

**OREGON TRAIL SCHOOL DISTRICT
ENROLLMENT FORECASTS
2012-13 TO 2021-22**



FEBRUARY, 2012

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ENROLLMENT FORECASTS
2012-13 TO 2021-22**

**Prepared By
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EXECUTIVE SUMMARY

This report presents the results of a demographic study conducted by the Portland State University Population Research Center. The study includes analyses of population, housing and enrollment trends affecting the District in recent years, *low*, *middle*, and *high range* forecasts of district-wide enrollment by grade level for the 2012-13 to 2021-22 school years and *middle range* forecasts of individual school enrollments for the 2012-13 to 2021-22 school years.

Fall 2011 enrollment in all OTSD schools was 4,089. In the twelve years since 1999-2000, total K-12 enrollment in the Oregon Trail School District has been relatively stable, never exceeding 4,220 students or falling below 4,036 students. The enrollment increase from Fall 2010 was small (48 students, or 1.2 percent) but it ranks as the largest numeric and percentage enrollment increase in the District's 14 year history. However, the growth did not make up for the small enrollment declines each of the five years between 2004-05 and 2009-10, and K-12 enrollment remains 131 students (3.1 percent) below its 2004-05 level of 4,220 students.

The enrollment decline has been influenced by three major factors. First is an age structure in which adults age 45 to 64 outnumber younger adults who are more likely to have young children. Second, those younger adults have fewer children, on average, than the previous generation; the number of births occurring to District residents has changed very little over the past 20 years despite overall population growth. Finally, the economic downturn has continued for more than three years; job losses have slowed the region's growth, affecting areas such as the OTSD that had been experiencing growth due to new housing development.

Changes in fertility rates are difficult to forecast, and the already low rates dropped even further nationally and in Oregon after the recession began in late 2007. The other two factors, decline in young adult population and job losses, are not likely to persist over the 10 year horizon of the enrollment forecasts included in the current study.

K-12 enrollment totals increase by less than 100 students in the *low range* forecast, more than 300 in the *middle range* forecast and over 600 in the *high range* forecast. Table 1 contains the Oregon Trail School District's recent and forecast K-12 enrollments by five year intervals under each of the three scenarios. Table 2 contains school level forecasts under the middle range

scenario. Following the tables are brief highlights of the district-wide and individual school enrollment forecasts. Chart 1 depicts the District's 10 year K-12 enrollment history and the three forecast scenarios. Details of the forecasts are presented in the "Enrollment Forecasts" section and in Appendix A.

Table 1
Historic and Forecast K-12 Enrollment
Oregon Trail School District

	Actual			Forecast	
	2001-02	2006-07	2011-12	2016-17	2021-22
LOW SERIES <i>5 year change</i>	4,156	4,164 8	4,089 -75	4,093 4	4,161 68
MID SERIES <i>5 year change</i>	4,156	4,164 8	4,089 -75	4,221 132	4,414 193
HIGH SERIES <i>5 year change</i>	4,156	4,164 8	4,089 -75	4,367 278	4,694 327

Source: Historic enrollment, Oregon Trail School District; Enrollment forecasts, Population Research Center, PSU, February 2012

Table 2
Historic and Forecast Enrollment
Oregon Trail School District by School Level

	Actual			MID SERIES Forecast	
	2001-02	2006-07	2011-12	2016-17	2021-22
K-5 <i>5 year change</i>	1,777	1,784 7	1,725 -59	1,859 134	1,951 92
6-8 <i>5 year change</i>	998	954 -44	1,046 92	951 -95	1,050 99
9-12 <i>5 year change</i>	1,381	1,426 45	1,318 -108	1,411 93	1,413 2
Total <i>5 year change</i>	4,156	4,164 8	4,089 -75	4,221 132	4,414 193

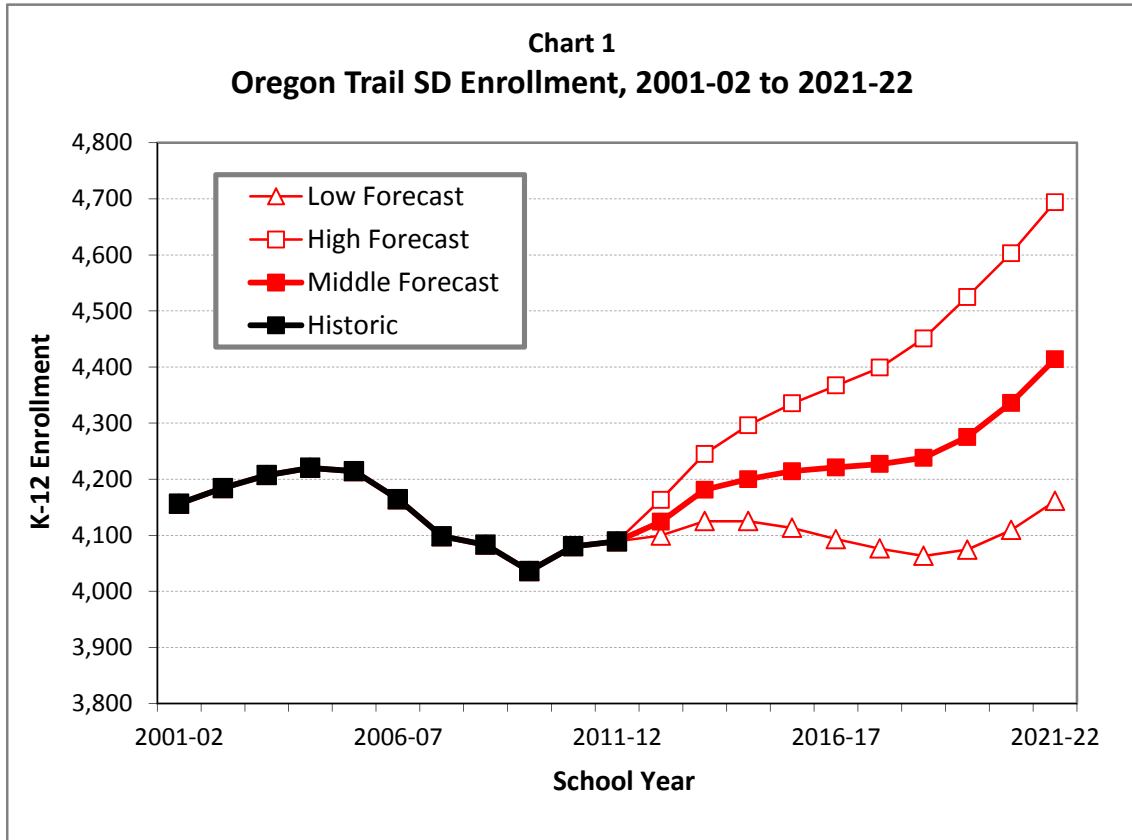
Source: Historic enrollment, Oregon Trail School District; Enrollment forecasts, Population Research Center, PSU, February 2012

District-wide Enrollment Forecast

In the *low range* forecast total K-12 enrollment throughout the 10 year forecast period remains in the narrow range that it has maintained over the past 10 years. The 2021-22 enrollment of 4,161 is just 72 students (two percent) higher than in 2011-12. Kindergarten class sizes remain below 300 each year and middle school enrollment is consistently less than in 2011-12.

In the *middle range* forecast total K-12 enrollment increases steadily, reaching 4,414 in 2021-22. The District adds 325 students (eight percent) for the entire 10 year period between 2011-12 and 2021-22. Most of the growth occurs at the elementary and high school levels; middle school enrollments rebound in the last six years of the forecast after falling from 2011-12 to 2015-16.

In the *high range* forecast total K-12 enrollment reaches 4,694 in 2021-22, adding 605 students (15 percent) for the entire 10 year period between 2011-12 and 2021-22. In this series, most of the growth occurs at the elementary level, but middle school and high school enrollments also increase over the forecast period.



Individual School Forecasts

Forecasts for individual schools are consistent with the *middle range* district-wide forecast. In the forecasts, the only program changes anticipated for OTSD schools are the addition of one grade each year to Oregon Trail Primary Academy until it serves grades K-8 in 2014-15. Other program changes, 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.

Among the District's elementary schools, the greatest amount of growth occurs at Firwood, based on potential residential development as well as its current young enrollment by grade level (upper grades have less enrollment than kindergarten and 1st grade). Future housing is also expected to contribute to growth at Kelso, but it loses enrollment initially due to its current older age profile (its upper grades have larger enrollments than kindergarten and 1st grade).

Enrollment changes at Boring, Cedar Ridge and Welches middle schools depend largely on fluctuations in the size of individual classes advancing from lower grades. For example, enrollment losses at all middle schools are forecasted until the 2015-16 school year, after which enrollments begin to rise due to the entry of relatively larger cohorts entering middle school. Overall, enrollment losses are expected for each of the District's middle schools.

Sandy High School is forecasted to see its enrollment rise from 1,318 in the 2011-12 school year to 1,413 students in 2021-22, adding 95 students (seven percent).

Forecasts for individual schools depict future enrollments consistent with the *middle range* district-wide forecast. Specific figures may be found in Table 20.

INTRODUCTION

The Portland State University Population Research Center (PRC) has prepared long range enrollment forecasts for the Oregon Trail School District (OTSD). PRC's previous enrolment forecasts for OTSD were prepared in March 2007. This study integrates information about OTSD 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 for the period between 2011-12 and 2021-22. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, geographic shape files from Clackamas County and Metro, county population forecasts from the Oregon Office of Economic Analysis, employment trends from the Oregon Employment Department, and housing development and planning data from the City of Sandy and Clackamas County.

The District, formed from the 1997 consolidation of the Sandy Union High School District and the Cottrell, Welches, and Sandy Elementary Districts, serves the northeastern portion of Clackamas County, from the community of Boring on the west to Mt. Hood on the east. The only incorporated city completely within the District is Sandy, but the District's western edge includes four homes within the recently incorporated City of Damascus. The OTSD encompasses 424 square miles. In spite of recent growth in the City of Sandy, results from the 2010 Census show that 66 percent of the District's residents live in unincorporated Clackamas County.

Following this introduction are sections presenting recent population, housing, employment, and enrollment trends within the District and the relationship between enrollment and housing. Next are the results of the district-wide enrollment forecasts and individual school forecasts, and a description of the methodologies used to produce the forecasts. The final section contains a brief discussion of the nature and accuracy of forecasts. Appendices contain details of the high and low district-wide forecast scenarios and a five page profile showing population and housing trends for 2000 and 2010.

POPULATION, EMPLOYMENT, AND HOUSING TRENDS, 1990 to 2010

Between 2000 and 2010, total population within the OTSD grew by 16 percent, from 24,107 persons to 28,038. This growth rate was greater than Clackamas County's 11 percent and slightly more than the Portland metropolitan area's 15 percent growth rate in the decade. Numeric and percentage growth in the OTSD was greater in the 2000s than in the 1990s, in contrast to Clackamas County and the Portland metropolitan area which saw higher growth in the 1990s. Between 1990 and 2000, total population within the OTSD grew by 14 percent, Clackamas County grew by 21 percent and the Portland metropolitan area grew by 27 percent.

The City of Sandy grew faster than the District, its unincorporated areas, the County and the metro area in both the 1990s and 2000s. During the 2000s, Sandy grew by 4,188 persons (77 percent). As a result, the share of the District's population living within the City of Sandy grew from 20 percent in 1990 to 22 percent in 2000 and 34 percent in 2010. The 1990, 2000, and 2010 populations of the District, the cities of Sandy and Damascus (OTSD portion only), the County and the metropolitan region are shown in Table 3.

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

	1990	2000	2010	Avg. Annual Growth Rate	
				1990-2000	2000-2010
OTSD Total	21,051	24,107	28,038	1.4%	1.5%
City of Sandy ¹	4,154	5,385	9,570	2.6%	5.9%
City of Damascus (OTSD portion) ²	N/A	N/A	9	N/A	N/A
OTSD Unincorporated	16,897	18,722	18,459	1.0%	-0.1%
Clackamas County	278,850	338,391	375,992	2.0%	1.1%
Portland-Vancouver-Beaverton MSA ³	1,523,741	1,927,881	2,226,009	2.4%	1.4%

1. A small part of the City of Sandy's population growth resulted from the annexation of 37 persons between 1990 and 2000 and 28 persons between 2000 and 2006.

2. Damascus was incorporated in 2005. A very small portion of the city is within OTSD.

3. Portland-Vancouver-Beaverton 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.

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, among private sector workers residing in the OTSD, 42 percent worked in neighboring Multnomah County. Another 39 percent worked in Clackamas County, and 8 percent worked in Washington County. Table 4 reports the number and share of OTSD residents by where their jobs are located.¹

Job Located Within*	Workers	Share
Multnomah County, OR	4,207	42%
<i>Portland city, OR</i>	2,658	26%
<i>Gresham city, OR</i>	1,196	12%
Clackamas County, OR	3,954	39%
<i>Oregon Trail School District</i>	2,289	23%
<i>Sandy city, OR</i>	1,037	10%
<i>Mount Hood Village CDP, OR</i>	403	4%
<i>Oregon City city, OR</i>	142	1%
Washington County, OR	794	8%
<i>Tigard city, OR</i>	177	2%
<i>Beaverton city, OR</i>	175	2%
<i>Hillsboro city, OR</i>	155	2%
Marion County, OR	291	3%
Clark County, WA	150	1%
Lane County, OR	104	1%
All Other Locations	569	6%
Total Primary Jobs	10,069	100%

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

Source: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2009). Jobs covered by unemployment insurance, generally excluding federal government, agricultural, self-employed and domestic workers. Includes at most one (primary) job per resident.

¹U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2009). Commute shed report for residents of OTSD. Includes workers at firms covered by unemployment insurance (excludes most agricultural jobs and self-employed). <http://lehdmap.did.census.gov/>.

Between 2004 and 2007 Clackamas County added 12,200 jobs, nine percent over the three year period. Growth slowed in early 2008, and in October 2008 the county began to post year-to-year job losses. By 2010, employment had fallen below its 2004 level, mainly due to the loss of 11,000 jobs between 2008 and 2009.²

Clackamas County's unemployment rate rose from 4.6 percent in May 2008, about one percentage point *below* the U.S. rate, to 11.2 percent in May 2009, nearly two percentage points *above* the U.S. rate. The Portland metro area's unemployment rate increase of 6.7 percentage points during that period was the biggest increase among the nation's large metro areas. Typically, when the Portland area's unemployment rate is higher than the U.S. rate, population growth slows as a result of fewer people moving to the region.

The Oregon Employment Department offered this assessment of Clackamas County employment growth in October 2011:

Economists predicted that the nation's jobs recovery would be sporadic in the early stages, and we're seeing that in [Clackamas County]. After stabilizing in mid-2010, the area's economy picked up steam late last fall and through the winter. Growth slowed to a crawl this past spring and we remain in a holding pattern into the fall months. At the end of the third quarter of 2011, private sector employment is up just 400 jobs compared to one year ago. Gains in manufacturing and educational and health services have been offset by losses in construction and financial activities. Meanwhile, the unemployment rate has dropped below nine percent.³

Births

Between 2000 and 2009 there was a gradual increase each year in births to residents of the OTSD. Births in the OTSD were still higher in 2009, compared to two previous years. This is in contrast to the U.S. and Oregon as a whole where the number of births peaked in 2007 and has fallen for three consecutive years. Provisional and preliminary data indicated that birth totals fell more than seven percent in the U.S. and Oregon between 2007 and 2010.⁴ The Pew Research Center's analysis of multiple economic and demographic data sources confirms the

² "Current Employment by Industry," Oregon Employment Department, OLMIS. Average annual non-farm employment in Clackamas County was 135,900 in 2004, 148,100 in 2007, and 134,900 in 2010.

³ "Recent Trends, Region 15." Oregon Employment Department, OLMIS, October 1, 2011.

⁴ "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.

close correlation between the economic downturn and the nation’s fertility downturn.⁵ The number of OTSD births each year from 1990 to 2009 is reported in Table 5. In the “Enrollment Forecasts” section of this report we will examine the relationship between births, migration, and subsequent school enrollments.

Table 5
Annual Births, 2000 to 2009
Oregon Trail School District

Year	Births
2000	282
2001	240
2002	276
2003	265
2004	273
2005	253
2006	323
2007	306
2008	312
2009	317

Source: PSU-PRC estimates using Oregon Center for Health Statistics zip code data and geocoded birth records.

Housing Growth and Characteristics

During the 2000 to 2010 period, the District added about 2,700 housing units, as shown in Table 6. The smaller increase of about 2,000 households (occupied housing units) was due to an increase in vacancy rates, from 18.5 percent in 2000 to 20.3 percent in 2010. The rate may be misleading, because nearly three quarters of the “vacant” units reported in the census are designated “for seasonal, recreational, or occasional use” such as the many vacation cabins and condos on Mount Hood. Vacant units designated “for sale or rent” in 2010 were just 3.1 percent of the District’s housing units, nearly identical to the 3.2 percent observed in 2000.

The net increase of 322 households with children under 18 during the 20 year period from 1990 to 2010 was small compared with overall gain of 3,367 households. As a result, the share of households with children fell from 41 percent in 1990 to 36 percent in 2000 and 31 percent in

⁵ “In a Down Economy, Fewer Births.” Pew Research Center, Pew Social & Demographic Trends, October 2011.

2010. The average number of persons per household also decreased, from 2.77 in 1990 to 2.67 in 2000 and 2.57 in 2010. Factors contributing to the decreases in household size and share of households with children include the rapid growth in the population age 45 and over and declining fertility rates.

Table 6
Oregon Trail School District
Housing and Household Characteristics, 1990, 2000, and 2010

	1990	2000	2010	Change	
				'90 to '00	'00 to '10
Housing Units	9,373	11,021	13,695	1,648	2,674
Households	7,546	8,980	10,913	1,434	1,933
Households with children under 18 <i>share of total</i>	3,058 41%	3,265 36%	3,380 31%	207	115
Households with no children under 18 <i>share of total</i>	4,488 59%	5,715 64%	7,533 69%	1,227	1,818
Household Population	20,920	23,975	28,000	3,055	4,025
Persons per Household	2.77	2.67	2.57	-0.10	-0.10

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

To track recent housing change, we use three sets of data that are consistent with each other but relate to different stages in the development process. In this section we present them chronologically. First, 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, building permits are issued, and then homes are built and ultimately appear on the tax roles. All of these steps create public records, which are compiled for the District and its attendance areas.

Updating the inventory of current and proposed development is an ongoing process incorporating information provided by Clackamas County and the City of Sandy. The previous report prepared by PRC included tables listing 42 separate developments within OTSD that had been submitted for land use approval between 2002 and the March 2007 report date. Many of those developments have been completed and several had their approvals withdrawn or expired. Table 7 lists 19 currently active developments, including 16 that were included in the

Table 7
Active Residential Developments, Oregon Trail School District

Year Submitted*	OTSD Attendance Areas			Development	File No.	Type	Lots/ Units
	Jurisdiction	Elementary	Middle				
2004	Sandy	Firwood	Cedar Ridge	Deer Pointe Phase 2	04-007	SFR	58
	Sandy	Naas	Boring	Salmon Creek Estates PD	04-051	SFR	61
2005	Sandy	Naas	Boring	Champion Village	05-003	Townhm.	62
	Unincorporated	Naas	Boring	Emerald Vista Estates	Z0926-05	SFR	12
	Unincorporated	Welches	Welches	Salmon River Meadows	Z0858-05	SFR	4
	Sandy	Kelso	Boring	Sandy Bluff 4 and 5	05-004	SFR	127
	Sandy	Kelso	Boring	Sandy Bluff 6	05-008	SFR	49
2006	Unincorporated	Welches	Welches	Brightwater Estates	Z0652-08	SFR	11
	Unincorporated	Firwood	Cedar Ridge	Kitchen Estates	Z0694-06	SFR	3
	Sandy	Sandy	Boring	Parmele Subdivision	06-050	SFR	33
	Sandy	Kelso	Boring	Sleepy Hollow Phase 1	06-015	SFR	35
	Unincorporated	Firwood	Cedar Ridge	Stone Trimble	Z0786-06	SFR	4
	Sandy	Sandy	Boring	Trimble Planned Development	06-022	Duplexes	28
	Sandy	Sandy	Boring	Troutner Subdivision	06-070	SFR	6
	Unincorporated	Welches	Welches	Tyrolean Meadows	Z0975-06	SFR	10
	Unincorporated	Welches	Welches	Village at the Mtn. Golf Townhomes	Z0436-06	Townhm.	6
2007	Unincorporated	Naas	Boring	Hood View Estates	Z0365-07	SFR	6
	Sandy	Kelso	Boring	Sleepy Hollow Phase 2	07-010	SFR	5
2011	Unincorporated	Welches	Welches	Highland Meadows	Z0013-11	SFR	9
Total (including homes already built):							529
Est. number of homes built as of mid-2011:			116	Additional homes possible:	413		

**Note: All except Highland Meadows have been platted. As of 2011, some or all of the building lots in each subdivision remained vacant, and residential construction was underway in several of the subdivisions.*

Sources: City of Sandy and Clackamas County, additional research by PSU-PRC; assigned to current (2011-12) attendance areas by PSU-PRC.

tables five years ago. Some adjustments to the previous data were made to account for development name changes, lot or unit counts, or other corrections. The “active” designation encompasses a wide range, from subdivisions where many homes have been built but vacant lots remain, to those that have been platted but development has stalled, such as ChampionVillage (identified as Creekside Village in the 2007 report). Current homebuilding and sales activity is occurring at a modest pace in several subdivisions, notably Sandy Bluff and Sleepy Hollow (Kelso Elementary and Boring Middle), Salmon Creek Estates (Naas Elementary and Boring Middle), and Deer Pointe (Firwood Elementary and Cedar Ridge Middle).

Following in chronological order, after subdivision plats are complete and building lots are created, new homes are authorized by building permits. Residential building permit activity within the City of Sandy each of the past 16 years is presented in Table 8. The table shows the slowdown that began in 2008 and has continued through the end of 2011.

Table 8
Housing Units Authorized by Building Permits

Year Permit Issued	City of Sandy	
	Single Family	Multiple Family
1996	46	0
1997	31	2
1998	65	0
1999	104	2
2000	150	80
2001	176	42
2002	162	18
2003	123	4
2004	93	35
2005	162	2
2006	193	0
2007	149	35
2008	77	0
2009	46	24
2010	45	4
2011	32	0

Source: U.S. Census Bureau, Residential Construction Branch. Data available online at <http://censtats.census.gov/bldg/bldgprmt.shtml>.

Finally, after homes are completed they appear in tax assessor records. Tax assessor data provided by the Clackamas County Geographic Information Systems (GIS) Department —

spatially aligned with the District's attendance area boundaries — indicates that during the 11 years from 2000 to 2010, more than 2,100 single family homes were built in the District.

Table 9 reports new single family homes by attendance area and year built. Attendance areas are based on last year's (2010-11) boundaries, which include the former Cottrell Elementary. Cottrell's entire attendance area was reassigned to Naas for the 2011-12 school year. The greatest numbers of new homes have been built in the past decade in the Firwood attendance area, followed by Sandy Grade and Kelso, respectively. The City of Sandy has accounted for 65 percent of the homes built since 2000, while the Clackamas County unincorporated area accounts for all of the rest. Homes that are demolished, removed, or replaced are not subtracted from the number of new homes, so the *net* change in the District's housing stock is lower than the number of new homes.

Table 9
Oregon Trail School District
Single Family Homes Built 2000 to 2010 by Attendance Area

Elementary School Area*	Year Built											2000-10 Total
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Cottrell	4	3	2	-	2	7	6	7	1	2	-	34
Firwood	88	73	94	90	29	77	126	81	59	13	11	741
Kelso	66	91	67	52	42	17	10	5	8	13	34	405
Naas	6	11	15	29	15	13	21	19	13	5	9	156
Sandy	16	28	14	3	45	80	106	73	42	29	10	446
Welches	41	33	23	33	54	52	27	35	26	10	10	344
Middle School Area*												
Boring	80	110	84	81	77	108	136	52	27	36	49	840
Cedar Ridge	100	96	108	93	56	86	133	133	96	26	15	942
Welches	41	33	23	33	54	52	27	35	26	10	10	344
District Total	221	239	215	207	187	246	296	220	149	72	74	2,126

*2010-11 attendance areas including Cottrell, which was reassigned to Naas beginning in 2011-12.

Source: Tax assessor data provided by Clackamas County GIS, November 2011. Housing identified based on parcel attributes and compiled by attendance area by PSU-PRC.

ENROLLMENT TRENDS

Fall 2011 enrollment in all OTSD schools was 4,089. In the twelve years since 1999-2000, total K-12 enrollment in the Oregon Trail School District has been relatively stable, never exceeding 4,220 students or falling below 4,036 students. The enrollment increase from Fall 2010 was small (48 students, or 1.2 percent) but it ranks as the largest numeric and percentage enrollment increase in the District's 14 year history. However, the growth did not make up for the small enrollment declines each of the five years between 2004-05 and 2009-10, and K-12 enrollment remains 131 students (3.1 percent) below its 2004-05 level of 4,220 students.

Although the K-12 total has changed very little, the three school levels, elementary, middle, and high, have seen greater fluctuations. Elementary (K-5th) grades peaked at 1,805 students in 2005-06, and had 80 fewer students (4.4 percent) in 2011-12. Middle school (6th-8th) enrollment in 2011-12 returned to its 2004-05 peak of 1,046, and is 139 students (15.3 percent) larger than in 2007-08. High school enrollment reached a peak of 1,432 in 2004-05 and flirted with the peak in 2006-07, but has since fallen to 1,318, 114 students (8.0 percent) below the peak seven years earlier.

Table 10 on the next page summarizes the enrollment history for the District by grade level annually from 2001-02 to 2011-12.

Table 10
Oregon Trail School District, Historic Enrollment, 2001-02 to 2011-12

Grade	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
K	250	282	283	270	312	243	260	250	253	259	279
1	272	284	279	292	301	319	263	282	272	276	282
2	261	273	285	298	307	307	324	272	285	276	279
3	331	274	280	292	296	294	303	331	282	288	276
4	308	348	280	287	297	314	313	330	337	281	296
5	355	309	358	303	292	307	317	315	323	334	313
6	358	364	313	360	298	302	306	332	332	330	342
7	326	347	365	323	365	289	310	319	337	348	348
8	314	332	366	363	338	363	291	319	320	341	356
9	367	357	368	400	392	370	370	308	326	351	345
10	358	370	340	365	376	380	357	364	305	320	343
11	320	338	350	316	328	356	349	329	329	291	308
12	336	306	340	351	312	320	335	332	335	346	322
Total	4,156	4,184	4,207	4,220	4,214	4,164	4,098	4,083	4,036	4,041	4,089
<i>One year change</i>		28 0.7%	23 0.5%	13 0.3%	-6 -0.1%	-50 -1.2%	-66 -1.6%	-15 -0.4%	-47 -1.2%	5 0.1%	48 1.2%
K-5	1,777	1,770	1,765	1,742	1,805	1,784	1,780	1,780	1,752	1,714	1,725
6-8	998	1,043	1,044	1,046	1,001	954	907	970	989	1,019	1,046
9-12	1,381	1,371	1,398	1,432	1,408	1,426	1,411	1,333	1,295	1,308	1,318

	5 Year Change: 2001-02 to 2006-07		5 Year Change: 2006-07 to 2011-12		10 Year Change: 2001-02 to 2011-12	
	Change	Pct.	Change	Pct.	Change	Pct.
K-5	7	0%	-59	-3%	-52	-3%
6-8	-44	-4%	92	10%	48	5%
9-12	45	3%	-108	-8%	-63	-5%
Total	8	0%	-75	-2%	-67	-2%

Source: Oregon Trail School District.

Private School Enrollment and Home Schooling

There are three private schools in the vicinity of the OTSD that enroll 100 or more students each. Damascus Christian School enrolls about 215 K-12 students, a decline from 2006-07 when it enrolled about 260. Hood View Junior Academy, enrolling about 100 students in grades K-8 and Good Shepherd School, enrolling about 200 K-8 students, are both in Boring. These three schools are at the western edge of the OTSD or just outside of it, and also draw enrollment from the more populous Gresham and Sunnyside areas. In addition to these three, there are a few preschools in the vicinity that also offer kindergarten, and the Pleasant Valley Montessori School includes kindergarten and first grade.

Private schools within the OTSD enroll local students as well as students from beyond the OTSD boundaries; conversely OTSD residents attend private schools beyond the District's boundaries, so the number of students enrolled in private schools physically located within the District cannot be used to measure overall private school share. The best estimates of private school enrollment for OTSD residents come from the Census Bureau — the 2000 Census "long form" and the more recent American Community Survey (ACS). In the 2000 Census, about 12 percent of the K-12 students living in the District and enrolled in school were reported as private school students. Estimates from 2006-2010 ACS responses show a similar 13 percent share.⁶

Another difference between public school enrollment and total school age population can be attributed to home schooling. Home schooled students age 7 to 18 living in the District are required to register with the Clackamas Educational Service District (CESD), though the statistics kept by the CESD 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. As shown in Table 11, the number of registered home school students was about 268 in 2006-07, but fell to 222 in 2011-12. This registry represents about four percent of the OTSD's resident elementary and middle school population and six percent of its high school population.

⁶ U.S. Census Bureau, 2000 Census, Summary File 3, Table P36; U.S. Census Bureau 2006-2010 American Community Survey 5 year estimates, Table B14002.

Table 11
Home School Students Residing in OTSD¹

	Grade 1-6	Grade 7-8	Grade 9-12	Total
2006-07 ²	107	47	114	268
2011-12 ³	75	47	100	222

1. Residents of OTSD age 7-18 enrolled with Clackamas Education Service District.

2. February 23, 2007.

3. January 20, 2012.

Source: Clackamas Education Service District

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. The other “outflow” consists of District residents who attend public schools in other school districts. There is also a related “inflow” of residents from other districts. Home schooling data, however, shows that it is not drawing increasing number of students from public schools.

Enrollment Trends at Individual Schools

Enrollments at the four of the District’s five Elementary schools were virtually unchanged between 2010-11 and 2011-12, with gains or losses no greater than five students. Naas grew by 73 students due to the closure of Cottrell, which had all of its attendance area reassigned to Naas. Naas’ 2011-12 enrollment was 13 students smaller than the 2010-11 combined total of Cottrell and Naas. Part of this small decline may be that only one of Cottrell’s two special education classes was relocated to Naas, while the other was relocated to Kelso. Oregon Trail Primary Academy, the District’s charter school, also serves elementary grades K-5 in 2011-12. Its growth of 28 students from 2010-11 is largely attributable to its addition of a fifth grade; it opened as a K-4 school in 2010-11 and will add one more grade each of the next three years, becoming K-8 in 2014-15.

Among the District’s middle schools, Boring and Cedar Ridge gained 17 and 13 students respectively, and each have attained their largest enrollments since the District formed 14 years ago. Welches Middle School lost three students. The District’s middle schools include three grades and enrollments are subject to annual fluctuation based on the size of the incoming 6th

grade class relative to the previous year's 8th grade class. The current fifth grade class is relatively small, and Oregon Trail Primary Academy is adding a sixth grade in 2012-13, so the number of students entering the District's three middle schools is likely to be smaller than in the past few years.

Sandy High School's enrollment has grown slightly in each of the past two years, adding 13 students in 2010-11 and 10 in 2011-12.

Total enrollments at each of the District's schools from 2006-07 to 2011-12 are shown in Table 12. Enrollment change is calculated for the five year period.

Table 12
Oregon Trail School District, Historic Enrollment by School, 2006-07 to 2011-12

School	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	5 Year Change: 2006-07 to 2011-12
Cottrell Elementary	133	129	117	122	86	0	-133
Firwood Elementary	423	432	462	478	433	435	12
Kelso Elementary	293	324	314	309	311	313	20
Naas Elementary	248	220	226	230	213	286	38
Sandy Grade	387	392	379	376	331	328	-59
Welches Elementary	300	283	282	240	214	209	-91
Elementary Totals	1,784	1,780	1,780	1,755	1,588	1,571	-213
Boring Middle	394	397	417	424	412	429	35
Cedar Ridge Middle	396	370	409	400	448	461	65
Welches Middle	164	141	144	162	159	156	-8
Middle School Totals	954	908	970	986	1,019	1,046	92
Oregon Trail Primary Academy	0	0	0	0	126	154	154
Sandy High School	1,426	1,410	1,333	1,295	1,308	1,318	-108
District Totals	4,164	4,098	4,083	4,036	4,041	4,089	-75

Source: Oregon Trail School District.

ENROLLMENT AND HOUSING

For school districts experiencing growth in their housing stock, understanding the existing demographics of the district is not enough. The impact of new residential development on school enrollment is often a concern of community members and school officials. New housing generally contributes enrollment growth to local schools, but demographic trends in existing homes may either offset or exacerbate the enrollment gains from new housing. Also, the impacts vary by the characteristics of the new housing. In this section, we present estimates of student generation for different types of housing in the OTSD. These estimates help to inform the enrollment forecasts, and they can be used by District staff on an *ad hoc* basis to estimate potential student generation from future developments as they are proposed or approved.

Using data from Metro we compiled a multiple family housing inventory in a spatial file that differentiates apartments, condominiums, and manufactured home parks and the number of housing units in each complex. We then combined this file with the parcel file and attribute data from the Clackamas County tax assessor's office and student address points in order to quantify the average number of students per unit for different types of housing.

The demographics of households within the City of Sandy differ from the unincorporated portion of the District; Sandy homes include more families with children. Within the unincorporated area, the Welches attendance area is unique because of its large share of vacation homes. For these reasons, we developed student generation rates for three distinct areas within OTSD.

In the City of Sandy, the average number of K-12 students per detached single family home built since 2000 was 0.60, more than one student for every two homes. This rate is similar to rates that we have measured for detached single family homes in other recent studies for area school districts.⁷ About 10 percent of the new single family homes built in Sandy since 2000 have been attached row homes. These have fewer students per home at each school level, and a K-12 total of 0.38 students per home.

⁷ For example, 0.52 in the Oregon City School District and 0.69 in the North Clackamas and Canby School Districts.

By Fall 2011, homes built in the 1990s were 12 to 21 years old. In the City of Sandy, these homes had a higher average number of high school students per home than those built since 2000, but fewer elementary students and a lower K-12 average of 0.49. Homes built before 1990 housed fewer students at all grade levels than homes built in the 1990s, and a K-12 average of 0.45 OTSD students per home.

On average, there were 0.43 K-12 OTSD students per apartment unit. Student generation rates in rental apartments vary widely depending on the size of the units themselves and the characteristics of the apartment complex. In general, income-restricted apartments with two or more bedrooms are home to the greatest numbers of children, but there are also many families in the District's market rate apartment complexes. Not surprisingly, one bedroom apartments and condominiums at any income level are home to relatively few school-age children.

There are fewer OTSD students per home in the District's unincorporated areas. Newer single family homes in unincorporated areas, excluding Welches, are home to an average of 0.43 K-12 students. In Welches, the average is only 0.19 K-12 students per home, due to the large number of seasonal homes included in the inventory of new homes. Tables 13, 14, and 15 provide detailed student generation rates observed in Fall 2011 for each area.

Fall 2011 student generation rates for the City of Sandy are shown in Chart 2, illustrating the "aging in place" that occurs in single family homes. The newest homes have many more young children than homes that are more than 11 years old. As the children grow, homes built in the 2000s will soon have fewer elementary age children, much like the homes built before 2000. Although younger families may eventually occupy the older homes, owner-occupied homes turn over to new owners very gradually, and the new owners will represent a diverse mix of households that may not include as many families with children as the newer tract homes.

Table 13
Average Number of OTSD Students per Home, Fall 2011
By Housing Type and Grade Level
City of Sandy

	Grade Level			
	K-5	6-8	9-12	K-12
Single family homes built 2000-2010	0.31	0.14	0.13	0.58
<i>detached homes built 2000-2010</i>	0.33	0.14	0.13	0.60
<i>row homes built 2000-2010</i>	0.20	0.11	0.07	0.38
Single family homes built 1990-1999	0.19	0.11	0.19	0.49
Single family homes built before 1990	0.17	0.11	0.16	0.45
Condominiums	0.09	0.00	0.03	0.12
Apartments	0.21	0.10	0.11	0.43
Manufactured homes in M.H. Parks	0.12	0.05	0.10	0.27

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

Table 14
Average Number of OTSD Students per Home, Fall 2011
By Housing Type and Grade Level
Excluding City of Sandy and Welches Attendance Area

	Grade Level			
	K-5	6-8	9-12	K-12
Single family homes built 2000-2010	0.16	0.13	0.14	0.43
Single family homes built 1990-1999	0.12	0.07	0.15	0.34
Single family homes built before 1990	0.12	0.08	0.11	0.31
Condominiums	N/A	N/A	N/A	N/A
Apartments	0.14	0.21	0.07	0.43
Manufactured homes in M.H. Parks	0.10	0.08	0.11	0.29

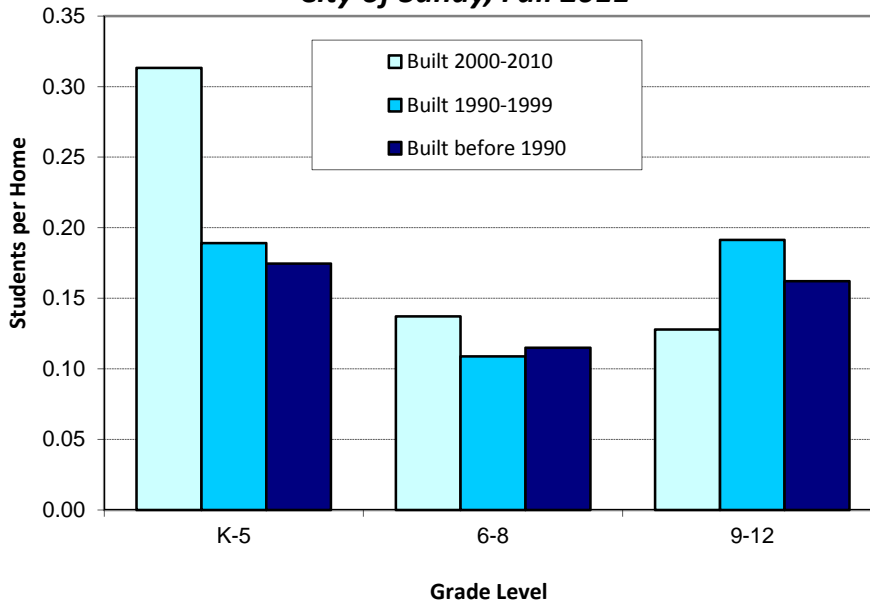
Source: Data compiled by PSU-PRC, using OTSD student data and geographic shape files from Metro RLIS. Excludes single family homes with unknown year built and senior housing developments.

Table 15
Average Number of OTSD Students per Home, Fall 2011
By Housing Type and Grade Level
Welches Attendance Area

	Grade Level			
	K-5	6-8	9-12	K-12
Single family homes built 2000-2010	0.08	0.04	0.07	0.19
Single family homes built 1990-1999	0.05	0.05	0.05	0.15
Single family homes built before 1990	0.05	0.03	0.05	0.13
Condominiums	0.00	0.00	0.00	0.00
Apartments	0.06	0.06	0.03	0.15
Manufactured homes in M.H. Parks	0.11	0.09	0.09	0.29

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

Chart 2
OTSD Students per Single Family Home
City of Sandy, Fall 2011



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

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 were used to develop initial net migration rates, forming 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 2010, 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 fertility rates by age group for both 2000 and 2010. We adjusted the future fertility rates to reflect trends of increasing fertility rates for women age 30 and older. These trends are based on state and national observations, as well as the number of births by age of mother occurring within the District during the 2000 to 2009 period for which detailed birth data was available.

Historic school enrollment is linked to the population forecast in two ways. First, the kindergarten and first grade enrollments at the time of the most recent census (the 2009-2010 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 OTSD 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. This forecast maintains capture rates of 80 percent for kindergarten and 84.5 percent for first grade, similar to those observed in 2000 and 2010 and consistent with the estimated 12 to 13 percent private and four percent home school shares.

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. These rates, usually 1.00 for elementary grades, represent a scenario under which there is no change due to migration. Enrollment change beyond the baseline is added (or subtracted, if appropriate) at each grade level depending on the migration levels of the overall population by single years of age. In this study, three different migration scenarios are modeled to produce *low*, *middle*, and *high range* enrollment forecasts.

Residential Capacity and Development

The information about active residential developments presented in Table 7 of this report and additional information from the City of Sandy Planning Department contribute to the district-wide population and enrollment forecasts and the individual school forecasts. For the district-wide forecast, adequate residential capacity must exist to accommodate expected long term growth, and buildable lots must be available for short term growth. For the potential growth in the next 10 years under the middle, low, or high growth scenarios, residential capacity is not a limitation. The City of Sandy’s January 2009 Urbanization Study estimated that the Sandy Urban Growth Boundary had enough capacity for 3,114 additional housing units, exceeding the expected 20 year demand.⁸ About 400 homes can be built in recently platted subdivisions, accommodating several years of growth under current conditions, or about two years under faster growth such as Sandy experienced in the mid-2000s.

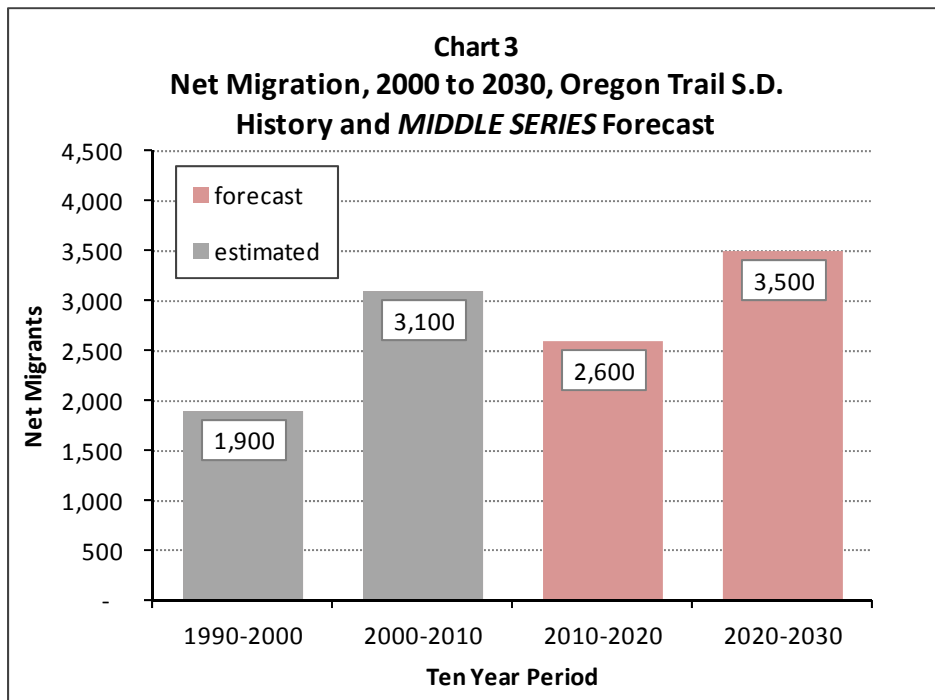
⁸ City of Sandy Urbanization Study, ECONorthwest, January 2009.

The specific location of residential growth matters most for the individual school forecasts. Homebuilding is currently underway within the Firwood, Kelso, and Naas elementary areas but the pace is too slow to contribute significantly to enrollment in the coming school year. In the long run, the location of active subdivisions and even expired or withdrawn developments is factored into the allocation of the district-wide forecast to individual schools, as expired developments may be the most likely to reemerge if market conditions allow.

Population Forecast

Census data confirm that population gains within the District in both the 1990s and the 2000s occurred due to both net migration (people moving in minus those moving out) and natural increase (births minus deaths).

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 actual 2010 population counts by age group, we are able to estimate net migration by age cohort. Under the *middle range* forecast, net migration is forecast to be similar to the 2000 to 2010 period. Chart 3 compares historic growth due to net migration estimated for the District with



the forecast net migration. Similar charts showing the low and high range migration forecasts are included in Appendix A.

The “baby bust” generation born in the 1970s will soon age out of its prime childbearing years and be replaced by the larger baby boom “echo” cohort born in the 1980s and early 1990s. Therefore, if fertility rates do not decline further, the number of births occurring to District residents is expected to increase slightly. Table 16 shows historic births from 2000 to 2010 as well as *middle range* forecasts from 2011 until 2016, the period that will have an impact on the enrollment forecasts presented in this study.

Table 16
Estimated and Forecast Births
OTSD, Middle Series Forecast

Year	Births
2000	282
2001	240
2002	276
2003	265
2004	273
2005	253
2006	323
2007	306
2008	312
2009	317
2010 (preliminary)	300
2011 (forecast)	308
2012 (forecast)	311
2013 (forecast)	315
2014 (forecast)	319
2015 (forecast)	323
2016 (forecast)	325

Source: 2000-2010 birth data from Oregon Center for Health Statistics allocated to OTSD boundary by PSU-PRC. 2011-2021 forecasts, PSU-PRC.

The 2030 *middle range* population forecast for the OTSD is 33,880, an increase of 5,842 persons from the 2010 Census. The average annual growth rate of 1.0 percent is less than the 2010 to 2030 growth rate in the State of Oregon Office of Economic Analysis’ most recent forecast for

Clackamas County (1.6 percent).⁹ This population forecast is presented by age group in Table 17. School-age population (5 to 17) is forecast to grow slowly, but continue to decline as a share of total population. Between 2010 and 2030, the greatest numeric and percentage growth occurs among the leading edge of the baby boom, ages 65 to 74 in 2020 and 75 to 84 in 2030. *Low and high range* population forecast tables are included in Appendix A.

Table 17
Population by Age Group, *MIDDLE SERIES* Forecast
Oregon Trail School District, 2000 to 2030

	2000	2010	2020	2030	2010 to 2030 Change	
	Census	Census	Forecast	Forecast	Number	Percent
Under Age 5	1,408	1,604	1,752	1,789	185	12%
Age 5 to 9	1,693	1,643	1,859	2,028	385	23%
Age 10 to 14	1,941	1,959	1,979	2,259	300	15%
Age 15 to 17	1,215	1,193	1,140	1,384	191	16%
Age 18 to 19	656	698	621	667	-31	-4%
Age 20 to 24	1,159	1,360	1,312	1,357	-3	0%
Age 25 to 29	1,184	1,519	1,515	1,424	-95	-6%
Age 30 to 34	1,439	1,716	1,882	1,878	162	9%
Age 35 to 39	1,898	1,766	2,114	2,189	423	24%
Age 40 to 44	2,287	1,768	2,025	2,267	499	28%
Age 45 to 49	2,253	2,187	1,974	2,398	211	10%
Age 50 to 54	1,941	2,367	1,807	2,083	-284	-12%
Age 55 to 59	1,460	2,389	2,274	2,072	-317	-13%
Age 60 to 64	1,066	1,981	2,372	1,827	-154	-8%
Age 65 to 69	794	1,404	2,262	2,172	768	55%
Age 70 to 74	664	949	1,746	2,111	1,162	122%
Age 75 to 79	490	655	1,136	1,849	1,194	182%
Age 80 to 84	329	457	642	1,200	743	163%
Age 85 and over	227	423	583	926	503	119%
Total Population	24,104	28,038	30,995	33,880	5,842	21%
Total age 5 to 17	4,849	4,795	4,978	5,671	876	18%
<i>share age 5 to 17</i>	20.1%	17.1%	16.1%	16.7%		

	2000-2010	2010-2020	2020-2030
Population Change	3,934	2,957	2,885
<i>Percent</i>	16.3%	10.5%	9.3%
<i>Average Annual</i>	1.5%	1.0%	0.9%

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

⁹ "Forecasts of Oregon's County Populations and Components of Change, 2000 to 2040." Oregon Department of Administrative Services, Office of Economic Analysis, April, 2004.

District-wide Enrollment Forecast

Chart 4 compares the historic and forecast number of births in the District with the historic and forecast number of OTSD kindergarten students under the *middle range* scenario. Births correspond to kindergarten cohorts (September to August). Although many children move into and out of the District between birth and age five, and not all District residents attend OTSD kindergartens, kindergarten enrollment has remained close to the number of births five years earlier. Because the kindergarten capture rate is assumed to be 80 percent, ratios of kindergarten enrollment to births above 0.80 indicate gains due to positive net migration. Throughout the forecast, net migration between birth and age five contributes to the population of young children within the District.

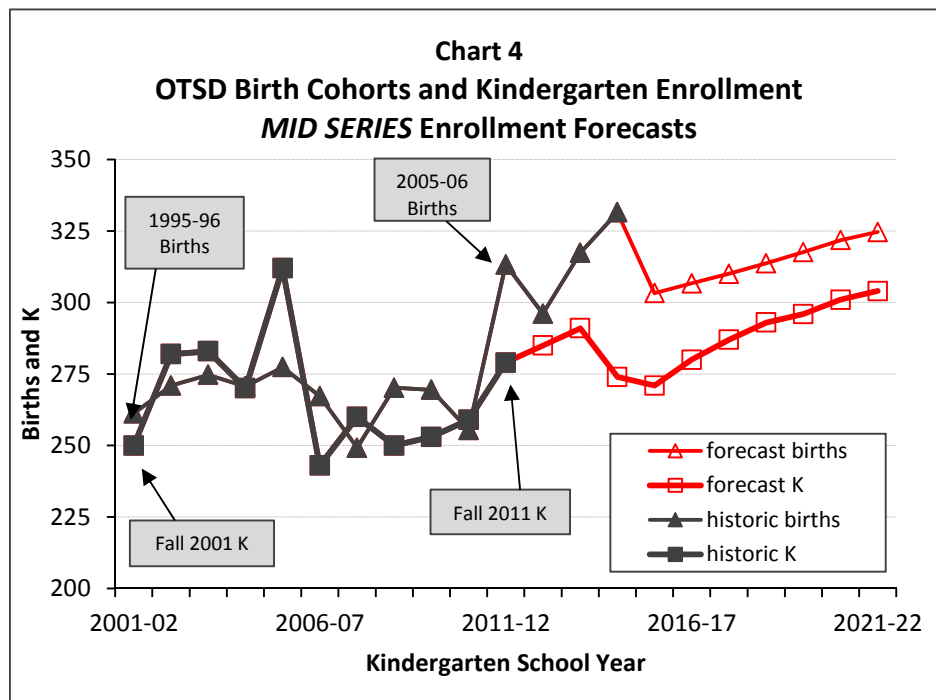


Table 18 displays Grade Progression Rates (GPRs) showing that over the past 10 years the OTSD has gained students due to migration at every grade level throughout elementary and middle grades. The GPR is the ratio of enrollment in a specific grade in one year to the enrollment of the same age cohort in the previous year; for example, the number of students enrolled in second grade this year divided by the number of students enrolled in first grade last year. Depending on the school district, rates for some grades are typically high because new students enter the District from private schools at particular grades. It is common to see higher GPRs for

the K-1st and 8th-9th grade transitions. In 10th, 11th, or 12th grade, low GPRs can indicate that students are leaving high school or being retained at lower grade levels. Baseline rates are used in the forecast model to move cohorts of students forward one grade prior to applying migration rates. For most elementary grades, if net migration is zero and students are not held back for academic reasons, one can expect baseline GPRs very close to 1.00. In the OTSD, transitions from 6th to 7th grade and 8th to 9th grade have been consistently higher than for other grades, evidence that more residents choose OTSD schools at those grades. Baseline rates of 1.01 for 6th to 7th grade and 1.02 for 8th to 9th grade are used in these forecasts. The *middle range* forecast includes enrollment growth due to migration, at similar rates as in the past.

Table 18
Grade Progression Rates¹
OTSD, MIDDLE Series Forecast

Grade Transition	Historic Average: 2001-02 to 2011-12	Baseline (without the influence of migration)	Forecast Average: 2011-12 to 2021-22
K-1	1.07	-- ²	1.08
1-2	1.02	1.00	1.02
2-3	1.01	1.00	1.02
3-4	1.04	1.00	1.03
4-5	1.03	1.00	1.03
5-6	1.02	1.00	1.03
6-7	1.02	1.01	1.03
7-8	1.02	1.00	1.03
8-9	1.07	1.02	1.04
9-10	0.98	0.98	0.98
10-11	0.93	0.96	0.96
11-12	1.00	1.04	1.04

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 *low range* forecast total K-12 enrollment throughout the 10 year forecast period remains in the narrow range that it has maintained over the past 10 years. The 2021-22 enrollment of 4,161 is just 72 students (two percent) higher than in 2011-12. Kindergarten class sizes remain below 300 each year and middle school enrollment is consistently less than in 2011-12.

In the *middle range* forecast total K-12 enrollment increases steadily, reaching 4,414 in 2021-22. The District adds 325 students (eight percent) for the entire 10 year period between 2011-12 and 2021-22. Most of the growth occurs at the elementary and high school levels; middle school enrollments rebound in the last six years of the forecast after falling from 2011-12 to 2015-16.

In the *high range* forecast total K-12 enrollment reaches 4,694 in 2021-22, adding 605 students (15 percent) for the entire 10 year period between 2011-12 and 2021-22. In this series, most of the growth occurs at the elementary level, but middle school and high school enrollments also increase over the forecast period.

Table 19 contains detailed *middle range* forecasts for the Oregon Trail School District by grade level annually for the 10 year period. Detailed annual forecasts by grade level for the other two scenarios are included in Appendix A3 and A4.

Table 19
Oregon Trail School District, MIDDLE SERIES Enrollment Forecasts, 2011-12 to 2021-22

Grade	2011-12	Forecast									
		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
K	279	285	291	274	271	280	287	293	296	301	304
1	282	299	308	314	296	293	302	309	316	321	326
2	279	286	304	314	320	302	298	307	314	324	329
3	276	284	292	311	320	327	308	304	313	322	332
4	296	282	291	300	319	329	335	316	312	321	330
5	313	302	289	299	308	328	337	344	324	320	330
6	342	320	310	297	307	317	336	346	353	333	329
7	348	352	331	321	307	318	328	348	358	366	345
8	356	356	362	341	330	316	327	337	358	368	376
9	345	368	369	375	353	342	327	339	349	371	381
10	343	339	362	363	369	347	336	322	334	343	365
11	308	330	327	349	350	356	334	324	310	322	331
12	322	321	345	342	364	366	372	349	338	324	336
Total	4,089	4,124	4,181	4,200	4,214	4,221	4,227	4,238	4,275	4,336	4,414
<i>Annual change</i>		35 0.9%	57 1.4%	19 0.5%	14 0.3%	7 0.2%	6 0.1%	11 0.3%	37 0.9%	61 1.4%	78 1.8%
K-5	1,725	1,738	1,775	1,812	1,834	1,859	1,867	1,873	1,875	1,909	1,951
6-8	1,046	1,028	1,003	959	944	951	991	1,031	1,069	1,067	1,050
9-12	1,318	1,358	1,403	1,429	1,436	1,411	1,369	1,334	1,331	1,360	1,413

	5 Year Change: 2011-12 to 2016-17		5 Year Change: 2016-17 to 2021-22		10 Year Change: 2011-12 to 2021-22	
	Growth	Pct.	Growth	Pct.	Growth	Pct.
K-5	134	8%	92	5%	226	13%
6-8	-95	-9%	99	10%	4	0%
9-12	93	7%	2	0%	95	7%
Total	132	3%	193	5%	325	8%

Population Research Center, Portland State University, February 2012

Individual School Forecasts

Forecasts for individual schools are consistent with the *middle range* district-wide forecast. In the forecasts, the only program changes anticipated for OTSD schools are the addition of one grade each year to Oregon Trail Primary Academy until it serves grades K-8 in 2014-15. Other program changes, 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.

The methodology relies on unique sets of grade progression rates for each school and the ratio of kindergarten enrollment to lagged births within each school's attendance area. New kindergarten classes are forecast each year based on recent kindergarten enrollments and their relationships to corresponding birth cohorts within their attendance areas. Subsequent grades were forecast using GPRs influenced by district-wide rates, historic observations at individual schools, and future expected housing growth. The final forecasts for individual schools are controlled to match the district-wide forecasts.

Among the District's elementary schools, the greatest amount of growth occurs at Firwood, based on potential residential development as well as its current young enrollment by grade level (upper grades have less enrollment than kindergarten and 1st grade). Future housing is also expected to contribute to growth at Kelso, but it loses enrollment initially due to its current older age profile (its upper grades have larger enrollments than kindergarten and 1st grade).

Enrollment changes at Boring, Cedar Ridge and Welches middle schools depend largely on fluctuations in the size of individual classes advancing from lower grades. For example, enrollment losses at all middle schools are forecasted until the 2015-16 school year, after which enrollments begin to rise due to the entry of relatively larger cohorts entering middle school. Overall, enrollment losses are expected for each of the District's middle schools.

Sandy High School is forecasted to see its enrollment rise from 1,318 in the 2011-12 school year to 1,413 students in 2021-22, adding 95 students (seven percent). Table 20 presents the enrollment forecasts for each school, grouped by school level.

Table 20
Enrollment Forecasts for Individual Schools, 2011-12 to 2021-22

School	Actual	Forecast										Change
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2011-12-2021-22
Firwood Elementary School	435	458	469	489	494	496	497	498	498	506	516	81
Kelso Elementary School	313	309	308	306	302	312	317	323	326	335	343	30
Naas Elementary School	286	285	306	314	314	317	318	317	317	322	331	45
Sandy Grade School	328	328	333	347	355	365	367	367	366	373	383	55
Welches Elementary School	209	200	198	197	209	210	209	209	209	214	219	10
Elementary School Totals	1,571	1,580	1,614	1,653	1,674	1,700	1,708	1,714	1,716	1,750	1,792	221
Boring Middle School	429	425	397	377	375	384	388	392	412	412	406	-23
Cedar Ridge Middle School	461	429	414	378	384	382	416	436	452	453	445	-16
Welches Middle School	156	148	138	126	107	105	107	122	124	121	118	-38
Middle School Totals	1,046	1,002	949	881	866	871	911	950	988	986	969	-77
Oregon Trail Primary Academy	154	184	215	237	238	239	239	240	240	240	240	86
Sandy High School	1,318	1,358	1,403	1,429	1,436	1,411	1,369	1,334	1,331	1,360	1,413	95
District Totals	4,089	4,124	4,181	4,200	4,214	4,221	4,227	4,238	4,275	4,336	4,414	325

Population Research Center, Portland State University, February 2012

FORECAST ACCURACY

Forecasts should be understood to represent a range of outcomes even though discrete numbers are provided. Due to the nature of forecasting, there is no way to estimate a confidence interval as one might for data collected from a survey. The best way to measure potential forecast error is to compare actual enrollments with previous forecasts that were conducted using similar data and methodologies.

Table 21 compares actual OTSD enrollment by grade level in Fall 2011 with the 2011-12 forecasts prepared in March 2007. Actual K-12 enrollment was 61 students less than the five year forecast. Forecasts made for individual grades ranged from 39 students too high (3rd grade) to 29 students too low (12th grade). Forecasts for six of the 13 grades were within 15 students of actual enrollments. As a measure of average error for individual grade levels, the mean absolute percent error (MAPE) is included in the table.

Grade	Actual	Five year forecast ¹		
		Fcst.	Diff.	Error
K	279	270	-9	-3.2%
1	282	287	5	1.8%
2	279	299	20	7.2%
3	276	315	39	14.1%
4	296	311	15	5.1%
5	313	294	-19	-6.1%
6	342	363	21	6.1%
7	348	346	-2	-0.6%
8	356	328	-28	-7.9%
9	345	375	30	8.7%
10	343	350	7	2.0%
11	308	319	11	3.6%
12	322	293	-29	-9.0%
Total	4,089	4,150	61	1.5%
MAPE²		5.8%		

1. Forecast for 2011-12 by PSU-PRC, baseline 2006-07 enrollment, May 2007
 2. Mean absolute percent error for individual grades K-12.

APPENDIX A

DISTRICT-WIDE POPULATION AND ENROLLMENT FORECASTS

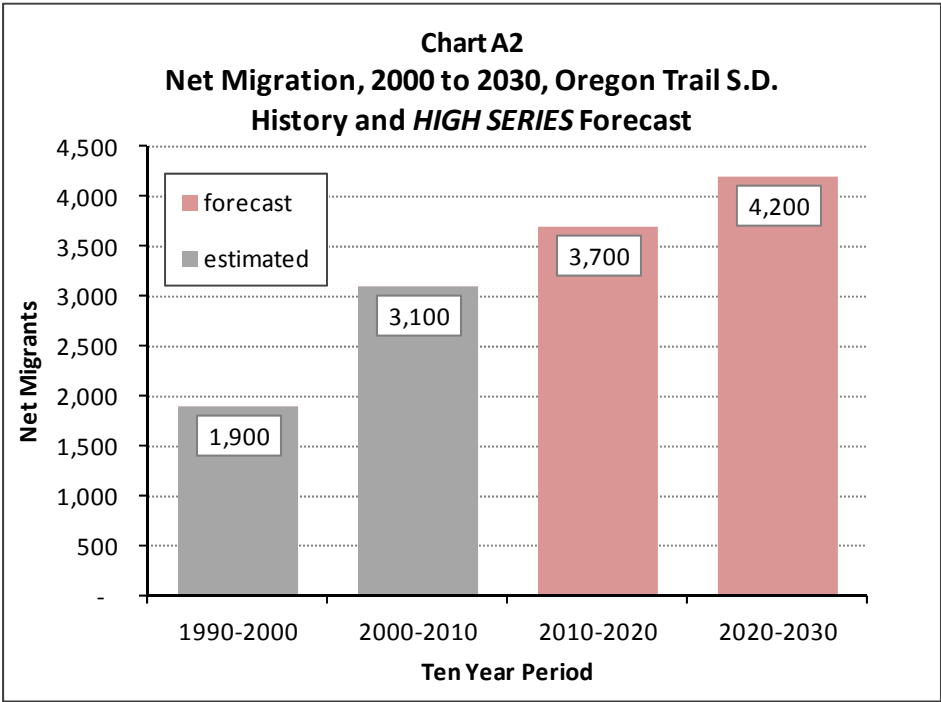
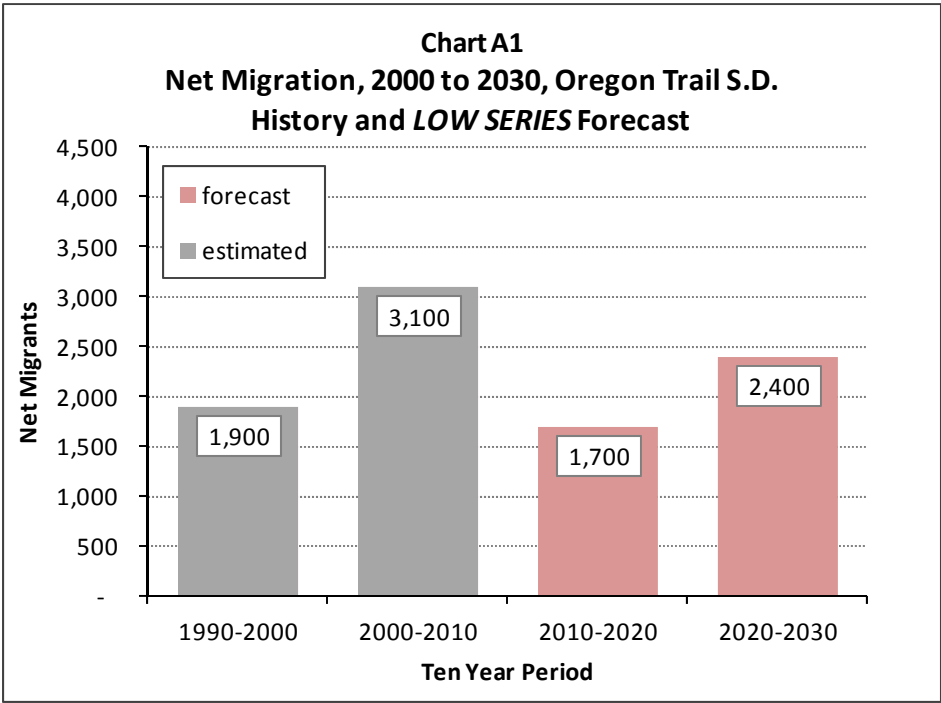


Table A1
Population by Age Group, *LOW SERIES* Forecast
Oregon Trail School District, 2000 to 2030

	2000 Census	2010 Census	2020 Forecast	2030 Forecast	2010 to 2030 Change	
					Number	Percent
Under Age 5	1,408	1,604	1,683	1,661	57	4%
Age 5 to 9	1,693	1,643	1,764	1,860	217	13%
Age 10 to 14	1,941	1,959	1,882	2,039	80	4%
Age 15 to 17	1,215	1,193	1,095	1,250	57	5%
Age 18 to 19	656	698	590	623	-75	-11%
Age 20 to 24	1,159	1,360	1,339	1,288	-72	-5%
Age 25 to 29	1,184	1,519	1,514	1,345	-174	-11%
Age 30 to 34	1,439	1,716	1,747	1,785	69	4%
Age 35 to 39	1,898	1,766	1,959	2,033	267	15%
Age 40 to 44	2,287	1,768	1,939	2,018	250	14%
Age 45 to 49	2,253	2,187	1,911	2,154	-33	-2%
Age 50 to 54	1,941	2,367	1,784	1,969	-398	-17%
Age 55 to 59	1,460	2,389	2,227	1,966	-423	-18%
Age 60 to 64	1,066	1,981	2,327	1,770	-211	-11%
Age 65 to 69	794	1,404	2,224	2,092	688	49%
Age 70 to 74	664	949	1,720	2,039	1,090	115%
Age 75 to 79	490	655	1,113	1,783	1,128	172%
Age 80 to 84	329	457	630	1,159	702	154%
Age 85 and over	227	423	560	870	447	106%
Total Population	24,104	28,038	30,008	31,703	3,665	13%
Total age 5 to 17	4,849	4,795	4,741	5,149	354	7%
share age 5 to 17	20.1%	17.1%	15.8%	16.2%		

	2000-2010	2010-2020	2020-2030
Population Change	3,934	1,970	1,695
Percent	16.3%	7.0%	5.6%
Average Annual	1.5%	0.7%	0.5%

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

Table A2
Population by Age Group, *HIGH SERIES* Forecast
Oregon Trail School District, 2000 to 2030

	2000	2010	2020	2030	2010 to 2030 Change	
	Census	Census	Forecast	Forecast	Number	Percent
Under Age 5	1,408	1,604	1,832	1,901	297	19%
Age 5 to 9	1,693	1,643	1,963	2,158	515	31%
Age 10 to 14	1,941	1,959	2,122	2,424	465	24%
Age 15 to 17	1,215	1,193	1,199	1,481	288	24%
Age 18 to 19	656	698	602	701	3	0%
Age 20 to 24	1,159	1,360	1,373	1,488	128	9%
Age 25 to 29	1,184	1,519	1,544	1,470	-49	-3%
Age 30 to 34	1,439	1,716	2,016	2,034	318	19%
Age 35 to 39	1,898	1,766	2,269	2,310	544	31%
Age 40 to 44	2,287	1,768	2,111	2,479	711	40%
Age 45 to 49	2,253	2,187	2,036	2,613	426	19%
Age 50 to 54	1,941	2,367	1,830	2,186	-181	-8%
Age 55 to 59	1,460	2,389	2,320	2,159	-230	-10%
Age 60 to 64	1,066	1,981	2,418	1,868	-113	-6%
Age 65 to 69	794	1,404	2,300	2,235	831	59%
Age 70 to 74	664	949	1,772	2,167	1,218	128%
Age 75 to 79	490	655	1,158	1,898	1,243	190%
Age 80 to 84	329	457	655	1,230	773	169%
Age 85 and over	227	423	606	966	543	128%
Total Population	24,104	28,038	32,126	35,767	7,729	28%
Total age 5 to 17	4,849	4,795	5,284	6,063	1,268	26%
share age 5 to 17	20.1%	17.1%	16.4%	17.0%		

	2000-2010	2010-2020	2020-2030
Population Change	3,934	4,088	3,641
Percent	16.3%	14.6%	11.3%
Average Annual	1.5%	1.4%	1.1%

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

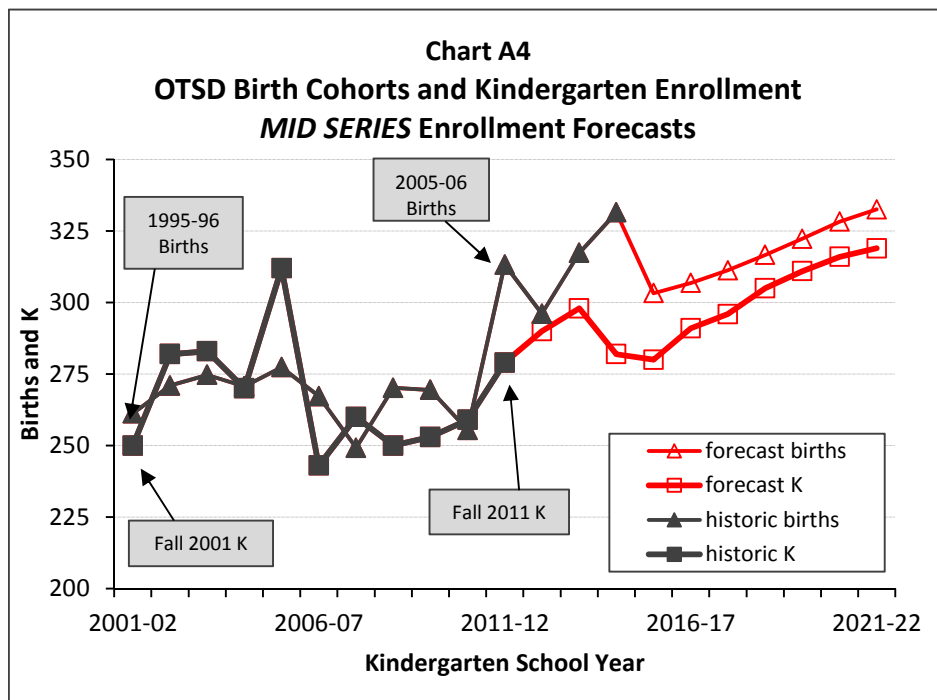
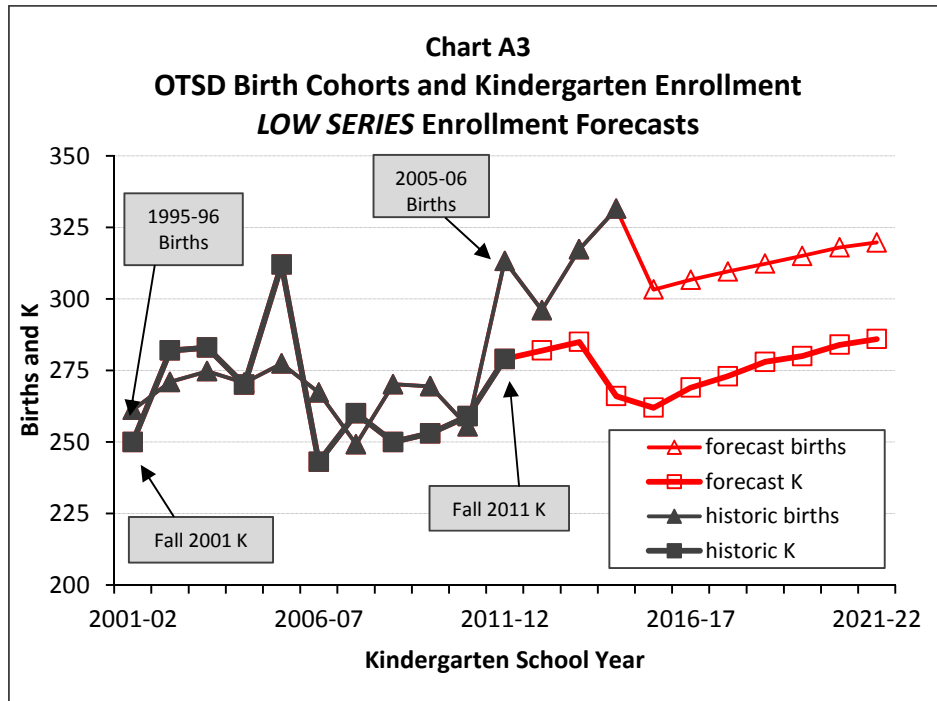


Table A3
Oregon Trail School District, LOW SERIES Enrollment Forecasts, 2011-12 to 2021-22

Grade	Forecast										
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
K	279	282	285	266	262	269	273	278	280	284	286
1	282	297	302	307	286	282	289	294	299	302	305
2	279	285	301	308	312	291	287	294	299	305	308
3	276	282	289	307	313	318	296	292	299	305	311
4	296	279	286	295	312	319	324	301	297	305	311
5	313	299	283	292	300	318	325	330	307	303	311
6	342	317	304	289	297	306	324	331	336	313	309
7	348	349	325	313	297	306	314	333	340	346	322
8	356	353	355	333	320	304	313	321	340	348	354
9	345	366	364	367	344	331	314	324	332	352	360
10	343	339	360	359	361	339	326	309	319	327	347
11	308	330	327	347	346	348	327	314	298	308	315
12	322	321	344	342	363	362	364	342	328	311	322
Total	4,089	4,099	4,125	4,125	4,113	4,093	4,076	4,063	4,074	4,109	4,161
<i>Annual change</i>		10	26	0	-12	-20	-17	-13	11	35	52
		0.2%	0.6%	0.0%	-0.3%	-0.5%	-0.4%	-0.3%	0.3%	0.9%	1.3%
K-5	1,725	1,724	1,746	1,775	1,785	1,797	1,794	1,789	1,781	1,804	1,832
6-8	1,046	1,019	984	935	914	916	951	985	1,016	1,007	985
9-12	1,318	1,356	1,395	1,415	1,414	1,380	1,331	1,289	1,277	1,298	1,344

	5 Year Change: 2011-12 to 2016-17		5 Year Change: 2016-17 to 2021-22		10 Year Change: 2011-12 to 2021-22	
	Growth	Pct.	Growth	Pct.	Growth	Pct.
K-5	72	4%	35	2%	107	6%
6-8	-130	-12%	69	8%	-61	-6%
9-12	62	5%	-36	-3%	26	2%
Total	4	0%	68	2%	72	2%

Population Research Center, Portland State University, February 2012

**Table A4
Oregon Trail School District, HIGH SERIES Enrollment Forecasts, 2011-12 to 2021-22**

Grade	Forecast										
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
K	279	290	298	282	280	291	296	305	311	316	319
1	282	305	315	324	306	305	316	323	332	337	342
2	279	290	314	325	333	315	313	326	333	341	346
3	276	287	299	324	334	343	323	323	336	342	350
4	296	285	297	310	334	345	354	335	334	346	352
5	313	307	295	309	320	346	356	368	347	345	357
6	342	324	317	306	319	331	357	369	380	358	356
7	348	355	336	330	317	331	343	372	383	394	371
8	356	358	365	346	339	326	339	354	383	393	404
9	345	369	371	379	358	351	337	352	367	397	407
10	343	340	364	366	374	353	346	333	347	362	391
11	308	331	328	352	353	361	341	334	322	335	349
12	322	322	346	343	368	369	378	357	350	337	350
Total	4,089	4,163	4,245	4,296	4,335	4,367	4,399	4,451	4,525	4,603	4,694
<i>Annual change</i>		74 1.8%	82 2.0%	51 1.2%	39 0.9%	32 0.7%	32 0.7%	52 1.2%	74 1.7%	78 1.7%	91 2.0%
K-5	1,725	1,764	1,818	1,874	1,907	1,945	1,958	1,980	1,993	2,027	2,066
6-8	1,046	1,037	1,018	982	975	988	1,039	1,095	1,146	1,145	1,131
9-12	1,318	1,362	1,409	1,440	1,453	1,434	1,402	1,376	1,386	1,431	1,497

	5 Year Change: 2011-12 to 2016-17		5 Year Change: 2016-17 to 2021-22		10 Year Change: 2011-12 to 2021-22	
	Growth	Pct.	Growth	Pct.	Growth	Pct.
K-5	220	13%	121	6%	341	20%
6-8	-58	-6%	143	14%	85	8%
9-12	116	9%	63	4%	179	14%
Total	278	7%	327	7%	605	15%

Population Research Center, Portland State University, February 2012

APPENDIX B

2000 AND 2010 CENSUS PROFILE

2000 and 2010 Census Profile

Oregon Trail School District

Approximation based on census blocks

POPULATION	2000		2010		Change	
SEX AND AGE						
Total population	24,104	100.0%	28,038	100.0%	3,934	16.3%
Under 5 years	1,408	5.8%	1,604	5.7%	196	13.9%
5 to 9 years	1,693	7.0%	1,643	5.9%	-50	-3.0%
10 to 14 years	1,941	8.1%	1,959	7.0%	18	0.9%
15 to 19 years	1,871	7.8%	1,891	6.7%	20	1.1%
20 to 24 years	1,159	4.8%	1,360	4.9%	201	17.3%
25 to 29 years	1,184	4.9%	1,519	5.4%	335	28.3%
30 to 34 years	1,439	6.0%	1,716	6.1%	277	19.2%
35 to 39 years	1,898	7.9%	1,766	6.3%	-132	-7.0%
40 to 44 years	2,287	9.5%	1,768	6.3%	-519	-22.7%
45 to 49 years	2,253	9.3%	2,187	7.8%	-66	-2.9%
50 to 54 years	1,941	8.1%	2,367	8.4%	426	21.9%
55 to 59 years	1,460	6.1%	2,389	8.5%	929	63.6%
60 to 64 years	1,066	4.4%	1,981	7.1%	915	85.8%
65 to 69 years	794	3.3%	1,404	5.0%	610	76.8%
70 to 74 years	664	2.8%	949	3.4%	285	42.9%
75 to 79 years	490	2.0%	655	2.3%	165	33.7%
80 to 84 years	329	1.4%	457	1.6%	128	38.9%
85 years and over	227	0.9%	423	1.5%	196	86.3%
Median age (years)	38.6		41.6		3.0	
Under 18 years	6,257	26.0%	6,399	22.8%	142	2.3%
18 to 64 years	15,343	63.7%	17,751	63.3%	2,408	15.7%
65 years and over	2,504	10.4%	3,888	13.9%	1,384	55.3%
Male population						
Male population	12,312	100.0%	14,138	100.0%	1,826	14.8%
Under 5 years	745	6.1%	839	5.9%	94	12.6%
5 to 9 years	873	7.1%	835	5.9%	-38	-4.4%
10 to 14 years	996	8.1%	1,018	7.2%	22	2.2%
15 to 19 years	1,014	8.2%	961	6.8%	-53	-5.2%
20 to 24 years	628	5.1%	723	5.1%	95	15.1%
25 to 29 years	625	5.1%	760	5.4%	135	21.6%
30 to 34 years	705	5.7%	879	6.2%	174	24.7%
35 to 39 years	943	7.7%	911	6.4%	-32	-3.4%
40 to 44 years	1,126	9.1%	892	6.3%	-234	-20.8%
45 to 49 years	1,167	9.5%	1,106	7.8%	-61	-5.2%
50 to 54 years	990	8.0%	1,170	8.3%	180	18.2%
55 to 59 years	766	6.2%	1,212	8.6%	446	58.2%
60 to 64 years	565	4.6%	987	7.0%	422	74.7%
65 to 69 years	405	3.3%	715	5.1%	310	76.5%
70 to 74 years	335	2.7%	468	3.3%	133	39.7%
75 to 79 years	218	1.8%	330	2.3%	112	51.4%
80 to 84 years	120	1.0%	207	1.5%	87	72.5%
85 years and over	91	0.7%	125	0.9%	34	37.4%

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1.

Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

2000 and 2010 Census Profile Oregon Trail School District

Approximation based on census blocks

POPULATION (continued)	2000		2010		Change	
Male population (continued)						
Median age (years)	38.0		40.8		2.8	
Under 18 years	3,255	26.4%	3,281	23.2%	26	0.8%
18 to 64 years	7,888	64.1%	9,012	63.7%	1,124	14.2%
65 years and over	1,169	9.5%	1,845	13.0%	676	57.8%
Female population	11,792	100.0%	13,900	100.0%	2,108	17.9%
Under 5 years	663	5.6%	765	5.5%	102	15.4%
5 to 9 years	820	7.0%	808	5.8%	-12	-1.5%
10 to 14 years	945	8.0%	941	6.8%	-4	-0.4%
15 to 19 years	857	7.3%	930	6.7%	73	8.5%
20 to 24 years	531	4.5%	637	4.6%	106	20.0%
25 to 29 years	559	4.7%	759	5.5%	200	35.8%
30 to 34 years	734	6.2%	837	6.0%	103	14.0%
35 to 39 years	955	8.1%	855	6.2%	-100	-10.5%
40 to 44 years	1,161	9.8%	876	6.3%	-285	-24.5%
45 to 49 years	1,086	9.2%	1,081	7.8%	-5	-0.5%
50 to 54 years	951	8.1%	1,197	8.6%	246	25.9%
55 to 59 years	694	5.9%	1,177	8.5%	483	69.6%
60 to 64 years	501	4.2%	994	7.2%	493	98.4%
65 to 69 years	389	3.3%	689	5.0%	300	77.1%
70 to 74 years	329	2.8%	481	3.5%	152	46.2%
75 to 79 years	272	2.3%	325	2.3%	53	19.5%
80 to 84 years	209	1.8%	250	1.8%	41	19.6%
85 years and over	136	1.2%	298	2.1%	162	119.1%
Median age (years)	39.1		42.4		3.3	
Under 18 years	3,002	25.5%	3,118	22.4%	116	3.9%
18 to 64 years	7,455	63.2%	8,739	62.9%	1,284	17.2%
65 years and over	1,335	11.3%	2,043	14.7%	708	53.0%

AREA AND DENSITY

Land Area - Acres ¹	267,532	267,797		
Persons per acre	0.1	0.1	0.0	16.2%
Persons per square mile	58	67	9	16.2%

RACE

Total population	24,104	100.0%	28,038	100.0%	3,934	16.3%
White alone	22,575	93.7%	25,724	91.7%	3,149	13.9%
Black or African American alone	59	0.2%	79	0.3%	20	33.9%
American Indian and Alaska Native alone	288	1.2%	317	1.1%	29	10.1%
Asian alone	156	0.6%	310	1.1%	154	98.7%
Native Hawaiian and Other Pacific Islander alone	30	0.1%	31	0.1%	1	3.3%
Some Other Race alone	459	1.9%	796	2.8%	337	73.4%
Two or More Races	537	2.2%	781	2.8%	244	45.4%

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1.

Tabulated by Population Research Center, Portland State University.

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2000 and 2010 Census Profile Oregon Trail School District

Approximation based on census blocks

POPULATION (continued)	2000		2010		Change	
RACE (continued)						
Race alone or in combination with one or more other races ²						
White	23,076	95.7%	26,459	94.4%	3,383	14.7%
Black or African American	105	0.4%	187	0.7%	82	78.1%
American Indian and Alaska Native	566	2.3%	719	2.6%	153	27.0%
Asian	286	1.2%	539	1.9%	253	88.5%
Native Hawaiian and Other Pacific Islander	66	0.3%	92	0.3%	26	39.4%
Some Other Race	593	2.5%	882	3.1%	289	48.7%
HISPANIC OR LATINO AND RACE						
Total population	24,104	100.0%	28,038	100.0%	3,934	16.3%
Hispanic or Latino	1,003	4.2%	1,931	6.9%	928	92.5%
Not Hispanic or Latino	23,101	95.8%	26,107	93.1%	3,006	13.0%
White alone	22,153	91.9%	24,758	88.3%	2,605	11.8%
Black or African American alone	57	0.2%	72	0.3%	15	26.3%
American Indian and Alaska Native alone	249	1.0%	260	0.9%	11	4.4%
Asian alone	156	0.6%	302	1.1%	146	93.6%
Native Hawaiian and Other Pacific Islander alone	25	0.1%	31	0.1%	6	24.0%
Some Other Race alone	20	0.1%	20	0.1%	0	0.0%
Two or More Races	441	1.8%	664	2.4%	223	50.6%
RELATIONSHIP						
Total population	24,104	100.0%	28,038	100.0%	3,934	16.3%
In households	23,975	99.5%	28,000	99.9%	4,025	16.8%
In family households	20,861	86.5%	23,880	85.2%	3,019	14.5%
Householder	6,603	27.4%	7,741	27.6%	1,138	17.2%
Spouse ³	5,550	23.0%	6,204	22.1%	654	11.8%
Child	7,178	29.8%	7,675	27.4%	497	6.9%
Own child under 18 years	5,682	23.6%	5,641	20.1%	-41	-0.7%
Other relatives	947	3.9%	1,488	5.3%	541	57.1%
Nonrelatives	583	2.4%	772	2.8%	189	32.4%
In nonfamily households	3,114	12.9%	4,120	14.7%	1,006	32.3%
Householder	2,377	9.9%	3,172	11.3%	795	33.4%
Nonrelatives	737	3.1%	948	3.4%	211	28.6%
Population under 18 in households	6,234	99.6%	6,387	99.8%	153	2.5%
Population 18 to 64 in households	15,277	99.6%	17,725	99.9%	2,448	16.0%
Population 65 and over in households	2,464	98.4%	3,888	100.0%	1,424	57.8%
In group quarters	129	0.5%	38	0.1%	-91	-70.5%

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Approximation based on census blocks

POPULATION (continued)	2000		2010		Change	
GROUP QUARTERS						
Total group quarters population	129	100.0%	38	100.0%	-91	-70.5%
Institutionalized population	15	11.6%	11	28.9%	-4	-26.7%
Male	15	11.6%	11	28.9%	-4	-26.7%
Female	0	0.0%	0	0.0%	0	--
Noninstitutionalized population	114	88.4%	27	71.1%	-87	-76.3%
Male	57	44.2%	14	36.8%	-43	-75.4%
Female	57	44.2%	13	34.2%	-44	-77.2%
Population under 18 in group quarters	23	0.4%	12	0.2%	-11	-47.8%
Population 18 to 64 in group quarters	66	0.4%	26	0.1%	-40	-60.6%
Population 65 and over in group quarters	40	1.6%	0	0.0%	-40	-100.0%
HOUSEHOLDS						
Total households	8,980	100.0%	10,913	100.0%	1,933	21.5%
Family households (families) ⁴	6,603	73.5%	7,741	70.9%	1,138	17.2%
With own children under 18 years	2,989	33.3%	3,011	27.6%	22	0.7%
Husband-wife family	5,550	61.8%	6,204	56.8%	654	11.8%
With own children under 18 years	2,365	26.3%	2,203	20.2%	-162	-6.8%
Male householder, no wife present	371	4.1%	547	5.0%	176	47.4%
With own children under 18 years	222	2.5%	290	2.7%	68	30.6%
Female householder, no husband present	682	7.6%	990	9.1%	308	45.2%
With own children under 18 years	402	4.5%	518	4.7%	116	28.9%
Nonfamily households ⁴	2,377	26.5%	3,172	29.1%	795	33.4%
Householder living alone	1,806	20.1%	2,423	22.2%	617	34.2%
Male	982	10.9%	1,240	11.4%	258	26.3%
65 years and over	195	2.2%	288	2.6%	93	47.7%
Female	824	9.2%	1,183	10.8%	359	43.6%
65 years and over	398	4.4%	605	5.5%	207	52.0%
Households with individuals under 18 years	3,265	36.4%	3,380	31.0%	115	3.5%
Households with individuals 65 years and over	1,811	20.2%	2,854	26.2%	1,043	57.6%
Average household size	2.67		2.57		-0.10	-3.9%
Average family size ⁴	3.07		2.99		-0.09	-2.8%

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Approximation based on census blocks

HOUSING UNITS	2000		2010		Change	
Total housing units	11,021	100.0%	13,695	100.0%	2,674	24.3%
Occupied housing units	8,980	81.5%	10,913	79.7%	1,933	21.5%
Owner occupied ⁵	7,146	79.6%	8,256	75.7%	1,110	15.5%
Owned with a mortgage or a loan	N/A		6,111	74.0%		
Owned free and clear	N/A		2,145	26.0%		
Renter occupied	1,834	20.4%	2,657	24.3%	823	44.9%
Vacant housing units ⁶	2,041	18.5%	2,782	20.3%	741	36.3%
For rent	154	7.5%	180	6.5%	26	16.9%
For sale only	203	9.9%	246	8.8%	43	21.2%
Rented or sold, not occupied	73	3.6%	59	2.1%	-14	-19.2%
For seasonal, recreational, or occasional use	1,483	72.7%	2,048	73.6%	565	38.1%
For migrant workers	7	0.3%	16	0.6%	9	128.6%
All other vacants	121	5.9%	233	8.4%	112	92.6%
Owner-occupied housing units	7,146	79.6%	8,256	75.7%	1,110	15.5%
Population in owner-occupied housing units	19,340		21,282		1,942	10.0%
Average household size of owner-occupied units	2.71		2.58		-0.13	-4.8%
Renter-occupied housing units	1,834	20.4%	2,657	24.3%	823	44.9%
Population in renter-occupied housing units	4,635		6,718		2,083	44.9%
Average household size of renter-occupied units	2.53		2.53		0.00	0.0%

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

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1.
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