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Gresham-Barlow School District Enrollment Forecast 2016-2017 to 2025-26

Portland State University. Population Research Center

Charles Rynerson
Portland State University, rynerson@pdx.edu

Scott Stewart
Portland State University

GRESHAM-BARLOW SCHOOL DISTRICT

ENROLLMENT FORECASTS

2016-17 TO 2025-26

Portland State UNIVERSITY
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November, 2015

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Prepared By

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Project Staff:

Charles Rynerson, Research Associate

Scott Stewart, Research Associate

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EXECUTIVE SUMMARY

This report presents a range of three scenarios of district-wide enrollment forecasts by grade level for the Gresham-Barlow School District (GBSD) for the 10 year period between 2016-17 and 2025-26. Each enrollment forecast scenario is related to population forecasts that incorporate different assumptions about growth within the District, with the primary differences being the contribution of net migration to the District's population and age distribution. Individual school forecasts consistent with the middle range scenario are also presented for the 10 year period.

Population and Economic Trends

- Between 2000 and 2010, total population within the GBSD grew by 16 percent, while school-age population grew by only five percent.
- GBSD population under age five increased by 15 percent between 2000 and 2010.
- Between 2000 and 2006 GBSD births increased. Births then steadily declined through 2009 before rising to a new peak in 2011. Between 2011 and 2014 they declined by over 100 births, returning to their 2005 level.
- Multnomah County's unemployment rate rose from 4.7 percent in 2007 to 10.6 percent in 2009. By 2014 it had fallen to 6.2 percent, close to the U.S. rate.
- Permits for single family homes declined strongly and steadily from 2001 through 2014.
- The City of Gresham reported only three subdivisions approved since 2010. The majority of these lots have been built out.

Enrollment Trends

- Gresham-Barlow School District K-12 enrollment has been fairly flat for the last 10 years, increasing by just one percent (114 students) between 2005-06 and 2015-16. Its largest enrollment year during this period was 12,289 in 2009-10, 127 more students than the District ended with in 2015-16.

- K-5 enrollment increased by three percent between 2005-06 and 2015-16 and grades 6-8 decreased by two percent during the period.
- Grades 9-12 increased by 148 students (4 percent) during the period.[1]

District-wide Enrollment Forecast: Middle Range

- K-12 enrollment increases by 1023 students (nine percent) in the next 10 years.
- Over the period, growth is stronger during the first five years and then slows during the second five years.
- K-5 enrollment increases by six percent, grades 6-8 by 13 percent, and grades 9-12 by nine percent during the 10 year period.
- *Low* and *high* range forecasts are summarized in the report and presented by individual grades in the appendix.

Individual School Forecasts

- Six of the eleven GBSD elementary schools recorded enrollment growth during the forecast period
- Deep Creek, Hall, Powell Valley and Hogan Cedars elementary schools had the largest increases.
- All middle schools except one (West Orient) grew in enrollment during the period.
- Damascus and Russell showed the strongest growth among middle schools.
- Barlow high school is expected to grow by 371 students. Gresham high school shows a small decline.

Table 1 summarizes recent and forecast K-12 enrollments by five year intervals under the three scenarios. Chart 1 depicts the District's 10 year K-12 enrollment history and the 10 year K-12 forecasts. Table 2 details the *Middle Range* forecast by grade level groups. More details of the forecasts are presented in the "Enrollment Forecasts" section and in Appendix A.

[1] Ungraded high school students are not included in this count.

Table 1

Historic and Forecast K-12 Enrollment

Low, Middle, and High Series

Gresham-Barlow School District[1]

School Year	LOW		MIDDLE		HIGH	
	Enrollment[1]	5 year growth	Enrollment[1]	5 year growth	Enrollment[1]	5 year growth
2005-06	12,048		12,048		12,048	
2010-11	12,129	81	12,129	81	12,129	81
2015-16	12,162	33	12,162	33	12,162	33
2020-21 (fcst.)	12,449	287	12,788	626	13,140	978
2025-26 (fcst.)	12,660	211	13,185	397	13,758	618
AAEG[2], 2015-16 to 2025-26	*0.4%*		*0.8%*		*1.2%*	

1. Includes charter schools.

2. Average Annual Enrollment Growth.

Source: Historic enrollment, Gresham-Barlow School District; Enrollment forecasts, Population Research Center, PSU. November 2015.

Chart 1

Gresham-Barlow S.D. K-12 Enrollment History and Forecasts

2005-06 to 2025-26

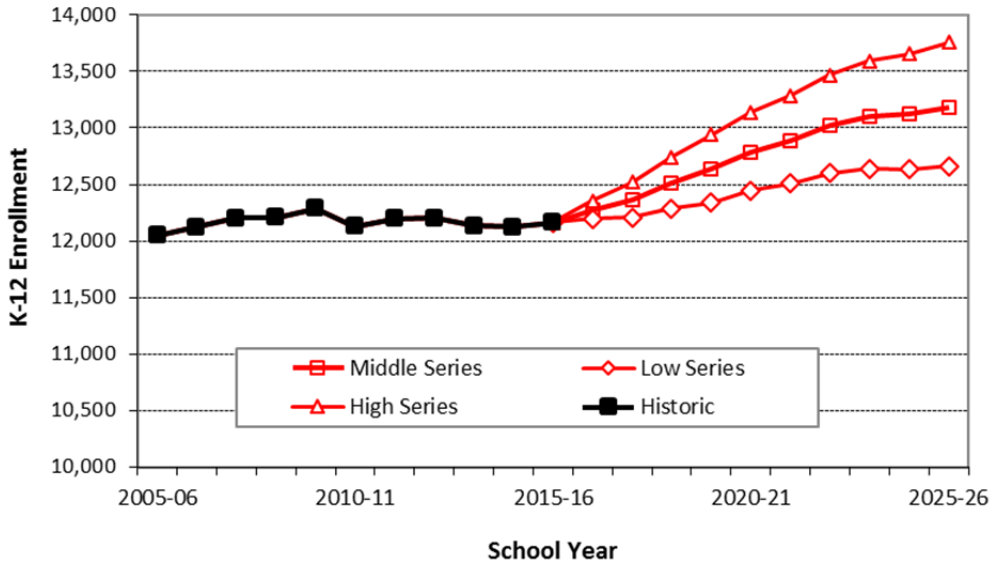


Table 2

Historic and Middle Series Forecast Enrollment

Gresham Barlow School District

	Actual			Forecast	
	2005-06	**2010-11**	**2015-16**	**2020-21**	**2025-26**
District Total	**12,048**	**12,129**	**12,162**	**12,788**	**13,185**
5 year change		***81***	***33***	***626***	***397***
		1%	***0%***	***5%***	***3%***
K-5	5,277	5,259	5,430	5,628	5,750
5 year change		*-18*	*171*	*198*	*122*
		0%	*3%*	*4%*	*2%*
6-8	2,732	2,920	2,673	2,894	3,023
5 year change		*188*	*-247*	*221*	*129*
		7%	*-8%*	*8%*	*4%*
9-12	3,756	3,778	3,904	4,111	4,257
5 year change		*22*	*126*	*207*	*146*
		1%	*3%*	*5%*	*4%*

Note: District totals include alternative placement high school students not included in grade level figures.

Source: Historic enrollment, Gresham-Barlow School District; Enrollment forecasts, Population Research Center, PSU. November 2015.

INTRODUCTION

The Gresham-Barlow School District (GBSD) requested that the Portland State University Population Research Center (PRC) prepare enrollment forecasts for the District and its schools. This study integrates information about GBSD enrollment trends with local area population, housing, and economic trends, and includes forecasts of district-wide enrollment by grade level and total enrollment for individual schools. Information sources include the GBSD, U.S. Census Bureau decennial censuses and 2009-2013 American Community Survey (ACS), employment trends from the Oregon Employment Department, birth data from the Oregon Health Authority, housing development data from the City of Gresham, Multnomah County and Clackamas County, and residential capacity data from Metro.

The District serves the cities of Gresham, Damascus and a tiny portion of Troutdale. In 2010, 84 percent of the District's overall population resided in Gresham, seven percent in Damascus, and a little less than one half percent in Troutdale. The remaining eight percent lived in unincorporated Multnomah and Clackamas counties.

In the next two sections, overviews of local area population and housing trends and historic GBSD enrollment trends will be presented. 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 contains detailed annual enrollment forecasts by grade level under the low, middle, and high growth scenarios, and other background information.

POPULATION, EMPLOYMENT, AND HOUSING TRENDS

Between 2000 and 2010, total population within the GBSD grew by 16 percent, from 66,145 persons to 76,485. This growth rate was one percentage point higher than Portland metropolitan area growth (15 percent) during the same decade.

The District's average annual growth rate for the two decades between 1990 and 2010 ran higher than the metropolitan area rates, but has fallen slightly behind metro in the current decade (2010-2014). The City of Gresham also had stronger annual average growth than the metro area between 1990 and 2010, but fell off in the current decade to a greater degree than GBSD. It appears that growth in unincorporated areas of GBSD kept the District's growth close to that of the metro area in this decade.

Table 3

City and Region Population, 1990, 2000, 2010 and 2014

					Avg. Annual Growth Rate		
	1990	2000	2010	2014	1990-2000	2000-2010	2010-2014
GBSD Total[1]	49,694	66,145	76,485	80,595	*2.9%*	*1.5%*	*1.2%*
City of Damascus[2]	N/A	N/A	10,539	10,625	*N/A*	*N/A*	*0.2%*
GBSD Portion	N/A	N/A	5,701	N/A	*N/A*	*N/A*	*N/A*
City of Gresham[3]	68,235	90,205	105,594	106,455	*2.8%*	*1.6%*	*0.2%*
GBSD Portion	39,914	53,996	64,414	N/A	*3.1%*	*1.8%*	*N/A*
City of Troutdale[4]	7,852	13,777	15,962	16,020	*5.8%*	*1.5%*	*0.1%*
GBSD Portion	4	126	279	N/A	*41.2%*	*8.3%*	*N/A*
GBSD Unincorporated	9,776	12,023	6,091	N/A	*2.1%*	*-6.6%*	*N/A*
Clackamas County	278,850	338,391	375,992	391,525	*2.0%*	*1.1%*	*1.0%*
Multnomah County	583,887	660,486	735,334	765,775	*1.2%*	*1.1%*	*1.0%*
Portland-Vancouver-Hillsboro MSA[5]	1,523,741	1,927,881	2,226,009	2,326,397	*2.4%*	*1.4%*	*1.0%*

1. School District population determined by PSU-PRC based on aggregation of census blocks within the GBSD boundary shapefiles. The 2010 GBSD population published by the Census Bureau is 76,354. The 2014 estimate is based on an extrapolation of 2010-2013 growth estimated by the Census Bureau. See http://www.census.gov/did/www/saipe.

2. City of Damascus incorporated in 2004.

3. City of Gresham gained 2 persons between 1990 and 2000, 108 persons between 2000 and 2010, and 2 persons between 2010 and 2014 due to annexation.

4. City of Troutdale gained 6 persons between 1990 and 2000 and gained 10 persons between 2000 and 2010 due to annexation.

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

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

Resident Employment

The District is part of the Portland metropolitan area labor market and most residents commute outside of the District to work, so population growth in the area depends to a great extent on the strength of the metro area's economy. Recent data show that although only 14 percent of GBSD workers have primary jobs within the District itself, two thirds worked in Multnomah County. Most of the rest worked in Clackamas (17 percent) and Washington (10 percent) counties. Table 4 reports the number and share of workers by place of work.[2]

Table 4

Where GBSD Residents Are Employed, 2013

Job Located Within*	Workers	Share
Gresham-Barlow School District	4,288	*14%*
Multnomah County	20,126	*66%*
City of Portland	*13,094*	*43%*
City of Gresham	*5,158*	*17%*
City of Troutdale	*1,017*	*3%*
Clackamas County	5,052	*17%*
Washington County	3,092	*10%*
Clark County, WA	804	*3%*
Marion County	791	*3%*
All other locations	609	*2%*
Total Primary Jobs	**30,474**	***100%***

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

Source: U.S. Census Bureau. 2015. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. 2nd Quarter 2013 data. Includes at most one (primary) job per resident. http://onthemap.ces.census.gov/

Between 2004 and 2008, Multnomah County added 27,100 jobs—over six percent growth during the four-year period. Between 2008 and 2010, 29,200 jobs were lost as the recession took hold, wiping out the gains from earlier in the decade. County employment began recovering in 2011 and grew to a total of 471,300 jobs by 2014, for a net increase of nearly 10 percent since 2004.

[2]U.S. Census Bureau. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. 2nd Quarter 2013 data. Includes at most one (primary) job per resident. http://onthemap.ces.census.gov/

Multnomah County's unemployment rate rose from 4.7 percent in 2007 - close to the U.S. rate - to 10.6 percent in 2009, over one percentage point higher than the U.S. rate of 9.3 percent. The most recent annual Multnomah County rate of 6.2 percent in 2014 was once again close to the national rate, and was an improvement over the County's 2013 rate of 6.8 percent.

In March 2015 The Oregon Office of Economic Analysis offered this state-level summary of Oregon labor market conditions:

> While the nation's labor market acceleration began only recently, Oregon's recovery picked up considerably in 2013. The stronger pace of growth was maintained throughout 2014 and is expected to continue this year and next before demographics weigh on longer-run growth. Today, Oregon still lags the typical state relative to pre Great Recession levels. However Oregon has regained its traditional growth advantage in expansion and is making up lost ground. More importantly, signs of a deeper labor market recovery are evident in the state. Unlike in the nation as a whole, strong job growth is bringing real wage gains to Oregon. Not only is the labor force growing with more Oregonians looking for work, but the labor force participation rate itself increased throughout 2014. The key question is whether or not Oregon can take another step up in growth, to rates seen during the typical Oregon expansion. All told, Oregon is approximately halfway back to full employment with the pace of improvement considerably faster than the nation as a whole.[3]

Births

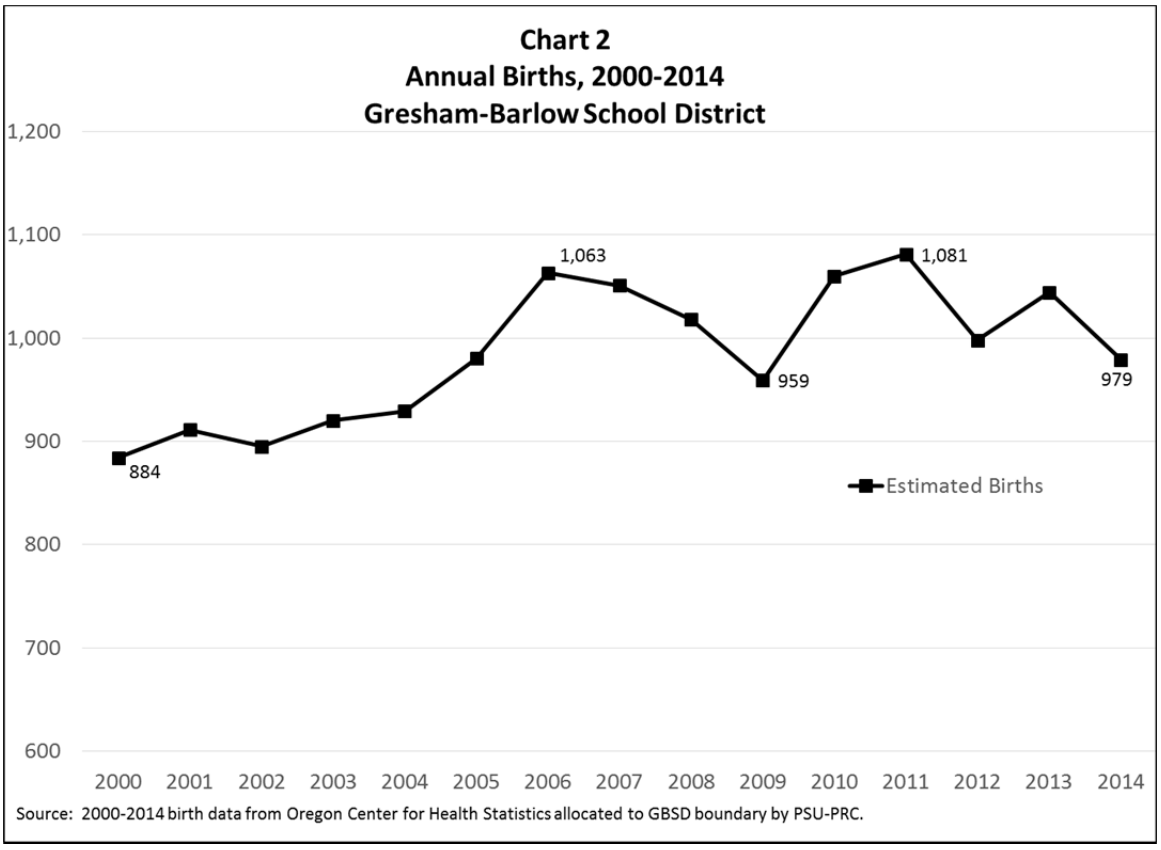
Between 2000 and 2006 GBSD births increased, peaking at 1,063. (Chart 2). Births then steadily declined through 2009 before rising to a new peak, 1,081, in 2011. Between 2011 and 2014 they declined by over 100 births, returning to their 2005 level.

In the U.S. and in Oregon the overall pattern was roughly similar, although GBSD peaked and declined a little earlier. The Pew Research Center's analysis of multiple economic and demographic data sources confirms the close correlation between the economic downturn and

[3]Excerpt from "Oregon Economic and Revenue Forecast," March 2015, Office of Economic Analysis.

the nation's fertility downturn.[4] For the actual number of GBSD births each year from 2000 to 2014 and births forecasted from 2015 through 2025 see Appendix A, Table A-6.

In the "Enrollment Forecasts" section of this report, we will examine the relationship between births, migration, and subsequent school enrollments.



[4] "In a Down Economy, Fewer Births." Pew Research Center, Pew Social & Demographic Trends, October 2011. Also, "U.S. Birth Rate Falls to a Record Low; Decline Is Greatest Among Immigrants." Pew Research Center, Pew Social & Demographic Trends, November 2012.

Housing Growth and Characteristics

During the 2000 to 2010 period, the District added about 4,560 housing units, as shown in Table 5. The smaller increase of about 4,100 households (occupied housing units) was due to an increase in vacancy rates, from 4.8 percent in 2000 to 5.6 percent in 2010.

In the 2000s the number of households with children under 18 grew more slowly than the number of households without children. The share of households with children fell from 39 percent in 2000 to 35 percent in 2010, while the share without children rose from 61 percent to 65 percent in the same period. The average number of persons per household also decreased, from 2.67 in 2000 and 2.65 in 2010.

Table 5
Gresham-Barlow School District
Housing and Household Characteristics, 2000 and 2010

	2000	2010	10 year Change Numeric	10 year Change Percent
Housing Units	25,749	30,307	4,558	17.7%
Households	24,516	28,621	4,105	16.7%
Households with children < 18	9,486	10,147	661	7.0%
share of total	*39%*	*35%*		
Households with no children < 18	15,030	18,474	3,444	22.9%
share of total	*61%*	*65%*		
Household Population	65,438	75,727	10,289	15.7%
Persons per Household	2.67	2.65	-0.02	

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

To anticipate the scale and geographic distribution of new housing in the short-term future, we compile data from land use applications and building permits. Developers submit land use applications to local jurisdictions in order to subdivide or partition residential land, creating new tax lots for single family development or to gain site development review for multi-family development. After the land use approvals are attained and subdivisions are platted, building permits may be issued. These steps create public records, which are compiled for the District and its attendance areas.

Updating the inventory of land use changes is an ongoing process incorporating information provided by the City of Gresham, Multnomah County and Clackamas County. Chart 3 portrays housing units authorized by building permits from 1996 through 2015 in the City of Gresham. Permits for single family homes declined strongly and steadily from 2001 through 2014, dropping from 471 to 62. The City of Gresham reported only three subdivisions approved since 2010: Brookside Phase 1 (23 lots, now built out), Brookside Phase 2 (89 lots, about half built out), and Salquist Estates (7 lots, 1 house currently being built).

Permits for multiple family units have followed a similar trend, bottoming out at or near zero between 2011 and 2014.

Single family permits have rebounded in the first nine months of 2015 and there are signs of possible future construction reflected in recent pre-application activity. The 2015 upswing in multiple family units is almost completely attributable to an assisted living facility for seniors which wouldn't impact enrollments, however, there has also been recent pre-application activity for multiple family unit construction.

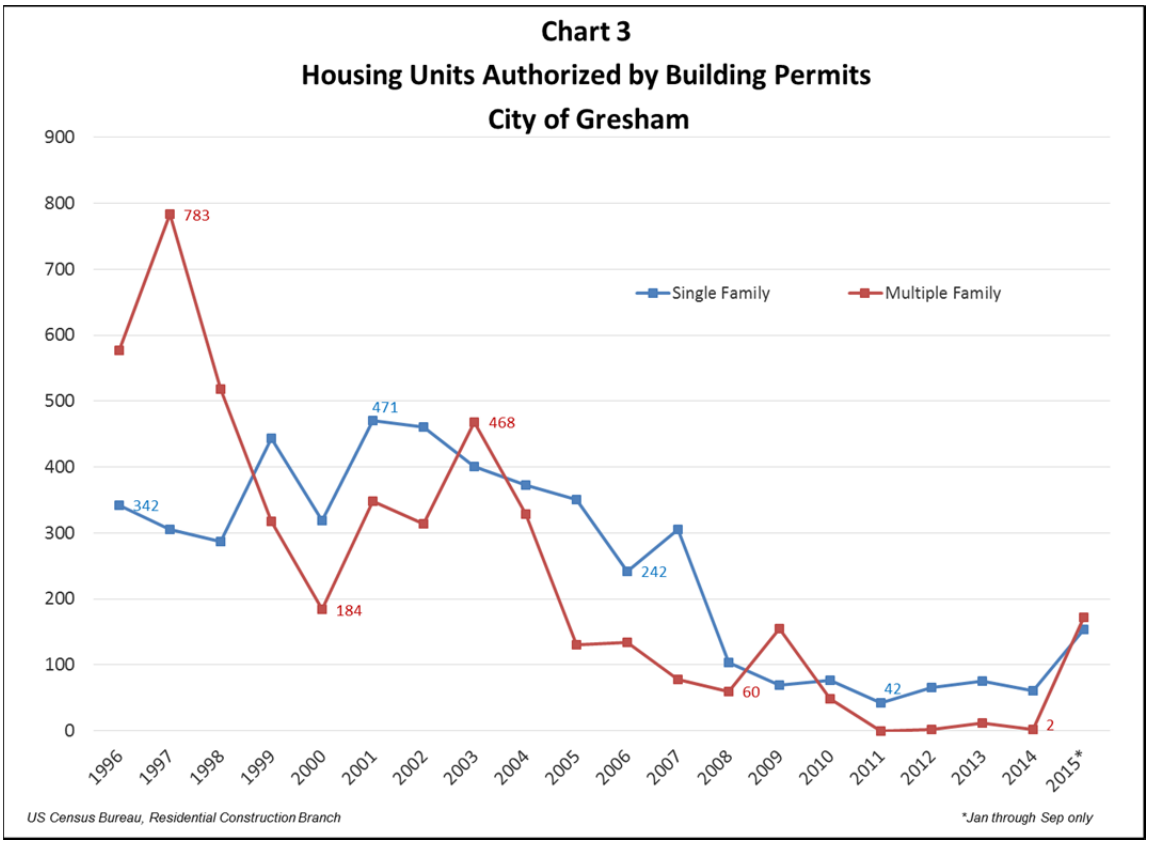


Table 6 shows single family homes in the GBSD by year built and attendance area. During the 2005-2014 ten year period about half as many homes were built in the District compared to the previous ten years (1995-2004). During both these ten year periods more homes were built in the Barlow high school attendance area than the Gresham high school attendance area. Barlow accounted for 64 percent of the total homes built in 2005-2014. The four most active elementary attendance areas for single family construction during 2005-2014 were East Orient, Kelly Creek, North Gresham and Hogan Cedars.

Table 6

Gresham-Barlow School District
Single Family Homes, Year Built by Attendance Area

Area	Year Built			Total
	Before 1995	1995-2004	2005-2014	
Deep Creek	1839	90	40	**1969**
East Gresham	1143	228	82	**1453**
East Orient	1717	318	263	**2298**
Hall	772	135	103	**1010**
Highland	1321	76	14	**1411**
Hogan Cedars	577	588	221	**1386**
Hollydale	1363	34	9	**1406**
Kelly Creek	1153	440	262	**1855**
North Gresham	1346	301	241	**1888**
Powell Valley	1037	536	154	**1727**
West Gresham	1640	95	61	**1796**
Middle School Area				
Clear Creek	3310	389	255	**3954**
Damascus	1839	90	40	**1969**
McCarty	3719	638	319	**4676**
Russell	2962	1111	519	**4592**
West Orient	2078	613	317	**3008**
High School Area				
Barlow	6879	1814	876	**9569**
Gresham	7029	1027	574	**8630**
District Total	**13908**	**2841**	**1450**	**18199**

Source: © Oregon Metro www.oregonmetro.gov/rlis, 8/12/15. Housing identified based on parcel attributes and compiled by attendance area by PSU-PRC.

ENROLLMENT TRENDS

Gresham-Barlow School District K-12 enrollment has been fairly flat for the last 10 years, increasing by just one percent (114 students) between 2005-06 and 2015-16. Its largest enrollment year during this period was 12,289 in 2009-10, 127 more students than the District ended with in 2015-16.

K-5 enrollment increased by three percent during the historical period, gaining 153 students. Grade 6-8 decreased by two percent, or 59 students. Grade 9-12 showed a 148 student increase (four percent) although this does not include the decrease occurring among ungraded students in alternative high school placements, who are represented in the District totals but not the 9-12 category.

Table 7

Gresham Barlow School District, Enrollment History, 2005-06 to 2015-16[1]

Grade	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
K	784	782	804	818	787	821	904	881	857	839	889
1	910	880	851	864	933	837	851	917	913	902	881
2	874	944	911	878	876	925	835	849	918	916	887
3	874	847	955	904	893	878	922	849	855	935	917
4	922	895	894	966	920	897	871	914	873	877	960
5	913	927	917	913	984	901	890	864	879	865	896
6	909	923	942	933	947	1,004	963	911	904	924	875
7	887	949	959	975	943	954	1,017	903	922	890	921
8	936	908	957	946	994	962	939	1,018	933	892	877
9	970	978	946	1,018	1,018	997	971	1,021	1,019	961	962
10	1,005	979	952	918	1,011	966	984	990	994	1,010	938
11	884	939	924	890	883	954	923	955	939	1,002	971
12	897	843	883	908	911	861	947	963	936	965	1,033
UN[2]	283	329	310	276	189	172	179	170	195	148	155
Total	**12,048**	**12,123**	**12,205**	**12,207**	**12,289**	**12,129**	**12,196**	**12,205**	**12,137**	**12,126**	**12,162**
Annual change		*75* *0.6%*	*82* *0.7%*	*2* *0.0%*	*82* *0.7%*	*-160* *-1.3%*	*67* *0.6%*	*9* *0.1%*	*-68* *-0.6%*	*-11* *-0.1%*	*36* *0.3%*
K-5	5,277	5,275	5,332	5,343	5,393	5,259	5,273	5,274	5,295	5,334	5,430
6-8	2,732	2,780	2,858	2,854	2,884	2,920	2,919	2,832	2,759	2,706	2,673
9-12	3,756	3,739	3,705	3,734	3,823	3,778	3,825	3,929	3,888	3,938	3,904

	5 Year Change: 2005-06 to 2010-11		5 Year Change: 2010-11 to 2015-16		10 Year Change: 2005-06 to 2015-16	
	Change	**Pct.**	**Change**	**Pct.**	**Change**	**Pct.**
K-5	-18	*0%*	171	*3%*	153	*3%*
6-8	188	*7%*	-247	*-8%*	-59	*-2%*
9-12	22	*1%*	126	*3%*	148	*4%*
Total	**81**	***1%***	**33**	***0%***	**114**	***1%***

1. Includes all charter schools

2. Ungraded students. These are alternative HS placements included in the district total.

Source: Gresham Barlow School District

Private School Enrollment, Home School, and Inter-District Transfers

Private schools within the GBSD enroll local students as well as students from beyond the GBSD boundaries. Conversely, GBSD residents attend private schools beyond the District's boundary, so the number of students enrolled in private schools physically located within the District cannot be used to measure overall private school share. The 2000 Census and the more recent American Community Survey (ACS) included questions about school enrollment by level and by type (public or private), reported by residence.[5] In 2000, 11 percent of K-12 students living in the District were enrolled in private schools. The ACS estimate from surveys conducted from 2009 to 2013 indicates that only 9 percent of GBSD K-12 students were enrolled in private schools. However, the ACS has a smaller sample size than the Census long form, with larger margins of error.

Another disparity between GBSD enrollment and child population can be attributed to home-schooling. Home schooled children age 7 to 18 living in the District are required to register with the Multnomah Educational Service District (MESD), though the statistics kept by the MESD 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 2014 there were 419 GBSD residents registered, up from 393 two years earlier. The number of registered home school students represents about three percent of GBSD's school age population.

Private schools and home schooling help to explain the difference between the number of school-age children living in the District and the number attending District schools. Both represent "outflow" from the District. That is, children eligible but not attending District schools.

Another "outflow" is the result of Open Enrollment, in which District residents attend public schools in other school districts. There is also a related "inflow" of residents from other districts attending GBSD. Table 8 displays these flows for recent school years.

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[5] Census 2000 Table P36 and ACS 2009-13 Table B14002 provides information on school enrollment by grade level and school type.

Table 8
Gresham-Barlow School District
Open Enrollment

Flow	2012-13	2013-14	2014-15
Transfer into GBSD	90	83	129
Transfer out of GBSD	170	154	121
Net to GBSD	-80	-71	8

Source: Gresham-Barlow School District

Enrollment Trends at Individual Schools

Total elementary enrollment, which had been mostly flat for the past five years, recorded a 95 student increase in 2015-16, bringing its total five year increase to 121 (2.6%). Seven elementary schools gained or maintained enrollment during the 2010-11 to 2015-16 period and four declined. Deep Creek, Hogan Cedars and Powell Valley showed the largest numeric increases. Deep Creek's increase was bolstered by the addition of 5th grade beginning in 2011-12, causing an 18.8 percent increase over the five year period. Hollydale and West Gresham had the largest declines: 58 and 33 students respectively.

The five middle schools all declined during the same five year period for a combined enrollment loss of 376 students (-12.7%). Part of this was the transfer of 5th grade from Damascus middle school to Deep Creek elementary school in 2011-12. The smallest loss among middle schools was McCarty at -2.8% (13 students).

Barlow and Gresham high schools also had enrollment declines over the five year period: 39 and 77 students respectively. During the same period Springwater Trail recorded a 17 student increase, bringing the net high school enrollment change to -99 students.

Total charter school enrollment nearly doubled between 2010-11 and 2015-16, rising to 832 students.

Table 9 shows the total enrollments and five-year enrollment changes at each of the District's schools from 2010-10 to 2015-16.

Table 9
Enrollment History for Individual Schools, 2010-11 to 2015-16

	Historic Enrollment						5 year change 2010-11 to 2015-16	
School	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**Number**	**Percent**
Deep Creek	239	274	267	248	234	284	45	*18.8%*
East Gresham	433	411	424	452	435	427	-6	*-1.4%*
East Orient	429	424	434	416	400	435	6	*1.4%*
Hall	505	493	490	493	515	497	-8	*-1.6%*
Highland	485	468	472	483	508	519	34	*7.0%*
Hogan Cedars	533	569	580	585	567	583	50	*9.4%*
Hollydale	460	458	433	418	417	402	-58	*-12.6%*
Kelly Creek	539	545	516	556	547	539	0	*0.0%*
North Gresham	525	549	560	533	556	555	30	*5.7%*
Powell Valley	424	440	454	458	476	485	61	*14.4%*
West Gresham	342	300	301	299	285	309	-33	*-9.6%*
Elementary Totals	**4,914**	**4,931**	**4,931**	**4,941**	**4,940**	**5,035**	**121**	***2.5%***
Clear Creek MS	703	715	683	667	641	652	-51	*-7.3%*
Damascus MS	296	227	208	175	166	164	-132	*-44.6%*
E. McCarty MS	673	664	637	598	589	559	-114	*-16.9%*
G. Russell MS	814	836	809	836	776	748	-66	*-8.1%*
West Orient MS	465	446	435	407	434	452	-13	*-2.8%*
Middle School Totals	**2,951**	**2,888**	**2,772**	**2,683**	**2,606**	**2,575**	**-376**	***-12.7%***
Barlow HS	1,762	1,745	1,758	1,686	1,725	1,723	-39	*-2.2%*
Gresham HS	1,744	1,737	1,753	1,722	1,686	1,667	-77	*-4.4%*
Springwater Trail HS	158	146	154	167	163	175	17	*10.8%*
High School Totals	**3,664**	**3,628**	**3,665**	**3,575**	**3,574**	**3,565**	**-99**	***-2.7%***
District-run Totals*	**11,529**	**11,447**	**11,368**	**11,199**	**11,120**	**11,175**	**-354**	***-3.1%***
Gresham Arthur Academy	147	168	156	169	174	169	22	*15.0%*
Lewis & Clark Montessori	142	174	204	215	269	291	149	*104.9%*
M-E Web Academy	139	228	307	359	415	372	233	*167.6%*
Charter School Totals	**428**	**570**	**667**	**743**	**858**	**832**	404	*94.4%*
Grand Totals*	**11,957**	**12,017**	**12,035**	**11,942**	**11,978**	**12,007**	**50**	***0.4%***

**Note: Totals do not include ungraded (UN) alternative high school placements.*

Source: Gresham-Barlow School District

ENROLLMENT FORECASTS

District-wide Long-range Forecast Methodology

To ensure that enrollment forecasts are consistent with the dynamics of likely population growth within the District, a grade progression enrollment model is combined 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 dynamics of population change. In addition to the middle range, or most likely, population and enrollment forecasts, we also prepared high and low range forecasts with alternative assumptions about future net migration.

The 2000 and 2010 Census results are 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 are 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 1999 to 2014 using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers is incorporated in the establishment of age-specific fertility rates (ASFRs) for both 2000 and 2010.

The total fertility rate (TFR) is another measure for fertility; it is an estimate of the number of children that would be born to the average woman during her child-bearing years based on ASFRs observed at a given time. The estimated TFR for GBSD decreased from 2.00 in 2000 to 1.99 in 2010. Downward trends were also observed state and county-wide during the past decade. These declines were steeper than GBSD: the State of Oregon TFRs decreased from 1.98

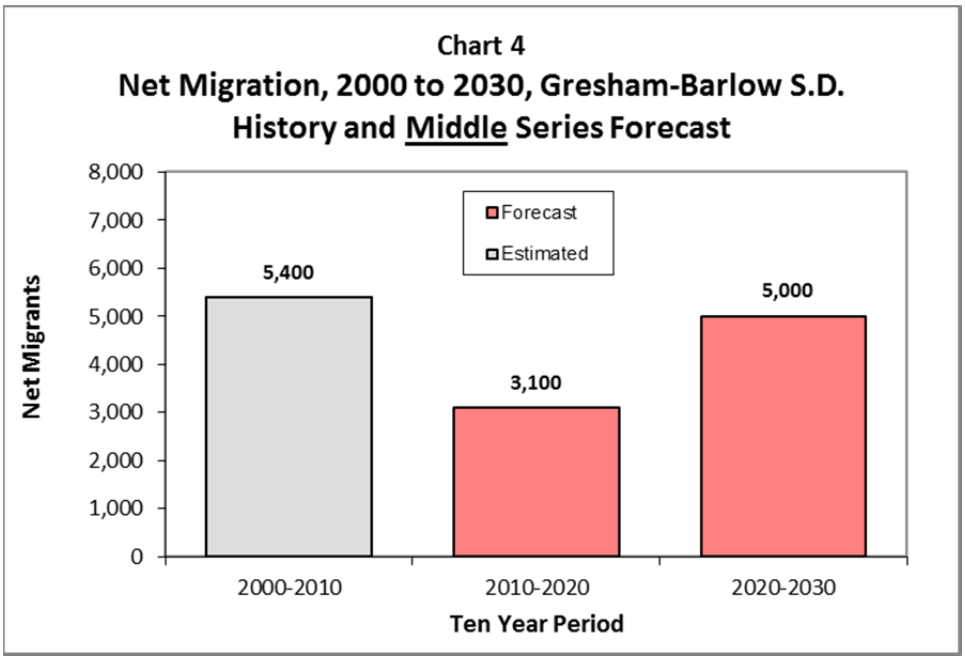
in 2000 to 1.79 in 2010, and Multnomah County TFRs decreased from 1.82 in 2000 to 1.59 in 2010.

School enrollment is linked to population 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 enrolled in GBSD schools. Assumptions for capture rates based on census data are used to bring new kindergarten and first grade students into the District. If there is evidence that capture rates have changed since the time of the census, they may be adjusted in the forecast. Kindergarten capture rates are increased slightly to 0.82 in fall 2015 when full day kindergarten becomes universal. The first grade capture rate is at 0.83 in fall 2015. These rates account for the 17 to 18 percent of GBSD residents at these grades who may be attending private or charter schools, are home schooled, or enrolled in other districts.

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 rates are used to move students from one grade to the next. A grade progression rate (GPR) is 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 year of age.

Population Forecast

The District added about 6,000 fewer residents in the 2000s than in the 1990s. Most of the difference was due to a lower level of positive net migration (people moving in minus people moving out). The current decade began like the last one ended, with slower growth, and growth due to net migration expected between 2014 and 2020 will result in overall levels in the 2010 to 2020 period falling short of the 2000 to 2010 period. Growth in 2020-2030 is forecast to increase somewhat closer to the 2000-2010 level. Chart 4 shows the 2000 to 2010 estimates and 2010 to 2020 and 2020 to 2030 forecasts of GBSD population growth attributable to net migration under the middle range forecast scenario. Forecasts of net migration under the high and low range scenarios are presented in charts in the appendix.



The 2010 population for the GBSD was 76,485, an increase of 10,340 persons from the 2000 Census (1.5 percent average annual growth rate, or AAGR). The middle range forecast for 2020 population in the GBSD is 83,884, an increase of 7,399 persons from the 2010 Census (0.9 percent AAGR). The 2030 population forecast is 91,523, an additional increase of 7,638 persons (0.9 percent AAGR) from 2020.

School-age population (5 to 17) increased by 683 persons between 2000 and 2010. Because the five percent increase in school age population was less than the 16 percent increase in total

population, school age population fell as a share of total population, from 20.1 percent to 18.3 percent. Between 2010 and 2020 school age population is expected to increase by just four percent, resulting in an even lower share of 17.3 percent in 2020. By 2030, the fastest growing age groups are the "baby boom" generation in its late 60s and older. Population age 65 and older in the District is forecast to account for 56 percent of the District's population growth between 2010 and 2030. These middle range forecasts are shown in Table 10. The high and low population forecasts by age group are included in the appendix.

Table 10

Population by Age Group, Middle Series Forecast
Gresham-Barlow School District, 2000 to 2030

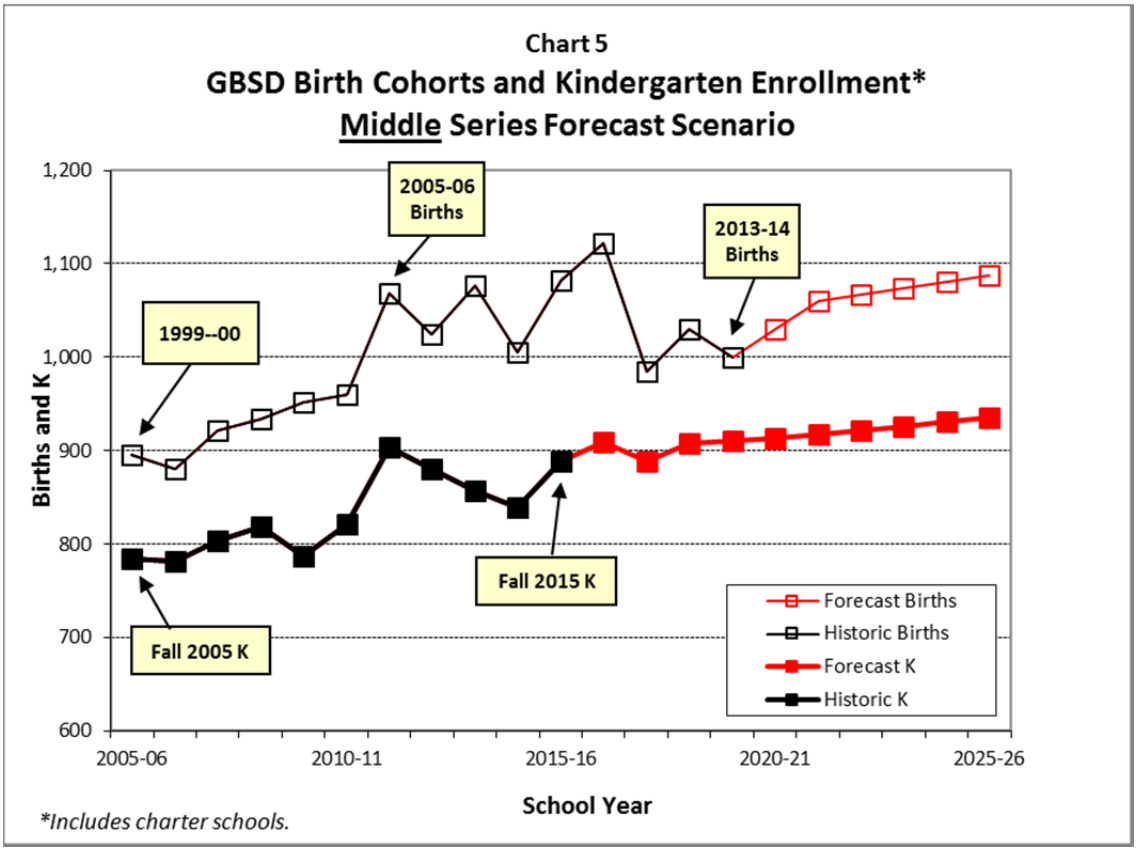
	2000 Census	2010 Census	2020 Forecast	2030 Forecast	2010 to 2030 Change	
					Number	Percent
Under Age 5	4,601	5,283	5,420	5,560	277	*5%*
Age 5 to 9	4,984	5,184	5,554	5,770	586	*11%*
Age 10 to 14	5,157	5,492	5,652	5,936	444	*8%*
Age 15 to 17	3,142	3,290	3,287	3,571	281	*9%*
Age 18 to 19	2,087	2,154	1,936	2,118	-36	*-2%*
Age 20 to 24	4,732	5,515	5,760	5,986	471	*9%*
Age 25 to 29	4,374	5,651	5,748	5,661	10	*0%*
Age 30 to 34	4,291	5,114	5,789	6,122	1,008	*20%*
Age 35 to 39	5,002	4,802	5,987	6,184	1,382	*29%*
Age 40 to 44	5,533	4,789	5,485	6,323	1,534	*32%*
Age 45 to 49	5,459	5,275	4,946	6,228	953	*18%*
Age 50 to 54	4,663	5,656	4,818	5,556	-100	*-2%*
Age 55 to 59	3,370	5,233	5,013	4,772	-461	*-9%*
Age 60 to 64	2,186	4,225	5,140	4,424	199	*5%*
Age 65 to 69	1,682	2,998	4,649	4,521	1,523	*51%*
Age 70 to 74	1,571	1,914	3,594	4,454	2,540	*133%*
Age 75 to 79	1,399	1,466	2,425	3,914	2,448	*167%*
Age 80 to 84	1,004	1,177	1,346	2,567	1,390	*118%*
Age 85 and over	908	1,267	1,335	1,856	589	*46%*
Total Population	**66,145**	**76,485**	**83,884**	**91,523**	**15,038**	***20%***
Total age 5 to 17	13,283	13,966	14,493	15,277	1,311	*9%*
share age 5 to 17	*20.1%*	*18.3%*	*17.3%*	*16.7%*		

		2000-2010	2010-2020	2020-2030
Population Change		**10,340**	**7,399**	**7,638**
Percent		*16%*	*10%*	*9%*
Average Annual		*1.5%*	*0.9%*	*0.9%*

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

District-wide Enrollment Forecast

Chart 5 compares the historic and forecast number of births in the District with the historic and forecast number of GBSD kindergarten students under the middle range scenario. Births correspond to kindergarten cohorts (September to August). Many children move into and out of the District between birth and age five, and not all District residents attend GBSD kindergartens, so the difference between lagged births and GBSD kindergarten enrollment represents a combination of net migration and the kindergarten capture rate. In the mid-2000s, the ratio of kindergarten enrollment to births five years earlier was as high as 0.89, showing evidence of in-migration, given that not all District residents attend GBSD kindergartens. In 2013-14 the ratio dropped to 0.80, and has moved up to 0.82 in 2015-16.



The historic GPRs in Table 11 detail the average Grade Progression Rates (GPRs) for the five most recent years and the "Low," "Middle," and "High" 10 year forecasts. During the historic period the highest rate is K-1, which may result from enrolling new students who had previously attended private kindergartens. With the exception of 8-9, the high school grade transitions are

the lowest for the historical 5 year average GPRs, likely because students are leaving traditional high schools.

In the middle series forecast, GPRs are higher than the five year historic averages for nearly all of the twelve grade transitions. The K-1 rate is lower due to the increased kindergarten capture rate; more students will enter GBSD in kindergarten rather than first grade.

Table 11

Grade Progression Rates[1]

Gresham-Barlow S.D. History and Forecasts

Grade Transition	5 Year Historic Average: 2010-11 to 2015-16	Baseline (without the influence of migration)	10 Year Forecast Average: 2015-16 to 2025-26		
			LOW SERIES	MIDDLE SERIES	HIGH SERIES
K-1	1.038	--[2]	1.024	1.030	1.035
1-2	0.997	1.00	1.004	1.008	1.013
2-3	1.008	1.00	1.004	1.008	1.013
3-4	1.013	1.00	1.004	1.009	1.014
4-5	0.992	0.99	0.995	0.999	1.005
5-6	1.031	1.03	1.035	1.040	1.045
6-7	0.986	1.00	1.005	1.009	1.015
7-8	0.981	1.00	1.000	1.004	1.010
8-9	1.032	1.04	1.045	1.049	1.052
9-10	0.964	0.97	0.975	0.977	0.979
10-11	0.931	0.95	0.954	0.957	0.959
11-12	0.951	0.97	0.975	0.977	0.979

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

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

In the *middle series* forecast (Table 12, page 28), overall K-12 enrollment is expected to grow at a fairly even pace for the first five years and then slow in the second five years, reaching an increase of 1023 students (nine percent) over the 10 year forecast period. The K-5, 6-8 and 9-12 categories all follow a similar pattern: stronger growth in the first five years followed by slower growth in the second five. The smallest percentage increase for the 10 year period is K-5 at six percent, the largest is 6-8 at thirteen percent, and 9-12 grows nine percent.

The *low series* forecast depicts a scenario under which net migration remains near its recent low levels. Average Annual Change stays below one percent across the series, sometimes at 0.3

percent and lower. The *high series* forecast includes net migration consistently near the higher levels observed in the mid-2000s. With one exception its Average Annual Change stays well above one percent.

In the *low series,* K-5 share of the total 2015-16 to 2025-26 K-12 increase is 23 percent, lower than the K-5 share for the *middle series* (31 percent) or the *high series* (33 percent). The comparable 6-8 share in the *low series* is 43 percent, higher than the 6-8 *middle series (34 percent* or *high series* (32 percent). Equivalent shares for 9-12 are about equal across the *low, middle and high* forecasts.

Table 12 contains annual district-wide forecasts by school level under the three scenarios for the District. Detailed annual forecasts by individual grades are included in the appendix.

Table 12

Gresham-Barlow S.D., Enrollment Forecasts by School Level, 2016-17 to 2025-26[1]

		LOW SERIES FORECAST						FORECAST CHANGE		
Grade	Actual 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2025-26	2015-16 to 2020-21	2020-21 to 2025-26	2015-16 to 2025-26
K-5	5,430	5,446	5,389	5,387	5,414	5,459	5,544	29	85	114
6-8	2,673	2,742	2,818	2,892	2,880	2,813	2,889	140	76	216
9-12	3,904	3,852	3,848	3,852	3,889	4,022	4,072	118	50	168
Total	**12,162**	**12,195**	**12,210**	**12,286**	**12,338**	**12,449**	**12,660**	**287**	**211**	**498**
Annual change[2]		*33*	*15*	*76*	*52*	*111*	*35*			
		0.3%	*0.1%*	*0.6%*	*0.4%*	*0.9%*	*0.3%*			

		MIDDLE SERIES FORECAST						FORECAST CHANGE		
Grade	Actual 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2025-26	2015-16 to 2020-21	2020-21 to 2025-26	2015-16 to 2025-26
K-5	5,430	5,497	5,476	5,510	5,569	5,628	5,750	198	122	320
6-8	2,673	2,759	2,854	2,948	2,954	2,894	3,023	221	129	350
9-12	3,904	3,865	3,876	3,900	3,958	4,111	4,257	207	146	353
Total	**12,162**	**12,276**	**12,361**	**12,513**	**12,636**	**12,788**	**13,185**	**626**	**397**	**1,023**
Annual change[2]		*114*	*85*	*152*	*123*	*152*	*66*			
		0.9%	*0.7%*	*1.2%*	*1.0%*	*1.2%*	*0.6%*			

		HIGH SERIES FORECAST						FORECAST CHANGE		
Grade	Actual 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2025-26	2015-16 to 2020-21	2020-21 to 2025-26	2015-16 to 2025-26
K-5	5,430	5,548	5,569	5,634	5,721	5,798	5,962	368	164	532
6-8	2,673	2,777	2,891	3,004	3,031	2,983	3,180	310	197	507
9-12	3,904	3,877	3,905	3,948	4,030	4,204	4,461	300	257	557
Total	**12,162**	**12,357**	**12,520**	**12,741**	**12,937**	**13,140**	**13,758**	**978**	**618**	**1,596**
Annual change[2]		*195*	*163*	*221*	*196*	*203*	*103*			
		1.6%	*1.3%*	*1.8%*	*1.5%*	*1.6%*	*0.9%*			

Note: District totals include 155 alternative placement high school students each year, not included in grade level figures.

1. Includes all charter schools

2. Average annual change shown for 2020-21 to 2025-26.

Population Research Center, Portland State University, November 2015.

Individual School Forecasts

Forecasts for individual schools are consistent with the *middle range* district-wide forecast. Program changes, open enrollment, school choice policies, boundary adjustments, or other decisions about individual schools and the students they serve could impact enrollment in ways that these forecasts do not anticipate. The individual school forecasts depict what future enrollments might be if facilities, programs, and boundaries remain unchanged from 2016-17 to 2025-26.

The forecast of future kindergarten classes relies on information about the number of births to women residing in each attendance area, recent enrollment trends, and expected housing growth. These factors are evaluated for consistency and applied conservatively to avoid extreme variation, particularly if opposing trends are evident. In geographic areas as small as elementary attendance areas, there may be great variation in single age cohorts from year to year and the relationship between kindergarten enrollment and births may not be stable. For example, a 40 percent increase in births does not guarantee a 40 percent increase in kindergarten enrollment five years later.

Subsequent grades at individual schools were forecast using GPRs influenced by district-wide rates, historic observations, and expected housing growth. Fifth grade enrollments at the appropriate elementary feeder schools are used to forecast sixth grade enrollments at each middle school.

Table 13 indicates enrollment growth for six of the eleven GBSD elementary schools during the 2015-16 to 2025-26 forecast period. Deep Creek shows the largest increase (106 students), followed by Hall (81), Powell Valley (73) and Hogan Cedars[6] (69). The areas served by Hall and Powell Valley are within the Russell MSAA, the area showing the largest enrollment growth among GBSD middle schools (193). The Damascus MSAA is second largest in growth among middle schools and its boundary is synonymous with Deep Creek. Of the five elementary schools decreasing in enrollment over the forecast period, East Orient has the largest decline (23).

[6] A portion of Hogan Cedars also serves Gresham H.S.

Four of the five GBSD middle schools are forecast for enrollment growth. The exception is West Orient, with a 27 student decline.

Barlow High School is expected to grow by 371 students over the forecast period, while Gresham High School shows a small decline (-18).

Table 13 presents the enrollment forecasts for each school, grouped by school level.

Table 13
Enrollment Forecasts for Individual Schools, 2016-17 to 2025-26

School	Actual 2015-16	Forecast 2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Change 2015-16-2025-26
Deep Creek	284	292	313	329	351	376	372	374	381	387	390	106
East Gresham	427	436	433	418	421	430	440	441	441	442	444	17
East Orient	435	440	438	445	443	445	420	416	413	411	412	-23
Hall	497	513	520	533	543	538	567	568	573	577	578	81
Highland	519	520	507	511	519	521	516	520	525	527	528	9
Hogan Cedars	583	606	608	592	607	619	633	638	644	648	652	69
Hollydale	402	397	396	402	399	399	400	398	400	399	401	-1
Kelly Creek	539	528	521	519	519	521	524	523	525	526	528	-11
North Gresham	555	555	555	552	549	558	554	554	555	553	552	-3
Powell Valley	485	499	484	491	507	519	527	533	542	550	558	73
West Gresham	309	302	297	311	310	308	304	305	308	310	313	4
Elementary Totals	**5,035**	**5,088**	**5,072**	**5,103**	**5,168**	**5,234**	**5,257**	**5,270**	**5,307**	**5,330**	**5,356**	321
Clear Creek Middle School	652	664	675	675	669	643	653	656	666	655	657	5
Damascus Middle School	164	174	176	194	189	191	221	248	271	263	265	101
McCarty Middle School	559	567	580	622	625	611	592	596	602	614	618	59
Russell Middle School	748	800	870	913	908	889	874	901	899	939	941	193
West Orient Middle School	452	455	444	435	442	434	446	450	453	435	425	-27
Middle School Totals	**2,575**	**2,660**	**2,745**	**2,839**	**2,833**	**2,768**	**2,786**	**2,851**	**2,891**	**2,906**	**2,906**	331
Barlow High School	1,723	1,725	1,758	1,795	1,839	1,946	1,987	2,020	2,044	2,043	2,094	371
Gresham High School	1,667	1,626	1,604	1,591	1,605	1,651	1,666	1,695	1,675	1,661	1,649	-18
Springwater Trail High School	175	175	175	175	175	175	175	175	175	175	175	0
High School Totals	**3,565**	**3,526**	**3,537**	**3,561**	**3,619**	**3,772**	**3,828**	**3,890**	**3,894**	**3,879**	**3,918**	353
District-run Totals*	**11,175**	**11,274**	**11,354**	**11,503**	**11,620**	**11,774**	**11,871**	**12,011**	**12,092**	**12,115**	**12,180**	1,005
Gresham Arthur Academy	169	169	169	169	169	169	169	169	169	169	169	0
Lewis & Clark Montessori	291	306	311	314	320	318	319	313	309	309	309	18
M-E Web Academy	372	372	372	372	372	372	372	372	372	372	372	0
Charter School Totals	**832**	**847**	**852**	**855**	**861**	**859**	**860**	**854**	**850**	**850**	**850**	18
Grand Totals*	**12,007**	**12,121**	**12,206**	**12,358**	**12,481**	**12,633**	**12,731**	**12,865**	**12,942**	**12,965**	**13,030**	**1,023**

**Note: Totals do not include ungraded (UN) alternative high school placements.*

Population Research Center, Portland State University, November 2015

Population Research Center, Portland State University, November 2015

FORECAST ACCURACY

Forecasts should be understood to represent a range of outcomes even though discrete numbers are provided. 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.

The best way to measure potential forecast error is to compare actual enrollments with previous forecasts that were conducted using similar data and methodologies. Additional context about institutional changes or unforeseen circumstances or trends may be helpful. For example, the housing crisis of the late 2000s resulted in enrollment losses in many suburban communities that had been expected to grow based on residential development plans.

Forecasts with a longer horizon may be expected to be less accurate than short term forecasts. However, year-to-year fluctuations can cause long term forecasts to be closer than short term forecasts to actual enrollments.

Measures of forecast error for total K-12 enrollments can benefit from compensating differences among individual grades. A measure of average error for individual grades, the mean absolute percent error (MAPE), is also included in Table 16. Individual grades typically have larger average errors than the K-12 total, and an annual "reset" is likely to result in improved grade level forecasts.

PRC prepared a preliminary forecast for GBSD in August 2015, prior to the publication of enrollment numbers for 2015-16 in October 2015. Table 14 displays the forecast error for one year: the preliminary forecast of 2015-16 enrollment.

For the District total, the *low* forecast had the smallest error at 0.2%, or 24 students. The MAPE for individual grades K-12 was smallest in the *middle* and *high forecasts. Both were 2.2%.*

Table 14

Fall 2015 Enrollment[1] Compared to Preliminary Forecasts
GBSD By Grade Level

		One year LOW forecast			One year MID forecast			One year HIGH forecast		
Grade	**Actual**	**Fcst.**	**Diff.**	**Error**	**Fcst.**	**Diff.**	**Error**	**Fcst.**	**Diff.**	**Error**
K	889	860	-29	*-3.3%*	879	-10	*-1.1%*	892	3	*0.3%*
1	881	852	-29	*-3.3%*	872	-9	*-1.0%*	884	3	*0.3%*
2	887	904	17	*1.9%*	910	23	*2.6%*	915	28	*3.2%*
3	917	919	2	*0.2%*	924	7	*0.8%*	929	12	*1.3%*
4	960	938	-22	*-2.3%*	943	-17	*-1.8%*	949	-11	*-1.1%*
5	896	871	-25	*-2.8%*	876	-20	*-2.2%*	881	-15	*-1.7%*
6	875	902	27	*3.1%*	908	33	*3.8%*	913	38	*4.3%*
7	921	930	9	*1.0%*	936	15	*1.6%*	941	20	*2.2%*
8	877	904	27	*3.1%*	909	32	*3.6%*	914	37	*4.2%*
9	962	931	-31	*-3.2%*	935	-27	*-2.8%*	939	-23	*-2.4%*
10	938	958	20	*2.1%*	961	23	*2.5%*	964	26	*2.8%*
11	971	1,001	30	*3.1%*	1,003	32	*3.3%*	1,006	35	*3.6%*
12	1,033	1,020	-13	*-1.3%*	1,022	-11	*-1.1%*	1,025	-8	*-0.8%*
US[2]	155	148	-7		148	-7		148	-7	
Total	**12,162**	**12,138**	**-24**	***-0.2%***	**12,226**	**64**	***0.5%***	**12,300**	**138**	***1.1%***
MAPE[3]				***2.4%***			***2.2%***			***2.2%***

1. October 1, 2015 enrollment, including all charter schools.

2. Alternative placements, not included in individual school tables.

3. Mean absolute percent error for individual grades K-12.

APPENDIX A

DISTRICT-WIDE POPULATION FORECASTS, ENROLLMENT FORECASTS, ANNUAL HISTORIC BIRTHS, AND CENSUS PROFILE

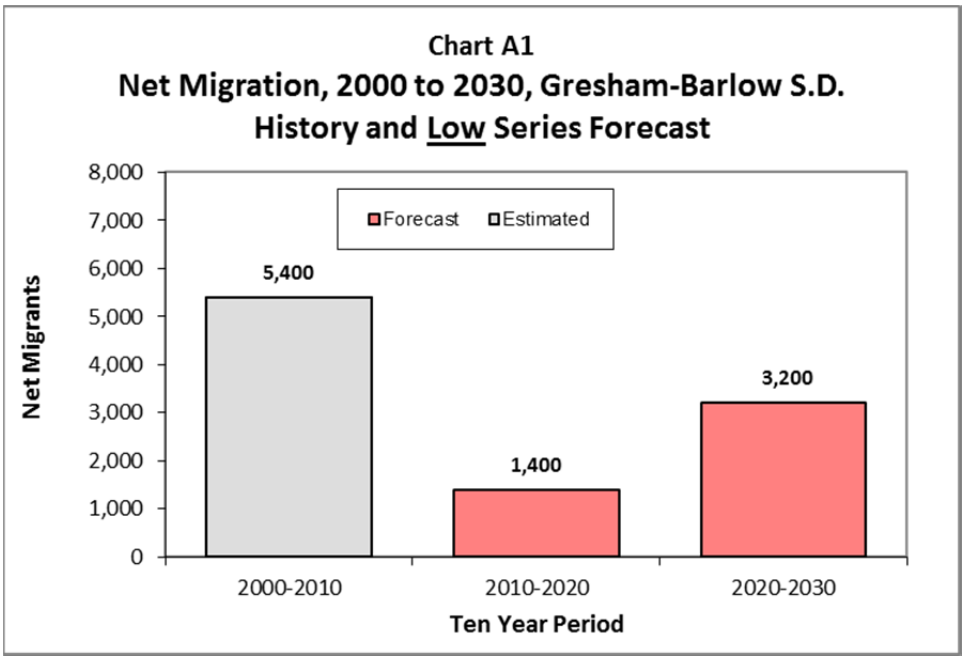


Chart A1
Net Migration, 2000 to 2030, Gresham-Barlow S.D.
History and Low Series Forecast
Net Migrants
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Forecast
Estimated
5,400
1,400
3,200
2000-2010
2010-2020
2020-2030
Ten Year Period

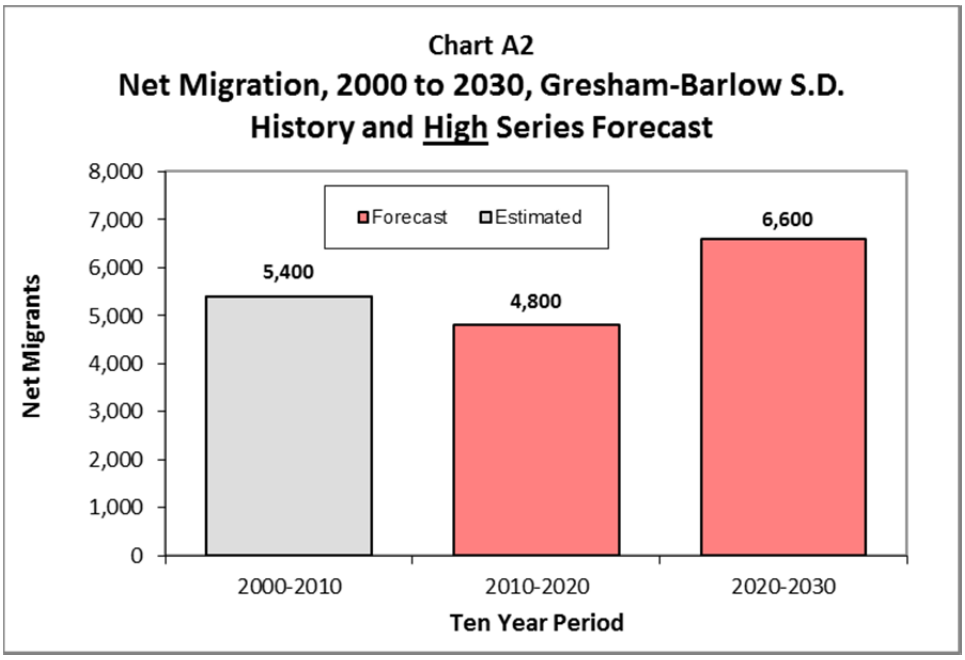
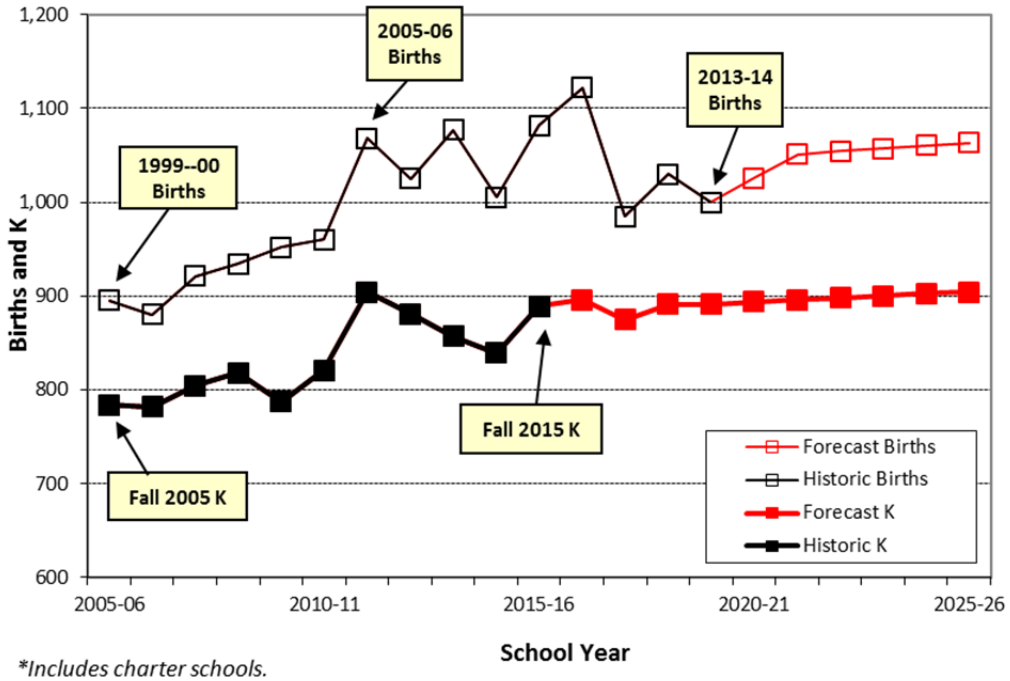


Chart A2
Net Migration, 2000 to 2030, Gresham-Barlow S.D.
History and High Series Forecast
Net Migrants
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Forecast
Estimated
5,400
4,800
6,600
2000-2010
2010-2020
2020-2030
Ten Year Period

Chart A3

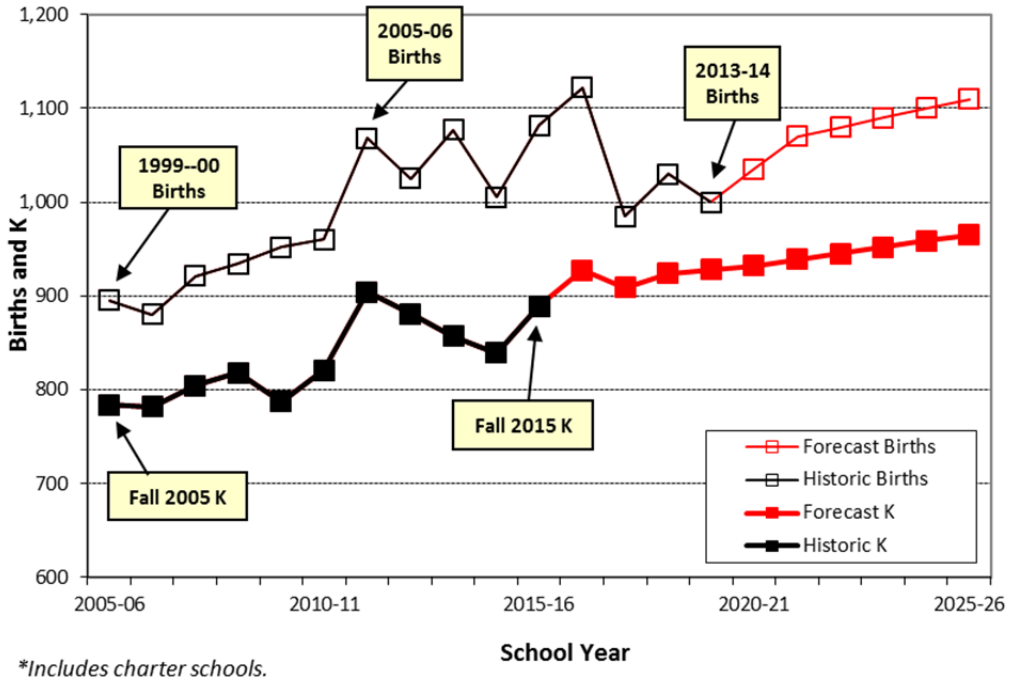
GBSD Birth Cohorts and Kindergarten Enrollment*
Low Series Forecast Scenario



*Includes charter schools.

Chart A4

GBSD Birth Cohorts and Kindergarten Enrollment*
High Series Forecast Scenario



*Includes charter schools.

Table A1

Population by Age Group, Low Series Forecast
Gresham-Barlow School District, 2000 to 2030

	2000 Census	2010 Census	2020 Forecast	2030 Forecast	2010 to 2030 Change	
					Number	Percent
Under Age 5	4,601	5,283	5,314	5,327	44	*1%*
Age 5 to 9	4,984	5,184	5,409	5,523	339	*7%*
Age 10 to 14	5,157	5,492	5,421	5,650	158	*3%*
Age 15 to 17	3,142	3,290	3,164	3,383	93	*3%*
Age 18 to 19	2,087	2,154	1,945	2,050	-104	*-5%*
Age 20 to 24	4,732	5,515	5,645	5,649	134	*2%*
Age 25 to 29	4,374	5,651	5,631	5,450	-201	*-4%*
Age 30 to 34	4,291	5,114	5,680	5,899	785	*15%*
Age 35 to 39	5,002	4,802	5,861	5,950	1,148	*24%*
Age 40 to 44	5,533	4,789	5,361	6,072	1,283	*27%*
Age 45 to 49	5,459	5,275	4,874	6,015	740	*14%*
Age 50 to 54	4,663	5,656	4,763	5,381	-275	*-5%*
Age 55 to 59	3,370	5,233	4,939	4,620	-613	*-12%*
Age 60 to 64	2,186	4,225	5,076	4,299	74	*2%*
Age 65 to 69	1,682	2,998	4,601	4,378	1,380	*46%*
Age 70 to 74	1,571	1,914	3,541	4,343	2,429	*127%*
Age 75 to 79	1,399	1,466	2,311	3,751	2,285	*156%*
Age 80 to 84	1,004	1,177	1,290	2,452	1,275	*108%*
Age 85 and over	908	1,267	1,220	1,655	388	*31%*
Total Population	**66,145**	**76,485**	**82,046**	**87,847**	**11,362**	***15%***
Total age 5 to 17	13,283	13,966	13,994	14,556	590	*4%*
share age 5 to 17	*20.1%*	*18.3%*	*17.1%*	*16.6%*		

		2000-2010	2010-2020	2020-2030
Population Change		**10,340**	**5,561**	**5,801**
Percent		*16%*	*7%*	*7%*
Average Annual		*1.5%*	*0.7%*	*0.7%*

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

Table A2

Population by Age Group, High Series Forecast
Gresham-Barlow School District, 2000 to 2030

	2000 Census	2010 Census	2020 Forecast	2030 Forecast	2010 to 2030 Change	
					Number	Percent
Under Age 5	4,601	5,283	5,524	5,792	509	*10%*
Age 5 to 9	4,984	5,184	5,658	6,027	843	*16%*
Age 10 to 14	5,157	5,492	5,869	6,268	776	*14%*
Age 15 to 17	3,142	3,290	3,415	3,770	480	*15%*
Age 18 to 19	2,087	2,154	1,926	2,180	26	*1%*
Age 20 to 24	4,732	5,515	5,888	6,332	817	*15%*
Age 25 to 29	4,374	5,651	5,864	5,880	229	*4%*
Age 30 to 34	4,291	5,114	5,912	6,364	1,250	*24%*
Age 35 to 39	5,002	4,802	6,099	6,439	1,637	*34%*
Age 40 to 44	5,533	4,789	5,596	6,548	1,759	*37%*
Age 45 to 49	5,459	5,275	5,031	6,431	1,156	*22%*
Age 50 to 54	4,663	5,656	4,897	5,748	92	*2%*
Age 55 to 59	3,370	5,233	5,088	4,926	-307	*-6%*
Age 60 to 64	2,186	4,225	5,190	4,560	335	*8%*
Age 65 to 69	1,682	2,998	4,723	4,652	1,654	*55%*
Age 70 to 74	1,571	1,914	3,649	4,568	2,654	*139%*
Age 75 to 79	1,399	1,466	2,486	4,019	2,553	*174%*
Age 80 to 84	1,004	1,177	1,390	2,656	1,479	*126%*
Age 85 and over	908	1,267	1,378	1,913	646	*51%*
Total Population	**66,145**	**76,485**	**85,582**	**95,072**	**18,587**	***24%***
Total age 5 to 17	13,283	13,966	14,942	16,065	2,099	*15%*
share age 5 to 17	*20.1%*	*18.3%*	*17.5%*	*16.9%*		

		2000-2010	2010-2020	2020-2030
Population Change		**10,340**	**9,097**	**9,490**
Percent		*16%*	*12%*	*11%*
Average Annual		*1.5%*	*1.1%*	*1.1%*

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

Table A3

Gresham-Barlow School District, Low Series Enrollment Forecasts, 2016-17 to 2025-26[1]

	Actual	Forecast									
Grade	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	889	896	875	891	891	894	896	898	900	903	904
1	881	905	917	896	912	914	917	919	921	923	926
2	887	883	907	919	898	916	918	921	923	925	927
3	917	889	885	909	921	902	920	922	925	927	929
4	960	920	891	887	911	926	907	925	927	930	932
5	896	953	914	885	881	907	922	903	921	923	926
6	875	931	990	949	919	918	945	960	940	959	961
7	921	882	938	997	956	928	927	954	969	949	968
8	877	929	890	946	1,005	967	938	937	965	980	960
9	962	926	980	939	998	1,061	1,021	991	990	1,019	1,035
10	938	966	931	984	944	1,002	1,063	1,024	995	994	1,022
11	971	919	946	912	963	925	980	1,038	1,001	973	972
12	1,033	1,041	991	1,017	984	1,034	997	1,050	1,107	1,071	1,043
UN[2]	155	155	155	155	155	155	155	155	155	155	155
Total	**12,162**	**12,195**	**12,210**	**12,286**	**12,338**	**12,449**	**12,506**	**12,597**	**12,639**	**12,631**	**12,660**
Annual change		*33*	*15*	*76*	*52*	*111*	*57*	*91*	*42*	*-8*	*29*
		0.3%	*0.1%*	*0.6%*	*0.4%*	*0.9%*	*0.5%*	*0.7%*	*0.3%*	*-0.1%*	*0.2%*
K-5	5,430	5,446	5,389	5,387	5,414	5,459	5,480	5,488	5,517	5,531	5,544
6-8	2,673	2,742	2,818	2,892	2,880	2,813	2,810	2,851	2,874	2,888	2,889
9-12	3,904	3,852	3,848	3,852	3,889	4,022	4,061	4,103	4,093	4,057	4,072

	5 Year Change: 2015-16 to 2020-21		**5 Year Change: 2020-21 to 2025-26**		**10 Year Change: 2015-16 to 2025-26**	
	Growth	**Pct.**	**Growth**	**Pct.**	**Growth**	**Pct.**
K-5	29	*1%*	85	*2%*	114	*2%*
6-8	140	*5%*	76	*3%*	216	*8%*
9-12	118	*3%*	50	*1%*	168	*4%*
Total	**287**	***2%***	**211**	***2%***	**498**	***4%***

1. Includes all charter schools. *Population Research Center, Portland State University, November 2015*

2. Ungraded students. These are alternative HS placements included in the district total.

Table A4

Gresham-Barlow School District, Middle Series Enrollment Forecasts, 2016-17 to 2025-26[1]

	Actual	Forecast									
Grade	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	889	909	889	908	910	914	917	922	926	931	935
1	881	921	936	916	935	936	941	944	948	953	958
2	887	888	929	944	924	943	944	949	952	956	961
3	917	894	895	937	952	931	951	952	957	960	964
4	960	925	902	903	945	960	939	959	960	965	968
5	896	960	925	902	903	944	959	938	958	959	964
6	875	937	1,003	967	943	944	986	1,002	980	1,001	1,002
7	921	887	950	1,017	980	956	957	999	1,015	993	1,014
8	877	935	901	964	1,031	994	970	971	1,013	1,029	1,007
9	962	930	991	955	1,021	1,091	1,052	1,027	1,028	1,072	1,089
10	938	969	938	998	962	1,026	1,094	1,056	1,032	1,033	1,076
11	971	922	951	922	979	943	1,005	1,070	1,033	1,010	1,011
12	1,033	1,044	996	1,025	996	1,051	1,016	1,076	1,140	1,103	1,081
UN[2]	155	155	155	155	155	155	155	155	155	155	155
Total	**12,162**	**12,276**	**12,361**	**12,513**	**12,636**	**12,788**	**12,886**	**13,020**	**13,097**	**13,120**	**13,185**
Annual change		*114*	*85*	*152*	*123*	*152*	*98*	*134*	*77*	*23*	*65*
		0.9%	*0.7%*	*1.2%*	*1.0%*	*1.2%*	*0.8%*	*1.0%*	*0.6%*	*0.2%*	*0.5%*
K-5	5,430	5,497	5,476	5,510	5,569	5,628	5,651	5,664	5,701	5,724	5,750
6-8	2,673	2,759	2,854	2,948	2,954	2,894	2,913	2,972	3,008	3,023	3,023
9-12	3,904	3,865	3,876	3,900	3,958	4,111	4,167	4,229	4,233	4,218	4,257

	5 Year Change: 2015-16 to 2020-21		**5 Year Change: 2020-21 to 2025-26**		**10 Year Change: 2015-16 to 2025-26**	
	Growth	**Pct.**	**Growth**	**Pct.**	**Growth**	**Pct.**
K-5	198	*4%*	122	*2%*	320	*6%*
6-8	221	*8%*	129	*4%*	350	*13%*
9-12	207	*5%*	146	*4%*	353	*9%*
Total	**626**	***5%***	**397**	***3%***	**1,023**	***8%***

1. Includes all charter schools. *Population Research Center, Portland State University, November 2015*

2. Ungraded students. These are alternative HS placements included in the district total.

Table A5

Gresham-Barlow School District, High Series Enrollment Forecasts, 2016-17 to 2025-26[1]

	Actual	Forecast									
Grade	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	889	927	909	924	928	932	939	945	952	959	965
1	881	930	959	940	955	959	963	970	977	983	990
2	887	894	943	973	953	967	971	975	982	989	995
3	917	900	907	956	987	965	979	983	987	994	1,001
4	960	931	914	921	971	1,000	978	992	996	1,000	1,007
5	896	966	937	920	927	975	1,004	982	996	1,000	1,004
6	875	943	1,016	986	968	973	1,023	1,054	1,031	1,045	1,049
7	921	893	962	1,036	1,006	985	990	1,041	1,073	1,049	1,063
8	877	941	913	982	1,057	1,025	1,004	1,009	1,060	1,092	1,068
9	962	934	1,002	972	1,045	1,121	1,087	1,065	1,071	1,124	1,158
10	938	972	945	1,012	982	1,051	1,125	1,092	1,071	1,076	1,128
11	971	924	957	931	995	964	1,030	1,101	1,070	1,049	1,054
12	1,033	1,047	1,001	1,033	1,008	1,068	1,038	1,102	1,172	1,141	1,121
UN[2]	155	155	155	155	155	155	155	155	155	155	155
Total	**12,162**	**12,357**	**12,520**	**12,741**	**12,937**	**13,140**	**13,286**	**13,466**	**13,593**	**13,656**	**13,758**
Annual change		*195*	*163*	*221*	*196*	*203*	*146*	*180*	*127*	*63*	*102*
		1.6%	*1.3%*	*1.8%*	*1.5%*	*1.6%*	*1.1%*	*1.4%*	*0.9%*	*0.5%*	*0.7%*
K-5	5,430	5,548	5,569	5,634	5,721	5,798	5,834	5,847	5,890	5,925	5,962
6-8	2,673	2,777	2,891	3,004	3,031	2,983	3,017	3,104	3,164	3,186	3,180
9-12	3,904	3,877	3,905	3,948	4,030	4,204	4,280	4,360	4,384	4,390	4,461

	5 Year Change: 2015-16 to 2020-21		**5 Year Change: 2020-21 to 2025-26**		**10 Year Change: 2015-16 to 2025-26**	
	Growth	**Pct.**	**Growth**	**Pct.**	**Growth**	**Pct.**
K-5	368	*7%*	164	*3%*	532	*10%*
6-8	310	*12%*	197	*7%*	507	*19%*
9-12	300	*8%*	257	*6%*	557	*14%*
Total	**978**	***8%***	**618**	***5%***	**1,596**	***13%***

1. Includes all charter schools. *Population Research Center, Portland State University, November 2015*

2. Ungraded students. These are alternative HS placements included in the district total.

Table A6

Estimated and Forecast Births
Gresham-Barlow School District

Year	Births
2000	884
2001	911
2002	895
2003	920
2004	929
2005	980
2006	1,063
2007	1,051
2008	1,018
2009	959
2010	1,060
2011	1,081
2012	998
2013	1,044
2014	979
2015 (forecast)	1,056
2016 (forecast)	1,063
2017 (forecast)	1,069
2018 (forecast)	1,076
2019 (forecast)	1,083
2020 (forecast)	1,089
2021 (forecast)	1,091
2022 (forecast)	1,093
2023 (forecast)	1,095
2024 (forecast)	1,097
2025 (forecast)	1,099

Source: 2000-2014 birth data from Oregon Center for Health Statistics allocated to GBSD boundary by PSU-PRC. 2015-2025 forecasts, PSU-PRC.

2000 AND 2010 CENSUS PROFILE FOR THE DISTRICT

2000 and 2010 Census Summary

Gresham Barlow School District

Area approximation based on census block geography

POPULATION BY AGE GROUP	2000		2010		2000 to 2010 Change	
Total population	66,145	*100.0%*	76,485	*100.0%*	10,340	*15.6%*
Under age 18	17,884	*27.0%*	19,249	*25.2%*	1,365	*7.6%*
Age 18 and over	48,261	*73.0%*	57,236	*74.8%*	8,975	*18.6%*
AREA AND DENSITY						
Land Area - Sq. Mi. (Source: 2010 Census)	50.4		50.4		0.0	*0.0%*
Persons per square mile	1,312.4		1,517.6		205.2	*15.6%*
HOUSING OCCUPANCY STATUS						
Total housing units	25,749	*100.0%*	30,307	*100.0%*	4,558	*17.7%*
Occupied	24,516	*95.2%*	28,621	*94.4%*	4,105	*16.7%*
Vacant or Seasonal	1,233	*4.8%*	1,686	*5.6%*	453	*36.7%*
HISPANIC OR LATINO AND RACE[1]						
Total population	66,145	*100.0%*	76,485	*100.0%*	10,340	*15.6%*
Hispanic or Latino (of any race)	4,827	*7.3%*	10,621	*13.9%*	5,794	*120.0%*
Not Hispanic or Latino	61,318	*92.7%*	65,864	*86.1%*	4,546	*7.4%*
White Alone	56,650	*85.6%*	59,126	*77.3%*	2,476	*4.4%*
Black or African American Alone	797	*1.2%*	1,348	*1.8%*	551	*69.1%*
American Indian and Alaska Native Alone	496	*0.7%*	518	*0.7%*	22	*4.4%*
Asian Alone	1,606	*2.4%*	2,156	*2.8%*	550	*34.2%*
Native Hawaiian and Other Pacific Islander Al	111	*0.2%*	268	*0.4%*	157	*141.4%*
Some Other Race Alone	66	*0.1%*	104	*0.1%*	38	*57.6%*
Two or More Races	1,592	*2.4%*	2,344	*3.1%*	752	*47.2%*
RACE ALONE OR IN COMBINATION[2]						
Total population	66,145	*100.0%*	76,485	*100.0%*	10,340	*15.6%*
White	60,268	*91.1%*	66,359	*86.8%*	6,091	*10.1%*
Black or African American	1,116	*1.7%*	2,236	*2.9%*	1,120	*100.4%*
American Indian and Alaska Native	1,179	*1.8%*	1,893	*2.5%*	714	*60.6%*
Asian	2,254	*3.4%*	3,206	*4.2%*	952	*42.2%*
Native Hawaiian and Other Pacific Islander	307	*0.5%*	573	*0.7%*	266	*86.6%*
Some Other Race	3,158	*4.8%*	5,660	*7.4%*	2,502	*79.2%*

1. 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.

2. 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.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1.
Tabulated by Population Research Center, Portland State University. www.pdx.edu/prc