	Percent	
Housing Units	38,491	46,731	8,240	21%	
Households	36,129	44,348	8,219	23%	
Households with children under 18 share of total	15,270 <i>42%</i>	17,259 39%	1,989	13%	
Households with no children under 18 share of total	20,859 <i>58%</i>	27,089 <i>61%</i>	6,230	30%	
Household Population	102,987	123,809	20,822	20%	
Persons per Household	2.85	2.79	-0.06	-2%	

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

<sup>2.</sup> Portland-Vancouver-Beaverton MSA consists of Clackamas, Columbia, Multnomah, Washington, Yamhill (OR) and Clark and Skamania (WA) Counties.

Table 5
Hillsboro School District
Population and Households by Elementary Area, 2010 Census

	I	Population	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
BROOKWOOD	4,948	1,020	357	1,637	677	41%	4,928	3.01
BUTTERNUT CREEK	5,340	1,080	361	1,794	715	40%	5,271	2.94
EASTWOOD	6,821	1,418	641	2,163	985	46%	6,703	3.10
FARMINGTON VIEW	3,817	626	184	1,424	412	29%	3,806	2.67
FREE ORCHARDS	4,255	988	341	1,266	627	50%	4,169	3.29
GRONER	2,545	437	109	905	274	30%	2,519	2.78
IMLAY	4,675	1,116	354	1,513	757	50%	4,668	3.09
INDIAN HILLS	4,973	1,044	365	1,598	726	45%	4,924	3.08
JACKSON	4,893	1,039	383	1,753	743	42%	4,865	2.78
LADD ACRES	5,826	1,237	424	2,005	857	43%	5,773	2.88
LENOX	6,893	963	540	3,037	903	30%	6,891	2.27
LINCOLN STREET	4,922	866	401	1,814	617	34%	4,798	2.64
MCKINNEY	5,933	1,087	396	1,753	734	42%	5,157	2.94
MINTER BRIDGE	6,030	1,037	520	2,063	818	40%	5,922	2.87
MOOBERRY	4,883	1,054	413	1,605	669	42%	4,841	3.02
NORTH PLAINS	4,303	779	261	1,612	539	33%	4,274	2.65
ORENCO	7,195	1,082	636	2,894	1,004	35%	7,195	2.49
PATTERSON	4,475	1,156	336	1,427	721	51%	4,475	3.14
QUATAMA	7,207	958	714	3,079	966	31%	7,207	2.34
REEDVILLE	2,227	510	208	671	332	49%	2,183	3.25
ROSEDALE	3,543	764	280	1,232	529	43%	3,509	2.85
TOBIAS	4,680	984	354	1,587	686	43%	4,657	2.93
W.L. HENRY	4,144	922	392	1,174	575	49%	4,127	3.52
WEST UNION	6,001	751	327	2,704	616	23%	5,990	2.22
WITCH HAZEL	4,957	1,030	543	1,638	777	47%	4,957	3.03
High School Area								
CENTURY	27,721	5,971	2,066	9,168	4,073	44%	27,476	3.00
GLENCOE	28,781	5,915	2,118	9,625	3,981	41%	27,738	2.88
HILLSBORO	29,984	5,836	2,385	10,073	4,062	40%	29,768	2.96
LIBERTY	39,000	6,226	3,271	15,482	5,143	33%	38,827	2.51
HSD Total	125,486	23,948	9,840	44,348	17,259	39%	123,809	2.79

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

Table 6
Hillsboro School District
Housing Units by Elementary Area, 2010 Census

			H	Housing Units						
	Total						Percent			
	Housing			Vacancy	Owner	Renter	Owner			
Elementary Area	Units	Occupied	Vacant	Rate	Occupied	Occupied	Occupied			
BROOKWOOD	1,690	1,637	53	3.1%	1,286	351	79%			
BUTTERNUT CREEK	1,850	1,794	56	3.0%	1,391	403	78%			
EASTWOOD	2,235	2,163	72	3.2%	1,272	891	59%			
FARMINGTON VIEW	1,496	1,424	72	4.8%	1,137	287	80%			
FREE ORCHARDS	1,320	1,266	54	4.1%	1,036	230	82%			
GRONER	946	905	41	4.3%	704	201	78%			
IMLAY	1,551	1,513	38	2.5%	1,145	368	76%			
INDIAN HILLS	1,641	1,598	43	2.6%	1,354	244	85%			
JACKSON	1,858	1,753	105	5.7%	1,199	554	68%			
LADD ACRES	2,103	2,005	98	4.7%	1,531	474	76%			
LENOX	3,225	3,037	188	5.8%	1,313	1,724	43%			
LINCOLN STREET	1,911	1,814	97	5.1%	923	891	51%			
MCKINNEY	1,875	1,753	122	6.5%	1,081	672	62%			
MINTER BRIDGE	2,168	2,063	105	4.8%	1,585	478	77%			
MOOBERRY	1,689	1,605	84	5.0%	890	715	55%			
NORTH PLAINS	1,792	1,612	180	10.0%	1,269	343	79%			
ORENCO	3,093	2,894	199	6.4%	1,806	1,088	62%			
PATTERSON	1,475	1,427	48	3.3%	1,088	339	76%			
QUATAMA	3,285	3,079	206	6.3%	1,470	1,609	48%			
REEDVILLE	694	671	23	3.3%	347	324	52%			
ROSEDALE	1,302	1,232	70	5.4%	772	460	63%			
TOBIAS	1,634	1,587	47	2.9%	1,150	437	72%			
W.L. HENRY	1,247	1,174	73	5.9%	656	518	56%			
WEST UNION	2,943	2,704	239	8.1%	1,480	1,224	55%			
WITCH HAZEL	1,708	1,638	70	4.1%	1,060	578	65%			
High School Area										
CENTURY	9,473	9,168	305	3.2%	6,918	2,250	75%			
GLENCOE	10,231	9,625	606	5.9%	6,596	3,029	69%			
HILLSBORO	10,557	10,073	484	4.6%	7,200	2,873	71%			
LIBERTY	16,470	15,482	988	6.0%	8,231	7,251	53%			
HSD Total	46,731	44,348	2,383	5.1%	28,945	15,403	65%			

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

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 7 recently built single family homes are tabulated by current (2011-12) attendance area and year built to show the distribution of recent housing development. Information about multiple family developments was more challenging to gauge, since the construction period can span across multiple years and number of units were difficult to ascertain. Metro compiled such information from various government and commercial sources to determine the year each development was completed and verified the number of units. Multiple family developments were assigned to current attendance areas and are tabulated in Table 8.

Table 7
Hillsboro School District
New Single Family Homes By Attendance Area

	Year Built										2000-09
School	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Brookwood	21	13	30	65	20	20	2	7	2		180
Butternut Creek	28	4	14	30	1	15	10		1	1	104
Eastwood	6	5	5	4	6	4	10	3	1		44
Farmington View	5	14	4	10	9	9	20	17	5	4	97
Free Orchards		4	30	3	89	39	71	23	16		275
Groner	3	10	8	15	7	6	8	13	8	2	80
Imlay	38	45	22	56	6	4	6	1	1	1	180
Indian Hills	2			1		6	11	25	13	21	79
Jackson	191	76	2	1							270
Ladd Acres	66	58	51	59	45	61	21	35		3	399
Lenox		7	32	4	60	40	22	56			221
Lincoln Street		6	19	4	2	6	19	5	1		62
McKinney	11	54	166	11	73	21	42	23	10	1	412
Minter Bridge			5	87	191	318	174	45	7	3	830
Mooberry	38	14	18	9				4	1		84
North Plains	25	11	12	8	30	22	42	37	9	13	209
Orenco	159	146	217	180	43	20	146	126	18	15	1,070
Paul L. Patterson	8	17	7	14	33	117	60	94	41	3	394
Quatama	72	83	366	326	193	34	65	55	18	1	1,213
Reedville		1	10	21				15			47
Rosedale	60	76	3	1	1	2	42	7	3	2	197
Tobias	170	13	12	45	26	35	2	47	2	17	369
W.L. Henry	2	3	1	11		2	1		2		22
West Union	106	46	20	46	8	4	36	5	6	3	280
Witch Hazel		1	1	11	7	144	290	56	55	98	663
Brown	304	121	109	212	78	121	50	123	17	43	1,178
Evergreen	235	168	236	41	227	205	234	182	77	17	1,622
Poynter	381	301	658	569	310	102	279	249	44	19	2,912
South Meadows	91	117	52	200	235	501	537	145	82	109	2,069
Century	304	121	109	212	78	121	50	123	17	43	1,178
Glencoe	235	168	236	41	227	205	234	182	77	17	1,622
Hillsboro	91	117	52	200	235	501	537	145	82	109	2,069
Liberty	381	301	658	569	310	102	279	249	44	19	2,912
District	1,011	707	1,055	1,022	850	929	1,100	699	220	188	7,781

<sup>\*</sup>Note: Current (2011-12) attendance area.

Source: Metro Regional Land Information System, November 2011; tax lot information compiled by Metro from county tax assessors information includes year built and land use ("SFR"). Compiled by HSD attendance area by Population Research Center, PSU.

Table 8
Hillsboro School District
New Multiple Family Units By Attendance Area

		Year Built							2000-09		
School	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Brookwood	4			2							6
Butternut Creek											0
Eastwood				138			4				142
Farmington View											0
Free Orchards				14							14
Groner											0
Imlay											0
Indian Hills											0
Jackson											0
Ladd Acres	4		2								6
Lenox			104		180		46				330
Lincoln Street	6			3	7	91	6		15		128
McKinney		4	4	2			6	8			24
Minter Bridge			2								2
Mooberry			2	2							4
North Plains											0
Orenco	2		4								6
Paul L. Patterson			2								2
Quatama	210		106	370			618				1,304
Reedville		10									10
Rosedale											0
Tobias	56										56
W.L. Henry				2	4	10					16
West Union	74	96						55			225
Witch Hazel											0
Brown	60	10	2								72
Evergreen	6	4	6	19	7	91	12	8	15		168
Poynter	286	96	216	510	180		668	55			2,011
South Meadows	4		2	4	4	10					24
Century	60	10	2								72
Glencoe	6	4	6	19	7	91	12	8	15		168
Hillsboro	4		2	4	4	10					24
Liberty	286	96	216	510	180		668	55			2,011
											1
District	356	110	226	533	191	101	680	63	15	0	2,275

<sup>\*</sup>Note: Current (2011-12) attendance area.

Source: Multiple family development information compiled by HSD, supplemented by information from various sources to determine year that each development was completed. Compiled by HSD attendance area by Population Research Center, PSU.

#### **ENROLLMENT TRENDS**

K-12 enrollment in the HSD has been increasing annually for more than 20 years, but growth began to slow after 2007-08. During the 2001-02 to 2007-08 period, the District added an average of 276 K-12 students each year. In the four years since 2007-08, K-12 growth has averaged 137 students per year. The District enrolled 20,723 students in Fall 2011, an increase of 34 students (0.2 percent) from Fall 2010.

This year's growth of 34 students was smaller than in any previous year since the elementary and high school districts consolidated in the mid-1990s. District elementary schools experienced a net loss of 76 students (0.7 percent) in 2011-12, mostly due to a smaller incoming kindergarten grade replacing a larger sixth grade. Middle grades (7<sup>th</sup>-8<sup>th</sup>) were virtually unchanged, with a net loss of 1 student in 2011-12. District-wide enrollment in high school grades 9-12 increased by 111 students (1.8 percent).

The Portland region had a net loss of about 60,000 jobs between September 2008 and September 2011, slowing migration to the area and preventing the depressed housing market from recovering. Consequently, the District's typical enrollment gains due to an inflow of families with children have slowed in the last several years.

Table 8 summarizes the enrollment history for the District by grade level annually for the past 10 years, from 2001-02 to 2011-12. Prior to the decline in growth rates in recent years, the District typically added between 200 and 400 students and experienced growth rates of one to two percent each year. The enrollment growth rate has slowed in recent years to an average annual gain of about 100 students or less than one percent in the last four years. As shown in the table, HSD gained 1,368 students (7.4 percent) from 2001-02 to 2006-07 while the increase slowed to a gain of only 836 students (4.2 percent) from 2006-07 to 2011-12; growth for the entire ten year period was 2,204 students, or 11.9 percent.

Table 9
Hillsboro School District, Historic Enrollment, 2001-02 to 2011-12

												Cha 2001-02 t	Ū
Grade	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Number	Percent
K	1,469	1,531	1,513	1,553	1,549	1,591	1,522	1,595	1,577	1,690	1,554	85	6%
1	1,585	1,510	1,547	1,531	1,614	1,581	1,676	1,571	1,674	1,632	1,731	146	9%
2	1,480	1,571	1,513	1,555	1,535	1,606	1,613	1,701	1,561	1,669	1,599	119	8%
3	1,477	1,516	1,495	1,543	1,578	1,534	1,629	1,600	1,700	1,541	1,681	204	14%
4	1,496	1,452	1,503	1,514	1,543	1,569	1,537	1,611	1,604	1,661	1,520	24	2%
5	1,543	1,505	1,424	1,534	1,520	1,548	1,588	1,555	1,606	1,579	1,639	96	6%
6	1,470	1,502	1,464	1,453	1,500	1,527	1,554	1,586	1,573	1,596	1,568	98	7%
7	1,395	1,460	1,485	1,470	1,454	1,500	1,561	1,554	1,613	1,565	1,601	206	15%
8	1,316	1,415	1,489	1,498	1,450	1,472	1,535	1,573	1,571	1,600	1,563	247	19%
9	1,440	1,372	1,454	1,520	1,553	1,542	1,556	1,576	1,646	1,606	1,660	220	15%
10	1,387	1,397	1,353	1,433	1,495	1,512	1,578	1,541	1,546	1,631	1,587	200	14%
11	1,275	1,333	1,359	1,302	1,360	1,456	1,441	1,517	1,470	1,492	1,570	295	23%
12	1,085	1,190	1,240	1,286	1,266	1,307	1,373	1,368	1,409	1,427	1,426	341	31%
US*	101	96	112	151	145	142	14	0	0	0	24	-77	-76%
Total	18,519	18,850	18,951	19,343	19,562	19,887	20,177	20,348	20,549	20,689	20,723	2,204	12%
		331	101	392	219	325	290	171	201	140	34		
Annual chan	ge	1.8%	0.5%	2.1%	1.1%	1.7%	1.5%	0.8%	1.0%	0.7%	0.2%		
K-3	6,011	6,128	6,068	6,182	6,276	6,312	6,440	6,467	6,512	6,532	6,565	554	9%
4-6	4,509	4,459	4,391	4,501	4,563	4,644	4,679	4,752	4,782	4,836	4,727	218	5%
7-8	2,711	2,875	2,974	2,968	2,904	2,972	3,096	3,127	3,184	3,165	3,164	453	17%
9-12	5,288	5,388	5,518	5,692	5,819	5,959	5,962	6,002	6,071	6,156	6,267	979	19%
			2001-02 t	o 2006-07		2006-07 t	o 2011-12		2001-02 t	o 2011-12			
			5 yr. chg.	Pct.		5 yr. chg.	Pct.		10 yr. chg.	Pct.			
K-3			301	5.0%	-	253	4.0%		554	9.2%	-		
4-6			135	3.0%	-	83	1.8%		218	4.8%	-		
7-8			261	9.6%	-	192	6.5%		453	16.7%	-		
9-12			671	12.7%		308	5.2%		979	18.5%			
Total			1,368	7.4%		836	4.2%		2,204	11.9%			

#### Private and Home School Enrollment and District "Capture Rate"

School-age students attending private schools account for part of the gap between HSD enrollment and child population. The best source for private school enrollment by residence is Census data. The 2000 Census and the more recent American Community Survey (ACS) included questions about school enrollment by level and by type (public or private). In 2000, ten percent of K-12 students living in the District were enrolled in private schools. The ACS estimate from surveys conducted from 2005 to 2009 indicates that eleven percent of HSD K-12 students were enrolled in private schools. However, the ACS has a smaller sample size than the Census long form, thus with larger margins of error.

Another difference between HSD 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 Educational Service District (NWRESD), though the statistics kept by the NRESD 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 2010-11 there were 750 HSD residents registered as home schooled.<sup>2</sup> This accounts for less than four percent of total HSD K-12 residents. The number of home-schooled students has remained in the range between 600 and 800 each year since 2006.

For purposes of forecasting enrollment, the ratios of kindergarten and first grade public school enrollment to overall population in the corresponding ages are very important. These ratios are called "capture rates." Once a student is enrolled in the public schools in first grade, it is very likely that they will continue to be enrolled in subsequent grades, unless their family moves out of the District. Comparing HSD kindergarten and 1<sup>st</sup> grade enrollment in 1999-00 and 2000-01 to the 2000 Census and in 2009-10 and 2010-11 to the 2010 Census reveals little change in the District's capture rates. In both periods, HSD enrollment accounted for about 82 to 83 percent of the kindergarten-age population and 86 to 89 percent of the 1<sup>st</sup> grade age population. That

<sup>1</sup> Census 2000 Table P36 and ACS 2005-09 Table B14002 provide information on school enrollment by grade level and school type.

<sup>&</sup>lt;sup>2</sup> Northwest Regional Education Service District, 2010-11 Annual Report.

means that about 18 percent of kindergarten-age children and 11-13 percent of first grade age children were not enrolled in HSD schools. These children include students who were enrolled in private schools or charter schools, net transfers to and from other public school districts, home schooled students, or children not yet attending school, since school is not compulsory until age seven.

#### **Enrollment at Individual Schools**

Total enrollment at each of the District's schools and recent enrollment trends by school are shown in Table 10. Many of the changes are the result of boundary adjustments and schools opening or closing; all of the District's neighborhood secondary schools and most of its neighborhood elementary schools have different boundaries today than in the 2006-07 school year. However, boundaries have been stable since 2010-11, so the final column shows one year of change from 2010-11 to 2011-12.

In contrast to the overall enrollment increase in the District, enrollment at elementary schools declined between 2010-11 and 2011-12. Fifteen of the twenty-five elementary schools experienced declines in enrollment in the past year, while the other ten elementary schools had enrollment increases. The largest decline of 38 students occurred at Ladd Acres Elementary; the largest gain of 36 students was seen at W.L. Henry Elementary between 2010-11 and 2011-12.

Two of the District's middle schools gained enrollment and the other two middle schools lost enrollment between 2010-11 and 2011-12, ranging from an increase of 47 students at South Meadows Middle to a loss of 36 students at Evergreen. The other two middle schools had relatively stable enrollment, with a gain of four students for Brown and loss of four students at Poynter.

Enrollment at the HSD's four high schools ranges from about 1,400 to 1,700 students. Between 2010-11 and 2011-12, Liberty High gained 91 students, followed by Century High with a gain of 36 students. Glencoe High remained relative stable with a loss of five students in the past year. Among the four high schools, Hillsboro High had a small decline of 13 students in the past year.

Table 10
Enrollment History for Individual Schools, 2006-07 to 2011-12

			His	toric		ı	Change 2010-11
School	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2011-1
Brookwood	565	544	451	456	450	420	-30
Butternut Creek	456	447	448	417	403	420	17
David Hill	282	266	0	0	0	0	0
Eastwood	493	480	471	474	487	494	7
Farmington View	210	212	207	206	234	226	-8
Free Orchards	0	0	460	491	513	490	-23
Groner	195	197	193	171	184	156	-28
Imlay	670	646	625	596	591	563	-28
Indian Hills	374	382	452	458	449	447	-2
Jackson	628	619	539	529	525	514	-11
Ladd Acres	617	645	629	548	566	528	-38
Lenox	462	441	382	378	427	442	15
Lincoln Street	0	0	545	527	544	579	35
McKinney	549	541	509	494	497	516	19
Minter Bridge	439	434	450	429	465	495	30
Mooberry	510	528	509	502	499	485	-14
North Plains	322	342	314	314	316	291	-25
Orenco	574	591	424	447	505	532	27
Paul L. Patterson	734	739	511	542	546	525	-21
Peter Boscow	381	361	0	0	0	0	0
Quatama	0	0	518	634	538	541	3
Reedville	331	349	279	283	263	255	-8
Rosedale	0	0	0	351	351	367	16
Tobias	531	546	551	524	528	500	-28
	613	616		506	462	498	36
W.L. Henry			626				-2
West Union	385	405	319	309	305	303	l
Witch Hazel	515	600	651	552	552	534	-18
Elem. Schools	10,836	10,931	11,063	11,138	11,200	11,121	-79
Brown	910	903	916	875	839	843	4
Evergreen	769	878	879	859	843	807	-36
Poynter	768	801	777	672	698	694	-4
South Meadows	0	0	0	755	754	801	47
Thomas	563	540	548	0	0	0	
Middle Schools	3,010	3,122	3,120	3,161	3,134	3,145	11
Century	1,529	1,531	1,549	1,586	1,659	1,695	36
Glencoe	1,461	1,494	1,535	1,602	1,647	1,642	-5
Hillsboro	1,527	1,565	1,549	1,521	1,487	1,474	-13
Liberty	1,299	1,309	1,323	1,304	1,296	1,387	91
High Schools	5,816	5,899	5,956	6,013	6,089	6,198	109
			1				
Miller Ed. Center	71	70	51	63	77	75	-2
District-run Totals	19,733	20,022	20,190	20,375	20,500	20,539	39
City View Charter	154	155	158	174	189	184	-5
Grand Totals	19,887	20,177	20,348	20,549	20,689	20,723	34

#### **HOUSING AND ENROLLMENT**

Housing development can be an indirect indicator for population change in the future, but how many children are expected to live in future new homes and attend HSD schools? Since 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 2009, the average number of HSD K-12 students per single family home was 0.47, or almost 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.<sup>3</sup> Homes built in the 1990s had a higher K-12 average of 0.58 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 0.43 HSD K-12 students per home.

Table 11 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. Several hundred of these homes on smaller lots (less than 2,750 square feet) had been built by 2009, generating fewer HSD students per home

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District.

<sup>&</sup>lt;sup>3</sup> For example, 0.57 in the Canby School District, 0.66 in the North Clackamas School District, 0.48 in the Oregon City School District, 0.84 in the Sherwood School District, and 0.55 in the Tigard-Tualatin School

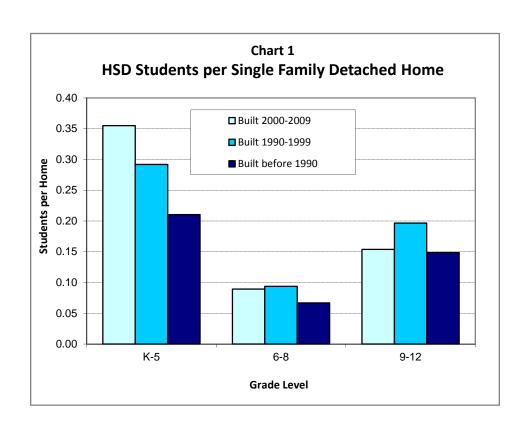
(0.31) than detached homes built at about the same time (0.60). Among other types of housing, rental apartments had higher student generation rates (0.41) than condominium units (0.17) or manufactured homes (0.22).

Table 11
Average Number of HSD Students per Home, Fall 2011
By Housing Type and Grade Level

		Grade	Level	
	K-6	7-8	9-12	K-12
Single family homes built 2000-2009	0.28	0.07	0.12	0.47
detached homes built 2000-2009	0.35	0.09	0.15	0.60
row homes built 2000-2009	0.19	0.05	0.08	0.31
Single family homes built 1990-1999	0.29	0.09	0.19	0.58
detached homes built 1990-1999	0.29	0.09	0.20	0.58
row homes built 1990-1999	0.20	0.04	0.07	0.32
Single family homes built before 1990	0.21	0.07	0.15	0.43
Condominiums	0.10	0.02	0.05	0.17
Apartments	0.25	0.06	0.11	0.41
density greater than 20 units/acre	0.15	0.03	0.06	0.24
density less than 20 units/acre	0.35	0.08	0.15	0.59
Manufactured homes in M.H. Parks	0.13	0.03	0.07	0.22

Source: Data compiled by PSU-PRC, using HSD student data and geographic shape files from Metro RLIS. Excludes single family homes with unknown year built and senior housing developments.

These same Fall 2011 student generation rates are shown in Chart 1, illustrating the "aging in place" that occurs in single family detached homes. On average, the homes that are 11-21 years old have fewer young children than homes that are less than 11 years old. As the older children graduate from high school, the homes built in the 1990s will soon have even 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 do the newer tract homes.



#### POTENTIAL RESIDENTIAL DEVELOPMENT

Between the 1990 and 2010 censuses the HSD had a net gain of more than 22,000 housing units, increasing the housing stock by more than 90 percent. HSD enrollment grew at a slower rate of 53 percent over the 20 year period. The difference is rooted in demographic factors common throughout Oregon and the U.S. including smaller families, an aging population, increases in the average age of childbearing and an increasing share of the population not having any children. Locally, Hillsboro's continued transformation from an agricultural outpost to a bedroom community to a major employment center has been accompanied by a more diverse housing stock that includes more row homes, condominiums, and high density apartments, all of which have fewer students per unit than the detached single family homes that once dominated the District's housing stock.

In spite of trends that may dilute its impact on school enrollment, new housing has been and will continue to be the greatest driver of long-term enrollment increases within HSD in the foreseeable future. The District added 7,000 students in the 20 year period from 1990 to 2010, and more than 9,000 current students reside in housing units built since 1990. Therefore, it is plausible that enrollment would have declined had there been no new housing built after 1990.

For the forecast, we must consider whether additional housing capacity can accommodate long-term growth trends. The availability of buildable residential land does not by itself ensure that new homes will be built, but a lack of residential capacity could constrain growth within the District's boundaries.

Metro is now in the final stages of allocating its most recent regional forecast to small areas called Transportation Analysis Zones (TAZs). Key inputs are residential and employment capacity based on vacant land and estimates of redevelopment and infill. We used Metro's capacity figures for land within the Urban Growth Boundary (UGB) as of October 2011 to generate rough estimates of residential capacity. Our estimate shows capacity for almost 9,800 additional housing units within the District on land within the UGB. Much of that capacity is on land that is already developed, and depending on the current intensity of development and intentions of property owners some of that land is not likely to redevelop within the 14 year

horizon of these forecasts. The level of future residential development is not simply a function of capacity (supply), but is also dependent on regional demand for housing, which has been weak following the recent recession.

Additions to the UGB that may more than double the District's buildable residential land were approved by Metro in October 2011 and are awaiting a May 2012 hearing by Oregon's Land Conservation and Development Commission. The two residential UGB expansion areas that will contribute to the District's capacity are the South Hillsboro area and the South Cooper Mountain area. These additions may bring district-wide residential capacity to more than 20,000 housing units, adequate to accommodate 20 or more years of growth at recent levels.

#### South Hillsboro UGB Expansion

In October 2011, Metro approved adding about 1,063 acres in the vicinity of Southwest 229th Avenue and Southeast Tualatin Valley Highway to the UGB.<sup>4</sup> This addition connects areas 69 and 71, which were added into the UGB in 2002, to form a 1,417-acre area in South Hillsboro that is designated for a mixed-use area development with 11,000 residential units.<sup>5</sup> Currently, outreach effort and planning refinements are underway to update citizens about the planning and project timeline, incorporate citizen input, and create planning alternatives. The South Hillsboro Community Plan alternatives, along with the Tualatin Valley Highway Corridor Plan, are pending review and adoption by the City Planning Commission.

Based on information from the South Hillsboro Community Plan Overview document released in Spring 2010, the South Hillsboro (SoHi) concept plan includes a mix of commercial, residential, public, and natural areas designed to be a "complete community" that is walkable and bikeable to various amenities. The plan provided a detailed map showing the proposed distribution of each residential and commercial category across the plan area as well as potential residential density per net acre. It indicated two high density residential development areas: Reed's

<sup>4</sup> Metro's 2011 growth management decision. http://www.oregonmetro.gov/index.cfm/go/by.web/id/37518

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Information based on sources including city of Hillsboro planning website, communication with city of Hillsboro planner, and news articles. <a href="http://www.ci.hillsboro.or.us/Planning/South Hillsboro.aspx">http://www.ci.hillsboro.or.us/Planning/South Hillsboro.aspx</a>
<a href="http://blog.oregonlive.com/hillsboro">http://blog.oregonlive.com/hillsboro</a> news/print.html?entry=/2012/03/south hillsboro will be develo.html

Crossing and Butternut Creek, with an overall residential density of at least 17 to 23 units per acre in the town/neighborhood center areas. The remainder of the SoHi Community residential area carried a housing density of at least 12 units per acre. The proposed build-out of these housing units would take about 20 years.

The Spring 2010 plan projected a scenario for SoHi that would include 8,451 housing units. Excluding potential housing units in a small portion of the plan area that is within the Beaverton School District, we estimated that 7,658 units would be accommodated within the HSD, based on the Spring 2010 scenario. When Metro adopted the UGB expansion, they set a capacity target of approximately 10,776 dwelling units in the plan area, in addition to current capacity. Detailed assumptions about the spatial distribution of additional housing capacity and the mix of housing types that might result from this higher density is not yet available, but it could add 20 to 30 percent to our estimate of potential student generation prepared below, which is based on the Spring 2010 plan.

We used the student generation estimates shown previously in Table 11 in the "Housing and Enrollment" section to develop assumptions about potential student generation within the South Hillsboro plan area, converting the housing types in our Fall 2011 analysis to the development types categorized in the South Hillsboro Community Plan Overview. Footnotes in Table 12 describe how the housing types were weighted to yield student generation rates for the South Hillsboro development types. The resulting rates range from 0.21 K-12 students per high density residential unit to 0.56 K-12 students per single family unit. For single family detached homes, rates are fairly predictable, typically in the range of 0.50 to 0.65 K-12 students per home in Portland suburban areas. Row homes and plexes typically house fewer children, on average, than do detached homes. The greatest variation in student generation occurs in high density housing, depending on the characteristics of individual developments. PRC has observed actual student generation rates ranging from 0.01 for market rate one bedroom condos to 2.00 for income restricted three and four bedroom rentals.

Table 12
Student Generation Rate Assumptions
New Urban Areas at 20 Year Build-out

	K-6	7-8	9-12	K-12
Development Type				
Town Center <sup>1</sup>	0.12	0.03	0.05	0.21
Neighborhood Center <sup>2</sup>	0.21	0.05	0.09	0.35
High Density Residential <sup>1</sup>	0.12	0.03	0.05	0.21
Medium Density Residential <sup>3</sup>	0.29	0.07	0.14	0.50
Single Family Residential <sup>4</sup>	0.31	0.09	0.17	0.56

- 1. 50% condos and 50% high density apartments
- $2.\ \ 10\%\,SF\,detached, 10\%\,SF\,attached, 30\%\,high\,density\,apartments, 25\%\,low\,density\,apartments, 25\%\,condos$
- 3. 45% SF detached, 20% SF attached, 10% high density apartments, 25% low density apartments
- 4. 90% SF detached, 10% SF attached

Source: PSU Population Research Center, based on rates observed in Fall 2011 in existing housing within Hillsboro School District.

The plan builds off the two major subareas of Reed's Crossing and Butternut Creek. Owners of each of these subareas prepared a detailed concept plan. Therefore, Table 13 presents the estimated number of students that SoHi development may add to HSD at build-out by subarea, development type and school grade level.

Once a new alternative is chosen and the Community Plan is updated, the rates shown in Table 12 may be used to update the estimates of potential student generation.

Table 13
Potential Hillsboro SD Students
South Hillsboro Built-out Under Spring 2010 Plan Scenario<sup>1</sup>

			•		
	Total Housing	K-6	7-8	9-12	K-12
	Units	Students	Students	Students	Students
Reeds Crossing	3,624	696	173	327	1,196
Town Center <sup>2</sup>	757	94	21	40	155
High Density Residential	1,432	178	40	76	294
Medium Density Residential	950	273	70	131	474
Single Family Residential	485	151	42	80	273
Butternut Creek	1,269	325	83	154	562
Neighborhood Center	234	49	12	22	83
High Density Residential	142	18	4	8	30
Medium Density Residential	836	240	62	115	417
Single Family Residential	57	18	5	9	32
South Hillsboro Plan Remainder <sup>3</sup>	2,765	828	224	424	1,476
High Density Residential	40	5	1	2	8
Medium Density Residential	1,024	294	76	141	511
Single Family Residential	1,701	529	147	281	957
Plan Area Totals within HSD	7,658	1,849	480	905	3,234

<sup>1.</sup> Based on rates observed in Fall 2011 in existing housing within Hillsboro School District and total housing units projections from "South Hillsboro Community Plan, SoHi Overview," Spring 2010. Ongoing planning will likely result in changes to the concept based on new alternatives.

#### South Cooper Mountain UGB Expansion

Also in October 2011, 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.<sup>6</sup> The City of Beaverton will start the planning for the South Cooper Mountain area as soon

<sup>2.</sup> Consistent with plan area total, 757 units in Reeds Crossing Town Center (Reeds Crossing table in planning document shows 778).

<sup>3.</sup> About 595 acres in HSD, excludes about 170 acres within Beaverton School District.

<sup>&</sup>lt;sup>6</sup> Metro's 2011 growth management decision. http://www.oregonmetro.gov/index.cfm/go/by.web/id/37518

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.<sup>7</sup>

Because detailed information about planned densities and concepts for the location of different land uses is not yet available, we are not able to create a student generation scenario for South Cooper Mountain with the type of detail presented above for South Hillsboro. About two thirds of the South Cooper Mountain UGB expansion lies within the southeastern part of the HSD, within the current Groner Elementary attendance area, while one third is in the Beaverton School District. If the housing capacity specified by Metro is spread evenly throughout the area, one might expect 3,000 or more new residential units within HSD at build-out. Once the City of Beaverton completes the planning for the area, the rates presented in Table 12 for South Hillsboro may be used to estimate the number of students at build-out in South Cooper Mountain.

<sup>&</sup>lt;sup>7</sup> Correspondence with City of Beaverton Community and Economic Development Department.

## **ENROLLMENT FORECASTS**

### **Potential Residential Development**

Residential development has slowed substantially in recent years compared to the first half of the 2000s due to the economic downturn. Housing development in the city of Hillsboro has been stagnant in the past few years. However, there are several active residential developments for which housing growth factors into enrollment forecasts for specific schools, and the UGB expansions described in the previous section may steer growth into the HSD when the regional demand for new housing rebounds.

The current study uses an objective approach to district-wide residential capacity analysis through the use of parcel-based residential capacity data used in Metro's current regional forecast allocation. Metro's residential capacity databases for land within the 2011 UGB indicate that there is capacity within the HSD for almost 9,800 housing units on vacant residential land or 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. In addition to this capacity, in October 2011 Metro approved the addition of more than 1,200 acres within the HSD for residential or mixed-use development. Plans for these areas in South Hillsboro and South Cooper Mountain have not been finalized, but based on our analysis of initial concepts and targets these new areas will add capacity for more than 10,000 housing units, for a total residential capacity within the HSD exceeding 20,000 units.

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<sup>&</sup>lt;sup>8</sup> Communications with planners, city of Hillsboro.

<sup>&</sup>lt;sup>9</sup> 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.

#### 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.

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.

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 2010.

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, likely due to the poor economy. Provisional and preliminary data indicate that birth totals fell more than seven percent in the U.S. and Oregon between 2007 and 2010.<sup>10</sup> The

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<sup>&</sup>lt;sup>10</sup> "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.

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.<sup>11</sup>

If women have been postponing births due to the economy, one may expect that birth rates would increase after the economy recovers. However, HSD birth rates for women under 30 are still relatively high compared with Washington County and Oregon. Birth rates for younger Hispanic women are expected to continue to fall as the share of the Hispanic population that is native U.S. born, rather than foreign born, increases and their educational attainment increases. Decreases among the HSD's Hispanic population may offset the increases attributable to economic recovery.

The total fertility rate (TFR) is an estimate of 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. The estimated TFR for the District fell from 2.30 in 2000 to 2.14 in 2010, and stabilizes at 2.14 by 2015 before declining further in the long run. Table 14 shows historic births from 2000 to 2009 as well as forecasts from 2010 until 2020, the period that will have an impact on the enrollment forecasts presented in this study.

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 HSD 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

<sup>&</sup>lt;sup>11</sup> "In a Down Economy, Fewer Births." Pew Research Center, Pew Social & Demographic Trends, October 2011.

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.

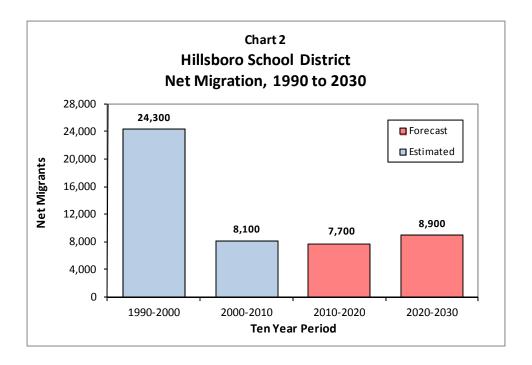
Estimated and	Forecast Births
Hillsboro Sci	nool District
/ear	Births
2000	1,921
2001	1,911
2002	1,892
2003	1,950
2004	1,942
2005	1,906
2006	1,975
007	2,099
2008	2,017
2009	2,022
2010 (fore cast)	1,853
2011 (forecast)	1,988
2012 (forecast)	1,979
2013 (forecast)	1,975
2014 (forecast)	1,984
2015 (forecast)	2,004
2016 (forecast)	2,016
.017 (forecast)	2,028
018 (forecast)	2,042
2019 (forecast)	2,053
2020 (forecast)	2,062

Source: 1990-2009 birth data from Oregon Center for Health Statistics allocated to HSD boundary by PSU-PRC. 2010-2020 forecasts, PSU-PRC.

### **Population Forecast**

Census data reported in the "Population and Housing Trends" section showed that the District added about 13,500 fewer residents in the 2000s than in the 1990s. The difference was primarily, if not entirely 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 24,300. In the 2000s, net migration fell to 8,100. 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 13,000 between 2000 and 2010, compared with about 10,000 between 1990 and 2000. Chart 2 shows the 2000 to 2010 estimates and 2010 to 2030 forecast of HSD population growth attributable to net migration. Net migration each decade is forecast to be similar to the level observed between 2000 and 2010.



The district-wide population forecast by age group is presented in Table 15. The forecast for 2020 population in the HSD is 144,104, an increase of 18,618 persons from the 2010 Census (1.4 percent average annual growth). By 2030, the HSD population is forecast to be 161,544, an increase of 36,058 persons from the 2010 Census (1.3 percent average annual growth).

School-age population (5 to 17) is forecast to increase at a slower rate than overall population. The 3,455 person growth in school-age population between 2010 and 2030 amounts to 14 percent growth in the 20 year period, or 0.7 percent annually. By 2030, the fastest growing age groups are the "baby boom" generation in its 70s and 80s. Population age 65 and older in the District is forecast to account for almost 40 percent of the District's growth between 2010 and 2030.

Table 15
Population by Age Group
Hillsboro School District, 2000 to 2030

	2000	2010	2020	2030	2010 to 20	30 Change
	Census	Census	Forecast	Forecast	Number	Percent
Under Age 5	9,078	9,840	10,206	10,764	558	5%
Age 5 to 9	8,533	9,440	9,986	10,588	602	6%
Age 10 to 14	7,824	9,218	10,017	10,541	524	5%
Age 15 to 17	4,625	5,290	5,867	6,274	406	7%
Age 18 to 19	2,803	3,023	3,340	3,437	97	3%
Age 20 to 24	7,272	7,429	8,553	9,192	639	7%
Age 25 to 29	9,475	10,162	10,569	11,775	1,206	11%
Age 30 to 34	9,511	11,084	10,772	12,208	1,436	13%
Age 35 to 39	8,770	10,204	10,674	11,241	567	5%
Age 40 to 44	8,372	9,166	10,917	10,666	-251	-2%
Age 45 to 49	7,325	8,536	10,100	10,633	533	5%
Age 50 to 54	6,202	8,201	9,041	10,756	1,715	19%
Age 55 to 59	4,319	7,119	8,335	9,867	1,532	18%
Age 60 to 64	2,816	5,918	7,759	8,540	781	10%
Age 65 to 69	2,105	3,956	6,383	7,481	1,098	17%
Age 70 to 74	1,849	2,440	5,086	6,665	1,579	31%
Age 75 to 79	1,466	1,808	3,222	5,132	1,910	59%
Age 80 to 84	1,040	1,351	1,680	3,484	1,804	107%
Age 85 and over	876	1,301	1,597	2,300	703	44%
Total Population	104,261	125,486	144,104	161,544	17,440	12%
Total age 5 to 17	20,982	23,948	25,870	27,403	1,532	6%
share age 5 to 17	20.1%	19.1%	18.0%	17.0%		

	2000-2010	2010-2020	2020-2030
Population Change	21,225	18,618	17,440
Percent	20%	15%	12%
Average Annual	1.9%	1.4%	1.1%

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

#### **District-wide Enrollment Forecast**

Chart 3 compares the historic and forecast number of births in the District with the historic and forecast number of HSD kindergarten students. Births correspond to kindergarten cohorts (September to August). Kindergarten classes of 2000-01 and 2001-02 were larger than corresponding births, a legacy of the huge in-migration that the District experienced in the late 1990s. Over the past 10 years, the gap between births and kindergarten enrollment has widened as a consequence of lower net migration. Kindergarten and first grade capture rates are shown in Table 16. The higher rates for first grade reflect the fact that additional residents enter HSD schools after completing their kindergarten year in private schools. However, kindergarten rates increase somewhat beginning in 2015-16 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.

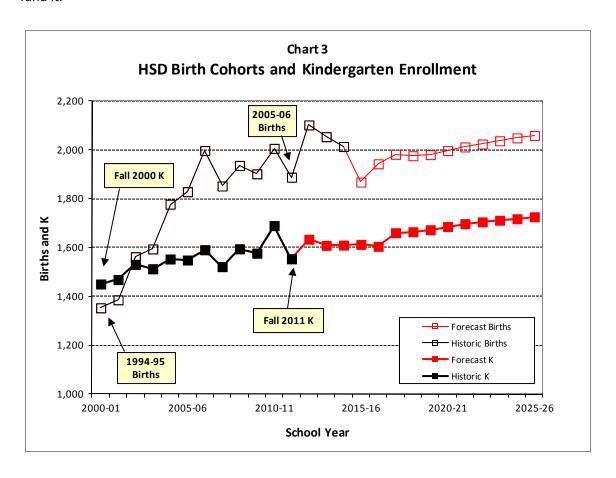


Table 16
Estimated and Forecast Capture Rates\*
Hillsboro School District

School Year	Kindergarten	Grade 1
1999-2000 (census)	0.823	0.861
2009-2010 (census)	0.816	0.890
2014-2015 (forecast)	0.815	0.845
2019-2020 (forecast)	0.830	0.850
2025-2026 (forecast)	0.830	0.850

<sup>\*</sup>The ratio of enrollment in District schools to total population in the District.

The District's growth was fueled by migration; there were consistently more households moving in than out. This migration contributed to the long-term growth in District births and subsequent kindergarten enrollments, as was shown in Chart 3. Table 17 illustrates how the HSD also gained students due to migration at most elementary and middle school grade levels. Over the 10 years between 1998-99 and 2008-09, average GPRs for each grade from 2<sup>nd</sup> to 8<sup>th</sup>

Table 17
Grade Progression Rates<sup>1</sup>
Hillsboro S.D. History and Forecast

•					
Grade Transition	10 Year Average: 1998-99 to 2008-09	3 Year Average: 2008-09 to 2011-12	Baseline (without the influence of migration)	Forecast Average: 2011-12 to 2021-22	
K-1	1.04	1.04	2	1.03	
1-2	1.01	0.99	1.00	1.00	
2-3	1.01	1.00	1.00	1.00	
3-4	1.00	0.99	1.00	1.00	
4-5	1.01	0.99	1.00	1.00	
5-6	1.00	1.00	1.00	1.00	
6-7	1.00	1.01	1.01	1.01	
7-8	1.01	1.00	1.01	1.01	
8-9	1.04	1.04	1.04	1.04	
9-10	0.99	0.99	1.00	1.00	
10-11	0.95	0.96	0.96	0.96	
11-12	0.94	0.95	0.97	0.97	

<sup>1.</sup> Ratio of enrollment in an individual grade to enrollment in the previous grade the previous year.

<sup>2.</sup> The enrollment forecast model uses capture rates for first grade; K-1 baseline GPRs are not used.

ranged from 1.00 to 1.01, indicating sustaining or growing enrollments due to migration at each grade level. For the most recent three years, from 2008-09 to 2011-12, there has been a small net loss at some grade levels attributable to net out-migration of school-age children. The forecast includes enrollment growth due to migration, but at slightly lower rates than in the 1998-99 to 2008-09 period.

Under the middle series forecast, K-12 enrollment in HSD is expected to increase by 2,284 students (11 percent) between 2011-12 and 2025-26. For the 14 year period, elementary (K-6) enrollments grow by 989 students (nine percent). Growth expected for secondary enrollments amounts to 403 middle school and 892 high school students (13 and 14 percent growth rates respectively) over the 14 year period.

In the low series forecast, overall K-12 enrollment grows by 877 students (four percent). Elementary enrollments grow by 244 students (two percent), while secondary schools add 218 students at the middle school level and 415 students at the high school level (both seven percent).

In the high series forecast, overall K-12 enrollment grows by 3,571 students (17 percent). Elementary enrollments grow by 1,782 students (16 percent), while secondary schools add 555 students at the middle school level and 1,234 students at the high school level (18 and 20 percent growth rates respectively) over the 14 year period.

Table 18, 19, and 20 contain summaries of grade level forecasts for the Hillsboro School District for selected years from 2012-13 to 2025-26. The forecasts are also summarized by grade level groups (K-6, 7-8, and 9-12). All three series predict growth each year, but there will be annual fluctuations that no forecast can anticipate; short term enrollment losses or other deviation from a specific forecast does not mean that the forecast trend will be inaccurate in the long run. Please see Appendix A for the detailed annual forecasts by grade levels at low, middle, and high series scenarios.

Table 18
Hillsboro School District
LOW SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Hist	toric			Forecast		
Grade	2010-11	2011-12	2012-13	2013-14	2015-16	2020-21	2025-26
K	1,690	1,554	1,611	1,593	1,593	1,638	1,598
1	1,632	1,731	1,595	1,667	1,643	1,675	1,642
2	1,669	1,599	1,725	1,592	1,646	1,673	1,648
3	1,541	1,681	1,593	1,721	1,661	1,670	1,653
4	1,661	1,520	1,672	1,588	1,585	1,612	1,661
5	1,579	1,639	1,511	1,667	1,713	1,619	1,667
6	1,596	1,568	1,631	1,507	1,580	1,630	1,667
7	1,565	1,601	1,576	1,643	1,676	1,648	1,683
8	1,600	1,563	1,609	1,587	1,531	1,680	1,699
9	1,606	1,660	1,617	1,668	1,717	1,665	1,706
10	1,631	1,587	1,651	1,612	1,642	1,799	1,710
11	1,492	1,570	1,514	1,579	1,592	1,592	1,647
12	1,427	1,426	1,513	1,463	1,491	1,620	1,595
Total <sup>1</sup>	20,689	20,699	20,818	20,887	21,070	21,521	21,576
	. 2	10	119	69	37	90	11
Annual c	change	0.0%	0.6%	0.3%	0.2%	0.4%	0.1%
и с	11 200	11 202	11 220	11 225	11 121	11 517	11 520
K-6	11,368	11,292	11,338	11,335	11,421	11,517	11,536
7-8	3,165	3,164	3,185	3,230	3,207	3,328	3,382
9-12	6,156	6,243	6,295	6,322	6,442	6,676	6,658

Population Research Center, Portland State University, March 2012.

Table 19
Hillsboro School District
MIDDLE SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Hist	toric			Forecast		
Grade	2010-11	2011-12	2012-13	2013-14	2015-16	2020-21	2025-26
K	1,690	1,554	1,634	1,609	1,613	1,686	1,726
1	1,632	1,731	1,609	1,696	1,676	1,718	1,765
2	1,669	1,599	1,729	1,612	1,682	1,717	1,763
3	1,541	1,681	1,597	1,732	1,712	1,720	1,760
4	1,661	1,520	1,680	1,599	1,624	1,672	1,760
5	1,579	1,639	1,519	1,682	1,742	1,687	1,756
6	1,596	1,568	1,637	1,521	1,610	1,712	1,751
7	1,565	1,601	1,582	1,656	1,712	1,733	1,771
8	1,600	1,563	1,615	1,600	1,564	1,780	1,796
9	1,606	1,660	1,623	1,682	1,753	1,755	1,815
10	1,631	1,587	1,657	1,625	1,677	1,883	1,826
11	1,492	1,570	1,521	1,593	1,628	1,671	1,775
12	1,427	1,426	1,520	1,477	1,526	1,707	1,719
Total <sup>1</sup>	20,689	20,699	20,923	21,084	21,519	22,441	22,983
	. 2	10	224	161	87	184	108
Annual c	hange	0.0%	1.1%	0.8%	0.4%	0.8%	0.5%
K-6	11,368	11,292	11,405	11,451	11,659	11,912	12,281
7-8	3,165	3,164	3,197	3,256	3,276	3,513	3,567
9-12	6,156	6,243	6,321	6,377	6,584	7,016	7,135

Population Research Center, Portland State University, March 2012.

Table 20
Hillsboro School District
HIGH SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Hist	toric			Forecast		
Grade	2010-11	2011-12	2012-13	2013-14	2015-16	2020-21	2025-26
K	1,690	1,554	1,647	1,624	1,626	1,748	1,857
1	1,632	1,731	1,623	1,712	1,699	1,773	1,893
2	1,669	1,599	1,734	1,629	1,705	1,762	1,885
3	1,541	1,681	1,602	1,741	1,737	1,761	1,876
4	1,661	1,520	1,685	1,610	1,657	1,712	1,870
5	1,579	1,639	1,524	1,694	1,776	1,735	1,854
6	1,596	1,568	1,643	1,532	1,643	1,779	1,839
7	1,565	1,601	1,588	1,668	1,747	1,810	1,849
8	1,600	1,563	1,621	1,611	1,594	1,869	1,870
9	1,606	1,660	1,628	1,691	1,780	1,850	1,887
10	1,631	1,587	1,662	1,632	1,695	1,972	1,905
11	1,492	1,570	1,525	1,599	1,640	1,740	1,867
12	1,427	1,426	1,524	1,483	1,535	1,767	1,818
Total <sup>1</sup>	20,689	20,699	21,006	21,226	21,834	23,278	24,270
	. 2	10	307	220	122	289	198
Annual c	hange	0.0%	1.5%	1.0%	0.6%	1.3%	0.8%
K-6	11,368	11,292	11,458	11,542	11,843	12,270	13,074
7-8	3,165	3,164	3,209	3,279	3,341	3,679	3,719
9-12	6,156	6,243	6,339	6,405	6,650	7,329	7,477

Population Research Center, Portland State University, March 2012.

### Enrollment at High School Feeder Systems

History and forecasts of the number of HSD students residing in each of the District's high school feeder areas are shown in Table 21. Boundaries have changed since 2005-06, but the figures are for comparable areas based on 2011-12 boundaries and students geocoded by home address. Forecasts are consistent with the district-wide middle series forecast.

The largest growth is forecast for the Hillsboro High area, which gains 1,103 students from 2011-12 to 2025-26, an annual average growth of 79 students. Long-run growth within the Hilhi area is largely due to ongoing development in areas such as Witch Hazel and new residential capacity added in South Hillsboro and South Cooper Mountain. The Liberty High feeder system gains 555 students by 2025-26, or 40 students annually, largely attributable to development ongoing near the Orenco Station area and additional capacity for large multi-family developments that exists near Orenco Station and east of Cornelius Pass Road.

Table 21
HSD Students by Resident High School Area<sup>1</sup>

Resident HS		Historic		Forecast		
<u>Century</u>	2005-06	2010-11	2011-12	2020-21	2025-26	
K-6	2,833	2,767	2,695	2,740	2,786	
7-8	787	845	855	893	897	
9-12	1,534	1,545	1,632	1,703	1,711	
Total	5,154	5,157	5,182	5,336	5,394	
Avg. Annl. Chg.		1	25	17	12	

···Cu				
Cha	nge			
2011-12 to 2025-26				
Number	Percent			
91	3%			
42	5%			
79	5%			
212	4%			
15				

<u>Glencoe</u>	2005-06	2010-11	2011-12	2020-21	2025-26
K-6	2,709	2,829	2,802	2,920	2,974
7-8	761	801	776	846	854
9-12	1,445	1,622	1,659	1,774	1,797
Total	4,915	5,252	5,237	5,540	5,625
Avg. Annl. Chg.		67	-15	34	17

Number	Percent
172	6%
78	10%
138	8%
388	7%
28	

<u>Hillsboro</u>	2005-06	2010-11	2011-12	2020-21	2025-26
K-6	2,483	2,701	2,729	3,049	3,210
7-8	672	741	797	797 933	
9-12	1,348	1,412	1,470	1,850	1,921
Total	4,503	4,854	4,996	5,832	6,099
Avg. Annl. Chg.		70	142	93	53

Number	Percent
481	18%
171	21%
451	31%
1,103	22%
79	

Liberty	2005-06	2010-11	2011-12	2020-21	2025-26
K-6	2,666	2,895	2,931	3,064	3,166
7-8	656	734	709	810	817
9-12	1,377	1,426	1,413	1,604	1,625
Total	4,699	5,055	5,053	5,478	5,608
Avg. Annl. Chg.		71	-2	47	26

Number	Percent
235	8%
108	15%
212	15%
555	11%
40	

Other <sup>2</sup>	2005-06	2010-11	2011-12	2020-21	2025-26
K-6	148	176	135	139	145
7-8	28	44	27	31	31
9-12	115	151	93	109	105
Total	291	371	255	279	281

Number	Percent
10	7%
4	15%
12	13%
26	10%

HSD Total	2005-06	2010-11	2011-12	2020-21	2025-26
K-6	10,839	11,368	11,292	11,912	12,281
7-8	2,904	3,165	3,164	3,513	3,567
9-12	5,819	6,156	6,267	7,040	7,159
Total	19,562	20,689	20,723	22,465	23,007
Avg. Annl. Chg.		225	34	194	108

Number	Percent
989	9%
403	13%
892	14%
2,284	11%
163	

- 1. Based on 2011-12 attendance area boundaries.
- $2. \ \textit{Primarily out-of-district addresses; also includes addresses that could not be matched.}$

Historic students - geocoded by PSU-PRC and controlled to published District totals; forecast -PSU-PRC.

#### **Individual School Forecasts**

Forecasts for individual schools are prepared under a scenario in which current boundaries and grade configurations remain constant, and are consistent with the district-wide middle series forecast. Of course, school districts typically respond to enrollment change in various ways that might alter the status quo, such as attendance area boundary changes, opening new schools, or offering special programs. 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.

The methodology for the individual school forecasts relies on unique sets of GPRs for each school, and kindergarten enrollment trends for elementary schools. Single year of age populations from the 2010 Census were utilized for kindergarten forecasts. Fluctuations and anomalies in the census data were adjusted based on historic kindergarten class sizes and characteristics of the individual attendance area. For example, areas with many apartments may consistently be home to more infants than five year olds. In such an area, the kindergarten class is not likely to grow in direct proportion to the cohorts counted in the Census. Subsequent grades were forecast using GPRs 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.

Active residential developments were taken into consideration for the individual school forecasts. They include the Solano Estates subdivision, Living Green apartments, and Arbor Pass condominiums (Quatama/Poynter/Liberty), Aspen Creek (formerly Dolores Park) and Village at Orenco (Orenco/Poynter/Liberty), and Parkside Estates, Oakhurst, and The Parks at Laurel Oaks (Witch Hazel/South Meadows/Hillsboro).

Over the five-year forecast period for individual schools most elementary schools are expected to gain enrollment. Five elementary schools: Witch Hazel (gain of 118 students), Quatama (gain of 71 students), Minter Bridge (gain of 62 students), Rosedale (gain of 57 students), and Orenco (gain of 54 students), are expected to gain more than 50 students from 2011-12 to 2016-17. During the same period, Butternut Creek, Lenox, Lincoln Street, and W.L. Henry are forecast to gain between 20 and 50 students. While enrollments for almost all other elementary schools are forecast to remain stable (with a change no more than 20 students) in the next five years, Imlay

is forecast to lose 43 students. Much of Imlay's loss is because its largest classes are currently in  $4^{th}$ ,  $5^{th}$ , and  $6^{th}$  grades.

Middle school enrollment growth is greatest at Poynter and Evergreen, followed by South Meadows (gain of 84, 81, and 55 students, respectively) related to growth in feeder elementary schools, as well as potential new housing development. Brown is forecast to experience a loss of about 31 students. Enrollment at each of the four high schools is expected to increase in the next five years. Century and Glencoe High Schools' enrollment forecast is fairly stable, while more growth is forecast for Liberty and Hillsboro High School. Table 22 presents the enrollment forecasts for each school, grouped by school level (elementary, middle, and high).

Table 22
Enrollment Forecasts for Individual Schools, 2012-13 to 2016-17

	Historic			Forecast			Chan;	
School	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2046	
Brookwood	420	420	401	414	429	432	12	
Butternut Creek	420	424	432	436	439	441	21	
Eastwood	494	499	505	514	513	510	16	
Farmington View	226	220	228	229	231	234	8	
Free Orchards	490	502	488	491	476	485	-5	
Groner	156	153	149	145	138	140	-16	
Imlay	563	559	539	531	520	520	-43	
Indian Hills	447	443	453	450	439	434	-13	
Jackson	514	518	514	505	497	508	-6	
Ladd Acres	528	521	507	512	515	519	-9	
Lenox	442	443	459	465	470	481	39	
Lincoln Street	579	601	600	619	630	615	36	
McKinney	516	507	503	510	513	516	0	
Minter Bridge	495	506	521	549	550	557	62	
Mooberry	485	482	484	482	472	467	-18	
North Plains	291	293	295	298	300	301	10	
Orenco	532	554	546	562	580	586	54	
Paul L. Patterson	525	539	528	543	524	517	-8	
Quatama	541	554	578	602	605	612	- <u>°</u> 71	
-	255	264	273	273	271	274	19	
Reedville								
Rosedale	367	374	386	392	400	424	57	
Tobias	500	490	481	485	484	489	-11	
W.L. Henry	498	518	538	552	555	541	43	
West Union	303	297	293	299	310	309	6	
Witch Hazel	534	557	582	609	630	652	118	
Elem. Schools	11,121	11,238	11,283	11,467	11,491	11,564	443	
Brown	843	849	817	818	829	812	-31	
Evergreen	807	809	862	865	866	888	81	
Poynter	694	713	740	725	745	778	84	
South Meadows	801	797	802	777	801	856	55	
Middle Schools	3,145	3,168	3,221	3,185	3,241	3,334	189	
Century	1,695	1,711	1,767	1,751	1,736	1,742	47	
Glencoe	1,642	1,648	1,599	1,599	1,644	1,655	13	
Hillsboro	1,474	1,481	1,530	1,570	1,633	1,618	144	
Liberty	1,387	1,436	1,436	1,511	1,526	1,537	150	
High Schools	6,198	6,276	6,332	6,431	6,539	6,552	354	
		II				,		
Miller Ed. Center	75	75	75	75	75	75	0	
District-run Totals	20,539	20,757	20,911	21,158	21,346	21,525	986	
City View Charter	184	190	197	197	197	197	13	
Grand Totals	20,723	20,947	21,108	21,355	21,543	21,722	999	

 ${\it Historic - Hillsboro School \, District; Forecast - Population \, Research \, Center, \, Portland \, State \, University, \, February \, 2012.}$ 

#### FORECAST ERROR AND UNCERTAINTY

In general, forecast error varies according to the size of the population being forecast and the length of the forecast horizon. The smaller the population and the longer the forecast period, the larger the error is likely to be. In particular, the school level forecasts depend on assumptions about the distribution of housing and population growth in small areas within the District, so their relative errors are likely greater than the District-wide forecast error. The forecasts should be used as only one of many tools in the planning process.

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 23 on the next page, actual HSD enrollment by grade level in Fall 2011 is compared with the 2011-12 forecasts that were prepared six years earlier. As a measure of average error for grade levels enrollments, the mean absolute percent error (MAPE) is included in the table.

Forecasts prepared in 2006 did not foresee the economic recession that impacted the District towards the end of the past decade. Effects of economic downturn such as slower housing development and migration that affected enrollment were not anticipated in the previous study. As seen in Table 23, the Fall 2011 forecast enrollment for HSD was higher than actual enrollments, particularly at the elementary level for which growth is dependent on the inmigration of young families.

The K-12 total medium growth forecast prepared in 2006 was 1,266 students (6.1 percent) higher than actual enrollment. The MAPE for all K-12 enrollments was 5.9%. However, examination of the forecast error by grade level reveals that the forecast errors were generally higher for elementary school grade levels than for middle or high school grade levels. Except for kindergarten, second, and fourth grades, the six year forecast prepared in 2006 was within ten percent of actual enrollment at all other grade levels.

Table 23
Fall 2011 Enrollment Compared to Previous
Forecasts By Grade Level<sup>1</sup>

		Medium Growth Forecast						
Grade	Actual	Fcst.	Diff.	Error				
K	1,554	1,759	205	13.2%				
1	1,731	1,792	61	3.5%				
2	1,599	1,796	197	12.3%				
3	1,681	1,777	96	5.7%				
4	1,520	1,755	235	15.5%				
5	1,639	1,721	82	5.0%				
6	1,568	1,673	105	6.7%				
7	1,601	1,675	74	4.6%				
8	1,563	1,612	49	3.1%				
9	1,660	1,696	36	2.2%				
10	1,587	1,615	28	1.8%				
11	1,570	1,533	-37	-2.4%				
12	1,426	1,424	-2	-0.1%				
US	24	161	137	570.8%				
Total	20,723	21,989	1,266	6.1%				
MAPE <sup>2</sup>				5.9%				

<sup>1.</sup> Forecast for 2011-12 by PSU-PRC, baseline 2005-06 enrollment.

<sup>2.</sup> Mean absolute percent error for individual grades.

## **APPENDIX A**

# DISTRICT-WIDE ENROLLMENT FORECAST 2012-13 to 2025-26 LOW, MIDDLE, AND HIGH SERIES SCENARIOS

# Table A1 Hillsboro School District LOW SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Actual	Forecast													
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	1,554	1,611	1,593	1,587	1,593	1,583	1,638	1,638	1,638	1,638	1,633	1,624	1,615	1,607	1,598
1	1,731	1,595	1,667	1,649	1,643	1,629	1,619	1,675	1,675	1,675	1,675	1,670	1,660	1,652	1,642
2	1,599	1,725	1,592	1,664	1,646	1,641	1,627	1,616	1,672	1,673	1,672	1,673	1,667	1,657	1,648
3	1,681	1,593	1,721	1,589	1,661	1,644	1,639	1,624	1,613	1,670	1,670	1,670	1,670	1,664	1,653
4	1,520	1,672	1,588	1,717	1,585	1,658	1,641	1,634	1,620	1,612	1,668	1,668	1,668	1,668	1,661
5	1,639	1,511	1,667	1,584	1,713	1,582	1,655	1,636	1,630	1,619	1,611	1,667	1,667	1,667	1,667
6	1,568	1,631	1,507	1,663	1,580	1,710	1,579	1,651	1,632	1,630	1,619	1,611	1,667	1,667	1,667
7	1,601	1,576	1,643	1,519	1,676	1,593	1,724	1,591	1,664	1,648	1,646	1,635	1,627	1,683	1,683
8	1,563	1,609	1,587	1,655	1,531	1,690	1,606	1,737	1,603	1,680	1,664	1,662	1,651	1,643	1,699
9	1,660	1,617	1,668	1,646	1,717	1,589	1,754	1,666	1,802	1,665	1,744	1,728	1,726	1,715	1,706
10	1,587	1,651	1,612	1,664	1,642	1,714	1,586	1,749	1,662	1,799	1,661	1,741	1,724	1,722	1,710
11	1,570	1,514	1,579	1,542	1,592	1,573	1,641	1,517	1,674	1,592	1,722	1,591	1,666	1,650	1,647
12	1,426	1,513	1,463	1,527	1,491	1,541	1,522	1,586	1,467	1,620	1,539	1,666	1,539	1,612	1,595
US*	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Total	20,723	20,842	20,911	21,030	21,094	21,171	21,255	21,344	21,376	21,545	21,548	21,630	21,571	21,631	21,600
A	-1	119	69	119	64	77	84	89	32	169	3	82	-59	60	-31
Annual	cnange	0.6%	0.3%	0.6%	0.3%	0.4%	0.4%	0.4%	0.1%	0.8%	0.0%	0.4%	-0.3%	0.3%	-0.1%
K-3	6,565	6,524	6,573	6,489	6,543	6,497	6,523	6,553	6,598	6,656	6,650	6,637	6,612	6,580	6,541
4-6	4,727	4,814	4,762	4,964	4,878	4,950	4,875	4,921	4,882	4,861	4,898	4,946	5,002	5,002	4,995
7-8	3,164	3,185	3,230	3,174	3,207	3,283	3,330	3,328	3,267	3,328	3,310	3,297	3,278	3,326	3,382
9-12	6,267	6,319	6,346	6,403	6,466	6,441	6,527	6,542	6,629	6,700	6,690	6,750	6,679	6,723	6,682

K-3	
4-6	
7-8	
9-12	
Total	

2011-12 to 2016-17								
5 yr. chg. Pct.								
-68	-1.0%							
223	4.7%							
119	3.8%							
174	2.8%							
448	2.2%							

2016-17 to 2021-22							
Pct.							
2.4%							
-1.1%							
0.8%							
3.9%							
1.8%							

2011-12 to 2021-22							
Pct.							
1.3%							
3.6%							
4.6%							
6.7%							
4.0%							

2011-12 to 2025-26								
14 yr. chg	Pct.							
-24	-0.4%							
268	5.7%							
218	6.9%							
415	6.6%							
877	4.2%							

\*Note: "US" is ungraded secondary; included in grade 9-12 totals.

Population Research Center, Portland State University, February 2012

# Table A2 Hillsboro School District MIDDLE SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Actual	Forecast													
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	1,554	1,634	1,609	1,610	1,613	1,605	1,661	1,665	1,673	1,686	1,698	1,705	1,712	1,718	1,726
1	1,731	1,609	1,696	1,674	1,676	1,658	1,651	1,708	1,712	1,718	1,732	1,744	1,751	1,758	1,765
2	1,599	1,729	1,612	1,704	1,682	1,684	1,667	1,659	1,716	1,717	1,723	1,737	1,749	1,756	1,763
3	1,681	1,597	1,732	1,619	1,712	1,690	1,693	1,675	1,666	1,720	1,721	1,727	1,741	1,753	1,760
4	1,520	1,680	1,599	1,736	1,624	1,717	1,695	1,698	1,679	1,672	1,726	1,727	1,733	1,747	1,760
5	1,639	1,519	1,682	1,604	1,742	1,629	1,723	1,700	1,703	1,687	1,680	1,735	1,736	1,742	1,756
6	1,568	1,637	1,521	1,688	1,610	1,749	1,636	1,730	1,707	1,712	1,695	1,688	1,744	1,745	1,751
7	1,601	1,582	1,656	1,542	1,712	1,633	1,774	1,659	1,754	1,733	1,738	1,720	1,713	1,770	1,771
8	1,563	1,615	1,600	1,678	1,564	1,736	1,656	1,799	1,682	1,780	1,759	1,764	1,746	1,739	1,796
9	1,660	1,623	1,682	1,670	1,753	1,633	1,814	1,730	1,879	1,755	1,857	1,835	1,841	1,822	1,815
10	1,587	1,657	1,625	1,689	1,677	1,761	1,641	1,822	1,737	1,883	1,759	1,861	1,839	1,845	1,826
11	1,570	1,521	1,593	1,566	1,628	1,617	1,699	1,582	1,756	1,671	1,811	1,692	1,790	1,769	1,775
12	1,426	1,520	1,477	1,551	1,526	1,586	1,576	1,655	1,541	1,707	1,624	1,760	1,645	1,740	1,719
US*	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Total	20,723	20,947	21,108	21,355	21,543	21,722	21,910	22,106	22,229	22,465	22,547	22,719	22,764	22,928	23,007
Annuala	h a n a a	224	161	247	188	179	188	196	123	236	82	172	45	164	79
Annual c	nange	1.1%	0.8%	1.2%	0.9%	0.8%	0.9%	0.9%	0.6%	1.1%	0.4%	0.8%	0.2%	0.7%	0.3%
K-3	6,565	6,569	6,649	6,607	6,683	6,637	6,672	6,707	6,767	6,841	6,874	6,913	6,953	6,985	7,014
4-6	4,727	4,836	4,802	5,028	4,976	5,095	5,054	5,128	5,089	5,071	5,101	5,150	5,213	5,234	5,267
7-8	3,164	3,197	3,256	3,220	3,276	3,369	3,430	3,458	3,436	3,513	3,497	3,484	3,459	3,509	3,567
9-12	6,267	6,345	6,401	6,500	6,608	6,621	6,754	6,813	6,937	7,040	7,075	7,172	7,139	7,200	7,159

K-3	
4-6	
7-8	
9-12	
Total	

2011-12 to 2016-17								
5 yr. chg. Pct.								
72	1.1%							
368	7.8%							
205	6.5%							
354	5.6%							
999	4.8%							

2016-17 to 2021-22									
5 yr. chg. Pct.									
237	3.6%								
6	0.1%								
128	3.8%								
454	6.9%								
825	3.8%								

2011-12 t	2011-12 to 2021-22									
10 yr. chg Pct.										
309	4.7%									
374	7.9%									
333	10.5%									
808	12.9%									
1,824	8.8%									

2011-12 to 2025-26							
14 yr. chg	Pct.						
449	6.8%						
540	11.4%						
403	12.7%						
892	14.2%						
2,284	11.0%						

Population Research Center, Portland State University, February 2012

<sup>\*</sup>Note: "US" is ungraded secondary; included in grade 9-12 totals.

# Table A3 Hillsboro School District HIGH SERIES Enrollment Forecasts, 2012-13 to 2025-26

	Actual	Forecast													
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	1,554	1,647	1,624	1,629	1,626	1,623	1,684	1,698	1,719	1,748	1,777	1,795	1,816	1,836	1,857
1	1,731	1,623	1,712	1,694	1,699	1,676	1,673	1,737	1,750	1,773	1,803	1,832	1,851	1,872	1,893
2	1,599	1,734	1,629	1,724	1,705	1,712	1,690	1,687	1,750	1,762	1,785	1,815	1,845	1,864	1,885
3	1,681	1,602	1,741	1,642	1,737	1,719	1,727	1,705	1,700	1,761	1,773	1,796	1,826	1,857	1,876
4	1,520	1,685	1,610	1,758	1,657	1,755	1,738	1,746	1,721	1,712	1,774	1,786	1,809	1,839	1,870
5	1,639	1,524	1,694	1,627	1,776	1,676	1,776	1,759	1,765	1,735	1,726	1,789	1,801	1,824	1,854
6	1,568	1,643	1,532	1,712	1,643	1,796	1,696	1,798	1,778	1,779	1,749	1,740	1,804	1,816	1,839
7	1,601	1,588	1,668	1,564	1,747	1,678	1,836	1,734	1,836	1,810	1,811	1,781	1,772	1,837	1,849
8	1,563	1,621	1,611	1,701	1,594	1,783	1,713	1,875	1,768	1,869	1,843	1,844	1,813	1,804	1,870
9	1,660	1,628	1,691	1,687	1,780	1,670	1,869	1,796	1,963	1,850	1,955	1,928	1,929	1,897	1,887
10	1,587	1,662	1,632	1,700	1,695	1,790	1,680	1,880	1,805	1,972	1,858	1,964	1,936	1,937	1,905
11	1,570	1,525	1,599	1,575	1,640	1,636	1,728	1,622	1,814	1,740	1,901	1,791	1,893	1,866	1,867
12	1,426	1,524	1,483	1,559	1,535	1,600	1,596	1,686	1,581	1,767	1,695	1,852	1,745	1,844	1,818
US*	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Total	20,723	21,030	21,250	21,596	21,858	22,138	22,430	22,747	22,974	23,302	23,474	23,737	23,864	24,117	24,294
Annual c	hango	307	220	346	262	280	292	317	227	328	172	263	127	253	177
Alliual C	iiaiige	1.5%	1.0%	1.6%	1.2%	1.3%	1.3%	1.4%	1.0%	1.4%	0.7%	1.1%	0.5%	1.1%	0.7%
K-3	6,565	6,606	6,706	6,689	6,767	6,730	6,774	6,827	6,919	7,044	7,138	7,238	7,338	7,429	7,511
4-6	4,727	4,852	4,836	5,097	5,076	5,227	5,210	5,303	5,264	5,226	5,249	5,315	5,414	5,479	5,563
7-8	3,164	3,209	3,279	3,265	3,341	3,461	3,549	3,609	3,604	3,679	3,654	3,625	3,585	3,641	3,719
9-12	6,267	6,363	6,429	6,545	6,674	6,720	6,897	7,008	7,187	7,353	7,433	7,559	7,527	7,568	7,501

K-3	
4-6	
7-8	
9-12	
Total	

2011-12 to 2016-17				
5 yr. chg. Pct.				
165	2.5%			
500	10.6%			
297	9.4%			
453	7.2%			
1,415	6.8%			

2016-17 to 2021-22				
5 yr. chg.	Pct.			
408	6.1%			
22	0.4%			
193	5.6%			
713	10.6%			
1336	6.0%			

2011-12 t	2011-12 to 2021-22				
10 yr. chg	Pct.				
573	8.7%				
522	11.0%				
490	15.5%				
1,166	18.6%				
2,751	13.3%				

2011-12 to 2025-26				
14 yr. chg	Pct.			
946	14.4%			
836	17.7%			
555	17.5%			
1,234	19.7%			
3,571	17.2%			

Population Research Center, Portland State University, February 2012

<sup>\*</sup>Note: "US" is ungraded secondary; included in grade 9-12 totals.

## **APPENDIX B**

## **2000 AND 2010 CENSUS PROFILES**

## 2000 and 2010 Census Summary Hillsboro School District

Area approximation based on census block geography

POPULATION BY AGE GROUP	200	00	2010		2000 to 2010 Change		
Total population	104,414	100.0%	125,486	100.0%	21,072	20.2%	
Under age 18	30,112	28.8%	33,788	26.9%	3,676	12.2%	
Age 18 and over	74,302	71.2%	91,698	73.1%	17,396	23.4%	
AREA AND DENSITY							
Land Area - Sq. Mi. (Source: 2010 Census)	204	1.2	204	1.2	0.0	0.0%	
Persons per square mile	511	l.3	614	1.5	103.2	20.2%	
HOUSING OCCUPANCY STATUS							
Total housing units	38,550	100.0%	46,731	100.0%	8,181	21.2%	
Occupied	36,182	93.9%	44,348	94.9%	8,166	22.6%	
Vacant or Seasonal	2,368	6.1%	2,383	5.1%	15	0.6%	
HISPANIC OR LATINO AND RACE <sup>1</sup>							
Total population	104,414	100.0%	125,486	100.0%	21,072	20.2%	
Hispanic or Latino (of any race)	16,727	16.0%	26,533	21.1%	9,806	58.6%	
Not Hispanic or Latino	87,687	84.0%	98,953	78.9%	11,266	12.8%	
White Alone	77,618	74.3%	82,427	65.7%	4,809	6.2%	
Black or African American Alone	917	0.9%	1,822	1.5%	905	98.7%	
American Indian and Alaska Native Alone	618	0.6%	713	0.6%	95	15.4%	
Asian Alone	5,863	5.6%	9,492	7.6%	3,629	61.9%	
Native Hawaiian and Other Pacific Islander Alone	255	0.2%	485	0.4%	230	90.2%	
Some Other Race Alone	122	0.1%	212	0.2%	90	73.8%	
Two or More Races	2,294	2.2%	3,802	3.0%	1,508	65.7%	
RACE ALONE OR IN COMBINATION <sup>2</sup>							
Total population	104,414	100.0%	125,486	100.0%	21,072	20.2%	
White	86,677	83.0%	99,489	79.3%	12,812	14.8%	
Black or African American	1,507	1.4%	3,002	2.4%	1,495	99.2%	
American Indian and Alaska Native	1,540	1.5%	2,585	2.1%	1,045	67.9%	
Asian	7,031	6.7%	11,942	9.5%	4,911	69.8%	
Native Hawaiian and Other Pacific Islander	597	0.6%	1,167	0.9%	570	95.5%	
Some Other Race	10,529	10.1%	13,210	10.5%	2,681	25.5%	

<sup>1.</sup> Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1. Tabulated by Population Research Center, Portland State University, September 2011.

<sup>2.</sup> Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

# 2000 and 2010 Census Summary Hillsboro H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	200	00	2010		2000 to 2010 Change	
Total population	24,880	100.0%	29,984	100.0%	5,104	20.5%
Under age 18	7,236	29.1%	8,221	27.4%	985	13.6%
Age 18 and over	17,644	70.9%	21,763	72.6%	4,119	23.3%
AREA AND DENSITY						
Land Area - Sq. Mi. (Source: 2010 Census)	74	.9	74	.9	0.0	0.0%
Persons per square mile	332	2.0	400	).1	68.1	20.5%
HOUSING OCCUPANCY STATUS						
Total housing units	8,482	100.0%	10,557	100.0%	2,075	24.5%
Occupied	8,085	95.3%	10,073	95.4%	1,988	24.6%
Vacant or Seasonal	397	4.7%	484	4.6%	87	21.9%
HISPANIC OR LATINO AND RACE <sup>1</sup>						
Total population	24,880	100.0%	29,984	100.0%	5,104	20.5%
Hispanic or Latino (of any race)	6,147	24.7%	8,564	28.6%	2,417	39.3%
Not Hispanic or Latino	18,733	75.3%	21,420	71.4%	2,687	14.3%
White Alone	17,588	70.7%	18,607	62.1%	1,019	5.8%
Black or African American Alone	130	0.5%	277	0.9%	147	113.1%
American Indian and Alaska Native Alone	124	0.5%	155	0.5%	31	25.0%
Asian Alone	420	1.7%	1,386	4.6%	966	230.0%
Native Hawaiian and Other Pacific Islander Alone	47	0.2%	147	0.5%	100	212.8%
Some Other Race Alone	24	0.1%	41	0.1%	17	70.8%
Two or More Races	400	1.6%	807	2.7%	407	101.8%
RACE ALONE OR IN COMBINATION <sup>2</sup>						
Total population	24,880	100.0%	29,984	100.0%	5,104	20.5%
White	20,192	81.2%	23,641	78.8%	3,449	17.1%
Black or African American	264	1.1%	528	1.8%	264	100.0%
American Indian and Alaska Native	337	1.4%	672	2.2%	335	99.4%
Asian	573	2.3%	1,887	6.3%	1,314	229.3%
Native Hawaiian and Other Pacific Islander	107	0.4%	287	1.0%	180	168.2%
Some Other Race	4,021	16.2%	4,315	14.4%	294	7.3%

<sup>1.</sup> Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1. Tabulated by Population Research Center, Portland State University, September 2011.

<sup>2.</sup> Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

# 2000 and 2010 Census Summary Glencoe H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	200	00	2010		2000 to 2010 Change		
Total population	24,457	100.0%	28,781	100.0%	4,324	17.7%	
Under age 18	7,211	29.5%	8,033	27.9%	822	11.4%	
Age 18 and over	17,246	70.5%	20,748	72.1%	3,502	20.3%	
AREA AND DENSITY							
Land Area - Sq. Mi. (Source: 2010 Census)	90	.2	90	.2	0.0	0.0%	
Persons per square mile	271	l.1	319	0.0	47.9	17.7%	
HOUSING OCCUPANCY STATUS							
Total housing units	8,633	100.0%	10,231	100.0%	1,598	18.5%	
Occupied	8,148	94.4%	9,625	94.1%	1,477	18.1%	
Vacant or Seasonal	485	5.6%	606	5.9%	121	24.9%	
HISPANIC OR LATINO AND RACE <sup>1</sup>							
Total population	24,457	100.0%	28,781	100.0%	4,324	17.7%	
Hispanic or Latino (of any race)	4,120	16.8%	5,947	20.7%	1,827	44.3%	
Not Hispanic or Latino	20,337	83.2%	22,834	79.3%	2,497	12.3%	
White Alone	18,853	77.1%	20,178	70.1%	1,325	7.0%	
Black or African American Alone	168	0.7%	329	1.1%	161	95.8%	
American Indian and Alaska Native Alone	177	0.7%	205	0.7%	28	15.8%	
Asian Alone	648	2.6%	1,289	4.5%	641	98.9%	
Native Hawaiian and Other Pacific Islander Alone	32	0.1%	60	0.2%	28	87.5%	
Some Other Race Alone	19	0.1%	33	0.1%	14	73.7%	
Two or More Races	440	1.8%	740	2.6%	300	68.2%	
RACE ALONE OR IN COMBINATION <sup>2</sup>							
Total population	24,457	100.0%	28,781	100.0%	4,324	17.7%	
White	20,888	85.4%	23,720	82.4%	2,832	13.6%	
Black or African American	264	1.1%	576	2.0%	312	118.2%	
American Indian and Alaska Native	405	1.7%	643	2.2%	238	58.8%	
Asian	860	3.5%	1,744	6.1%	884	102.8%	
Native Hawaiian and Other Pacific Islander	93	0.4%	157	0.5%	64	68.8%	
Some Other Race	2,716	11.1%	3,188	11.1%	472	17.4%	

<sup>1.</sup> Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1. Tabulated by Population Research Center, Portland State University, September 2011.

<sup>2.</sup> Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

# 2000 and 2010 Census Summary Liberty H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	200	00	2010		2000 to 2010 Change		
Total population	30,097	100.0%	39,000	100.0%	8,903	29.6%	
Under age 18	7,844	26.1%	9,497	24.4%	1,653	21.1%	
Age 18 and over	22,253	73.9%	29,503	75.6%	7,250	32.6%	
AREA AND DENSITY							
Land Area - Sq. Mi. (Source: 2010 Census)	34	.6	34	.6	0.0	0.0%	
Persons per square mile	870	).6	1,12	8.1	257.5	29.6%	
HOUSING OCCUPANCY STATUS							
Total housing units	12,831	100.0%	16,470	100.0%	3,639	28.4%	
Occupied	11,659	90.9%	15,482	94.0%	3,823	32.8%	
Vacant or Seasonal	1,172	9.1%	988	6.0%	-184	-15.7%	
HISPANIC OR LATINO AND RACE <sup>1</sup>							
Total population	30,097	100.0%	39,000	100.0%	8,903	29.6%	
Hispanic or Latino (of any race)	4,047	13.4%	7,161	18.4%	3,114	76.9%	
Not Hispanic or Latino	26,050	86.6%	31,839	81.6%	5,789	22.2%	
White Alone	22,513	74.8%	25,747	66.0%	3,234	14.4%	
Black or African American Alone	358	1.2%	763	2.0%	405	113.1%	
American Indian and Alaska Native Alone	183	0.6%	202	0.5%	19	10.4%	
Asian Alone	2,104	7.0%	3,639	9.3%	1,535	73.0%	
Native Hawaiian and Other Pacific Islander Alone	91	0.3%	144	0.4%	53	58.2%	
Some Other Race Alone	50	0.2%	73	0.2%	23	46.0%	
Two or More Races	751	2.5%	1,271	3.3%	520	69.2%	
RACE ALONE OR IN COMBINATION <sup>2</sup>							
Total population	30,097	100.0%	39,000	100.0%	8,903	29.6%	
White	25,147	83.6%	31,036	79.6%	5,889	23.4%	
Black or African American	576	1.9%	1,148	2.9%	572	99.3%	
American Indian and Alaska Native	473	1.6%	700	1.8%	227	48.0%	
Asian	2,468	8.2%	4,473	11.5%	2,005	81.2%	
Native Hawaiian and Other Pacific Islander	197	0.7%	395	1.0%	198	100.5%	
Some Other Race	2,365	7.9%	3,124	8.0%	759	32.1%	

<sup>1.</sup> Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1. Tabulated by Population Research Center, Portland State University, September 2011.

<sup>2.</sup> Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

# 2000 and 2010 Census Summary Century H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	200	00	2010		2000 to 2010 Cha	
Total population	24,980	100.0%	27,721	100.0%	2,741	11.0%
Under age 18	7,821	31.3%	8,037	29.0%	216	2.8%
Age 18 and over	17,159	68.7%	19,684	71.0%	2,525	14.7%
AREA AND DENSITY						
Land Area - Sq. Mi. (Source: 2010 Census)	4.	5	4	5	0.0	0.0%
Persons per square mile	5,56	2.2	6,17	2.5	610.3	11.0%
HOUSING OCCUPANCY STATUS						
Total housing units	8,604	100.0%	9,473	100.0%	869	10.1%
Occupied	8,290	96.4%	9,168	96.8%	878	10.6%
Vacant or Seasonal	314	3.6%	305	3.2%	-9	-2.9%
HISPANIC OR LATINO AND RACE <sup>1</sup>						
Total population	24,980	100.0%	27,721	100.0%	2,741	11.0%
Hispanic or Latino (of any race)	2,413	9.7%	4,861	17.5%	2,448	101.5%
Not Hispanic or Latino	22,567	90.3%	22,860	82.5%	293	1.3%
White Alone	18,664	74.7%	17,895	64.6%	-769	-4.1%
Black or African American Alone	261	1.0%	453	1.6%	192	73.6%
American Indian and Alaska Native Alone	134	0.5%	151	0.5%	17	12.7%
Asian Alone	2,691	10.8%	3,178	11.5%	487	18.1%
Native Hawaiian and Other Pacific Islander Alone	85	0.3%	134	0.5%	49	57.6%
Some Other Race Alone	29	0.1%	65	0.2%	36	124.1%
Two or More Races	703	2.8%	984	3.5%	281	40.0%
RACE ALONE OR IN COMBINATION <sup>2</sup>						
Total population	24,980	100.0%	27,721	100.0%	2,741	11.0%
White	20,450	81.9%	21,092	76.1%	642	3.1%
Black or African American	403	1.6%	750	2.7%	347	86.1%
American Indian and Alaska Native	325	1.3%	570	2.1%	245	75.4%
Asian	3,130	12.5%	3,838	13.8%	708	22.6%
Native Hawaiian and Other Pacific Islander	200	0.8%	328	1.2%	128	64.0%
Some Other Race	1,427	5.7%	2,583	9.3%	1,156	81.0%

<sup>1.</sup> Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1. Tabulated by Population Research Center, Portland State University, September 2011.

<sup>2.</sup> Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.