

12-1-2008

Ashland School District: Population and Enrollment Forecasts 2009-10 to 2018-19

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**ASHLAND SCHOOL DISTRICT
POPULATION AND ENROLLMENT FORECASTS
2009-10 TO 2018-19**



December 2008

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**Prepared By
Population Research Center
Portland State University**

December 2008

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EXECUTIVE SUMMARY

The area served by the Ashland School District (ASD) has experienced population and housing growth in recent years, but the District's K-12 school enrollment of 2,627 students in Fall 2008 was 703 students (21 percent) fewer than it enrolled in Fall 2000. The long period of falling enrollment began after the 1993-94 school year; enrollment has not grown by more than a few students in any year since. In 10 of the last 15 years there have been significant K-12 enrollment losses ranging from 31 to 133 students.

This report presents the results of a study conducted by the Portland State University Population Research Center (PRC) containing enrollment forecasts for the ASD from 2009-10 to 2018-19. We conclude that the most likely scenario is for relatively stable total K-12 enrollment in the ASD during the next 10 years. However, growth in elementary grades will be offset by decline in secondary enrollments as smaller classes continue to work their way through the grade levels.

PRC's methodology links enrollment trends with the area's population dynamics. For example, the largest population growth has been and will continue to be in age groups represented by the large baby boom cohort, in their 40s and 50s in 2000 and in their 60s and 70s in 2020. These older age groups contribute very little to school-age population. Many of the area's young adults are college students, so the District's fertility rates for women under age 30 are very low compared with other areas. However, the college and retiree populations generate employment in retail services, health care, and higher education, so the job market remains strong. If housing were available and affordable, more workers would live close to these jobs.

The enrollment decline is almost entirely due to progressively smaller incoming kindergarten and 1st grade classes between the early 1990s and today. Nearly every year the District has had net enrollment gains attributable to students progressing from one grade to the next. Although the District may be keeping its established families whose

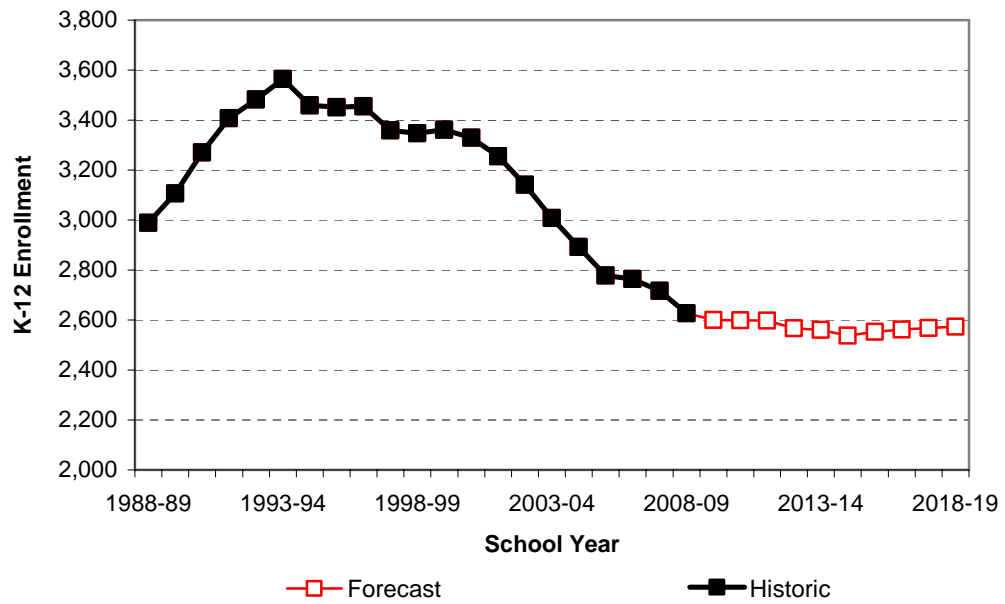
children are already in school, it appears that more young families are moving out before their children reach kindergarten.

In 2006-07 and 2007-08 elementary enrollment began to reverse its long downward trend. However, the big story in 2008-09 is the extreme drop in kindergarten enrollment from 161 last year to 117 this year. Does it represent an outlier or a trend? It is probably a little of each. There were 28 fewer births to ASD residents in the cohort corresponding to this year's kindergarten, but the kindergarten enrollment loss of 44 students exceeded the birth decline. The Fall 2009 kindergarten class corresponds to a larger cohort born in 2003-2004, but each of the following three years align with birth totals that remain low by historic standards. As a result, we expect kindergarten enrollment to rebound somewhat in Fall 2009, but remain relatively low through Fall 2012.

Table 1 compares enrollment forecasts by school level with historic enrollments, showing stable K-12 totals compared with the losses that occurred in the last 10 years. Chart 1 on the next page includes a longer view of historic K-12 enrollment. ASD elementary enrollment is forecast to grow very slowly in the next few years as growth from new affordable housing developments in the City of Ashland is tempered by recent relatively small birth cohorts entering kindergarten and first grade. The pace of elementary enrollment growth increases later in the 10 year forecast horizon, but secondary enrollments continue to decline beyond 2013-14.

	Actual			Forecast	
	1998-99	2003-04	2008-09	2013-14	2018-19
K-5	1,316	1,108	967	1,004	1,102
<i>5 year change</i>		-208	-141	37	98
6-8	832	722	622	621	575
<i>5 year change</i>		-110	-100	-1	-46
9-12	1,199	1,178	1,038	935	896
<i>5 year change</i>		-21	-140	-103	-39
Total	3,347	3,008	2,627	2,560	2,573
<i>5 year change</i>		-339	-381	-67	13

Chart 1
ASD Enrollment History and Forecast, 1988-89 to 2018-19



INTRODUCTION

The Ashland School District (ASD) requested that the Portland State University Population Research Center (PRC) prepare enrollment forecasts for use in the District's long-range planning. This study integrates information about ASD enrollment trends with local area population, housing, and economic trends, and includes population forecasts for the District as well as forecasts of district-wide enrollment by grade level for the period between 2009-10 and 2018-19. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, county population forecasts from the Oregon Office of Economic Analysis, planning documents from Jackson County, the City of Ashland, the Rogue Valley Council of Governments, and Southern Oregon University, employment trends and forecasts from the Oregon Employment Department, and personal interviews with city and regional officials and business people.

The District serves the City of Ashland and a small population in surrounding unincorporated areas. At the time of the 2000 Census, 83 percent of the District's population lived within the City of Ashland and 17 percent lived in unincorporated Jackson County.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District. Next, the "Enrollment Forecasts" section includes a discussion of methodology and results of the district-wide and individual school enrollment forecasts. The final section contains a brief discussion of the nature and accuracy of forecasts, and the appendix contains a one page profile for each of the District's schools showing its enrollment history and forecasts.

We would like to acknowledge (in alphabetical order) the help of the following individuals who contributed to the study by answering questions, providing local insight, or providing data:

- Larry Blake, Southern Oregon University
- Juli Di Chiro, Ashland S.D.
- Jason Elzy, Housing Authority of Jackson County
- Brandon Goldman, City of Ashland
- Adam Hanks, City of Ashland
- Elizabeth Littleton, SOESD
- Pam Lucas, Ashland S.D.
- Emily Luka, Ashland S.D.
- Andrea Miranda, RVCDC
- Jill Turner, Ashland S.D.
- Greg Williams, Verde Village

POPULATION AND HOUSING TRENDS, 1990 to 2007

During the decade between 1990 and 2000, total population within the ASD grew from 19,750 persons to 23,556 persons. The District’s overall population growth rate of 19 percent was only slightly lower than the 24 percent growth in Jackson County overall. Within the ASD, the unincorporated area grew at a slower rate than the City of Ashland, so the share of the District’s population living outside the City fell from 18 percent in 1990 to 17 percent in 2000. Since 2000, the City and the County have both grown at a slower rate than in the 1990s. Table 2 shows the 1990 and 2000 census counts and 2007 population estimates for the City, the District and the County.

	1990	2000	2007	Avg. Annual Growth Rate	
				1990-2000	2000-2007
Ashland S.D. Total	19,750	23,556	N/A	1.8%	
<i>City of Ashland</i>	16,252	19,522	21,630	1.9%	1.4%
<i>Unincorporated area</i>	3,498	4,034	N/A	1.4%	
Jackson County	146,389	181,273	202,310	2.2%	1.5%

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

Although many residents such as students and retirees may not be in the job market, employment opportunities are one of the factors making Ashland a desirable place to live. The Census Bureau’s Local Employment Dynamics (LED) data for the second quarter of 2006 identifies 9,531 “primary” jobs within the ASD, not counting most agricultural employment, self-employment, and second jobs. There were 9,209 primary job holders living in the District, a favorable ratio of 1.03 jobs per worker. The 2006 LED results indicate that half of all ASD job holders worked within the District itself. Another 23 percent worked in the City of Medford.¹

¹U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2006). Report created on line at <http://lehdmap3.did.census.gov/themap3/>

Population by Age Group

The District’s school-age population grew by only nine percent in the 1990s, much slower than overall population growth. About 15 percent of the District’s population in 2000 was of school age (age 5 to 17), a lower share than Jackson County’s 18 percent. In both 1990 and 2000 persons age 20 to 24 constituted the District’s largest five-year age group. This college-age population was followed by the baby boom cohort, age 30 to 44 in 1990 and 40 to 54 in 2000. Population by age group for 1990 and 2000 is shown in Table 3.

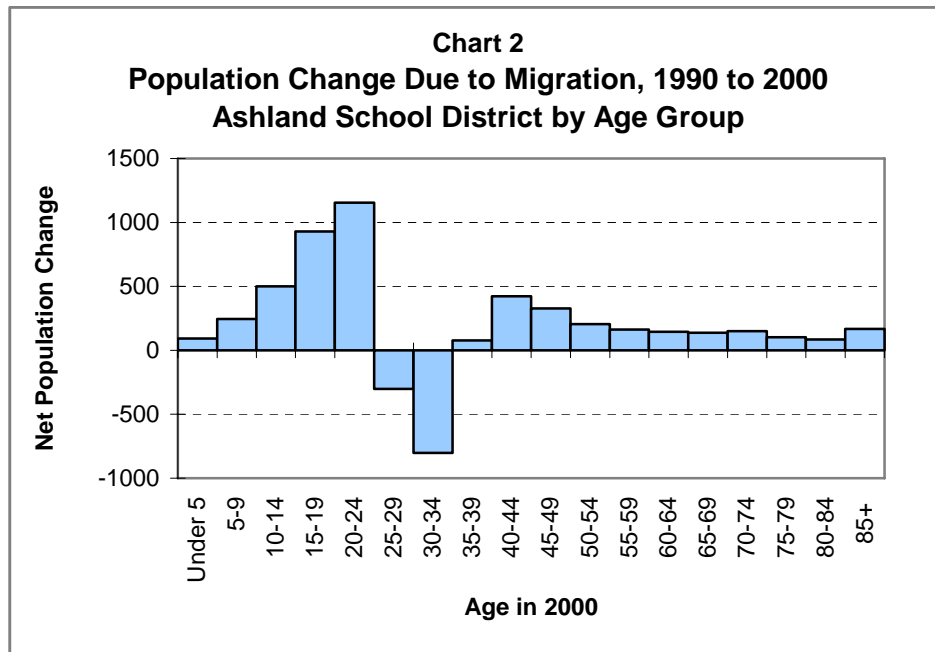
Table 3
Population by Age Group
Ashland School District, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Under Age 5	973	972	-1	0%
Age 5 to 9	1,255	1,139	-116	-9%
Age 10 to 14	1,342	1,471	129	10%
Age 15 to 17	718	1,000	282	39%
Age 18 to 19	984	1,179	195	20%
Age 20 to 24	1,925	2,488	563	29%
Age 25 to 29	1,116	1,385	269	24%
Age 30 to 34	1,369	1,099	-270	-20%
Age 35 to 39	1,870	1,175	-695	-37%
Age 40 to 44	1,883	1,766	-117	-6%
Age 45 to 49	1,235	2,157	922	75%
Age 50 to 54	799	2,032	1,233	154%
Age 55 to 59	752	1,342	590	78%
Age 60 to 64	801	886	85	11%
Age 65 to 69	881	804	-77	-9%
Age 70 to 74	718	815	97	14%
Age 75 to 79	580	761	181	31%
Age 80 to 84	333	541	208	62%
Age 85 and over	216	544	328	152%
Total Population	19,750	23,556	3,806	19%
Total age 5 to 17	3,315	3,610	295	9%
share age 5 to 17	16.8%	15.3%		

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

By “surviving” the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the “survived” population to the actual 2000 population by age group, we are able to estimate net migration by age

cohort. Like many parts of Southern Oregon, the District depends on migration for its population growth because its age structure results in roughly equal numbers of deaths and births. We estimate that about 3,700 more people moved into ASD between 1990 and 2000 than out of it, accounting for nearly all of the District’s growth. Chart 2 shows the estimated net migration by cohort. For example, in the cohort that was under age five in 1990 and age 10 to 14 in 2000, about 500 more people moved into the District than out during the decade. Every cohort gained population due to migration in the 1990s, except for those age 25 to 34 in 2000. Many of these would have been college students in 1990, so we expect a similar pattern to occur in each decade. That is, net migration makes the largest contribution to the population in their late teens and early 20s, and accounts for a lower population in their late 20s and early 30s.



Births and Fertility Rates

In spite of the 19 percent increase in overall population between 1990 and 2000, the average annual number of births in the District fell by six percent between the early 1990s and early 2000s, from an average of 190 births per year in 1990-1993 to an average of 178 births per year in 2000-2003. In the latest four year period from 2004 to 2007, births to ASD residents have averaged 160 per year, an additional 10 percent drop

from the 2000 to 2003 period. This is partly due to a small drop in fertility rates, but primarily due to a lower population of women in prime childbearing ages 20 to 39. The population in its 20s has increased since 1990, but many ASD residents in their 20s are college students. The population in its 30s currently remains much lower than it was in 1990. Table 4 reports the number of births each year from 1990 to 2007 for the District.

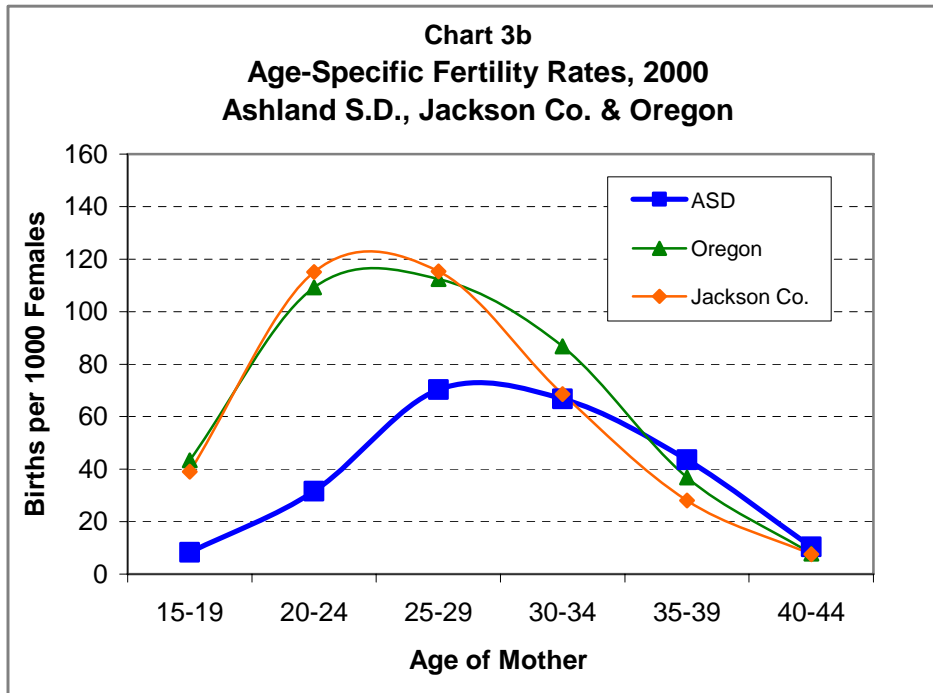
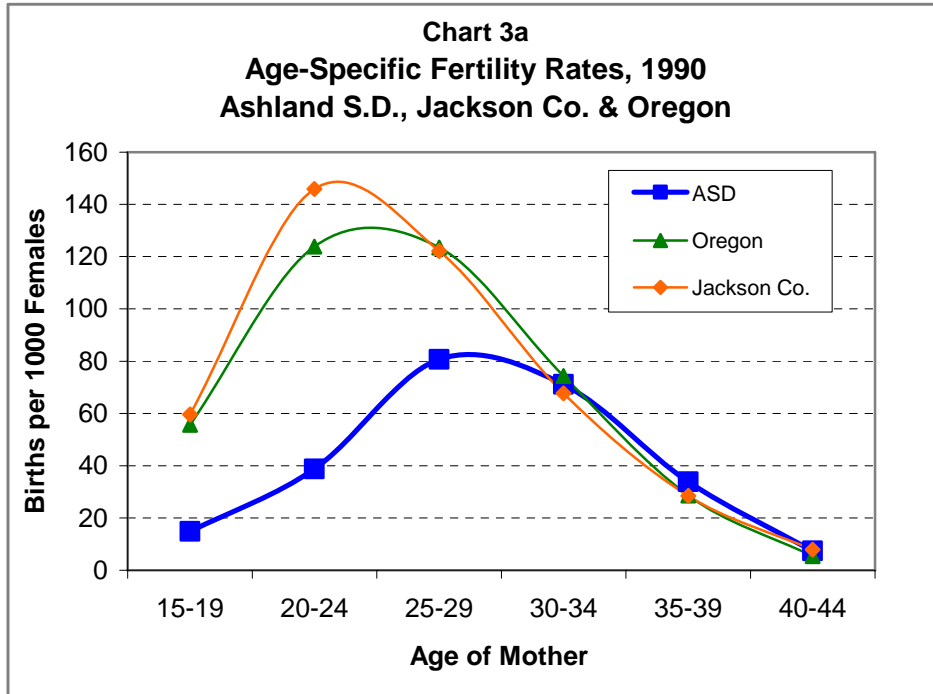
Table 4
Annual Births, 1990 to 2007
Ashland School District

Year	Births
1990	183
1991	190
1992	210
1993	176
1994	168
1995	187
1996	184
1997	199
1998	173
1999	171
2000	186
2001	173
2002	180
2003	174
2004	152
2005	168
2006	150
2007	169

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

The population forecast model used in this study requires age-specific fertility rates in order to forecast births. Historic fertility rates for ASD in 1990 and 2000 were calculated for each age group by dividing the average annual number of births in the three year period around each census (1989 to 1991 and 1999 to 2001) by the female population counted in the census. For example, there were an average of 53 births per year to mothers age 30 to 34 in 1989 to 1991 and a population of 750 women age 30 to 34 counted in the 1990 Census. So the fertility rate in 1990 for women age 20 to 24 was $53/750 = 0.071$ births per female, or 71 per thousand. For each age group under age 35, fertility rates in the ASD fell between 1990 and 2000. For women age 35 and over,

fertility rates increased. Charts 3a and 3b show the age-specific fertility rates for the District, as well as rates for Jackson County and the State of Oregon. In both 1990 and 2000, rates for women age 30 and over in the ASD were similar to county and statewide rates. Rates for women under 30 were significantly lower.



Another common measure of fertility is the Total Fertility Rate (TFR). This is an estimate of the number of children that would be born to the average woman during her childbearing years, based on age-specific fertility rates observed at a given time. The TFR for the ASD fell from 1.23 in 1990 to 1.15 in 2000. Declining TFRs were also observed in Jackson County (2.16 in 1990 and 1.87 in 2000) and the State (2.06 in 1990 and 1.98 in 2000).

Housing Growth

During the 1990s, the number of housing units within the District’s boundaries increased by 2,173 (25 percent), as shown in Table 5 below. There was a gain of 44 percent in multiple family housing units, which comprised 32 percent of the District’s housing stock in 2000. The number of households (occupied housing units) increased by 23 percent, but the number of households in the ASD that included at least one child under the age of 18 only increased by 12 percent. The share of households that included at least one child

**Table 5
Ashland School District
Housing and Household Characteristics, 1990 and 2000**

	1990	2000	1990 to 2000 Change	
			Number	Percent
Housing Units	8,726	10,899	2,173	25%
Single Family <i>share of total</i>	5,519 63%	6,671 61%	1,152	21%
Multiple Family <i>share of total</i>	2,444 28%	3,525 32%	1,081	44%
Mobile Home and Other <i>share of total</i>	763 9%	703 6%	-60	-8%
Households	8,248	10,159	1,911	23%
Households with children under 18 <i>share of total</i>	2,458 30%	2,765 27%	307	12%
Households with no children under 18 <i>share of total</i>	5,790 70%	7,394 73%	1,604	28%
Household Population	18,685	22,339	3,654	20%
Persons per Household	2.27	2.20	-0.07	-3%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to ASD boundary by Population Research Center, PSU.

fell from 30 percent in 1990 to 27 percent in 2000. The average number of persons per household decreased from 2.27 in 1990 to 2.20 in 2000.

Information from tax assessor records is also helpful in chronicling historic housing growth within the District. We acquired shape files (digital boundaries to import into mapping software) from Jackson County GIS Services. The geographic data includes school district boundaries, city boundaries, urban growth boundaries, and tax lots. We used tax lot attribute data to estimate the number of single family housing units by year built, and summarized the information by jurisdiction in Table 6. The table shows that 1,065 new homes were added in the eight years from 2000 to 2007, an average of 133 annually. About 87 percent of the District’s new homes have been added within the City of Ashland.

**Table 6
Ashland School District
Homes Built 2000 to 2007¹**

A. By Jurisdiction

Jurisdiction	Year Built								2000-07 Total
	2000	2001	2002	2003	2004	2005	2006	2007 ²	
City of Ashland	173	111	116	135	112	126	94	61	928
Unincorporated Area	26	12	31	11	27	10	16	4	137
District Total	199	123	147	146	139	136	110	65	1065

B. By Elementary Attendance Area

Elementary Area ³	Year Built								2000-07 Total
	2000	2001	2002	2003	2004	2005	2006	2007 ²	
Bellview	110	58	76	63	50	53	32	4	446
Helman	39	42	47	27	32	46	21	31	285
Walker	50	23	24	56	57	37	57	30	334
District Total	199	123	147	146	139	136	110	65	1065

1. Includes single family homes, mobile homes on individual parcels, and units in apartments and condos. The number of NEW homes shown in this table is greater than the NET change in housing stock, because the table does not account for homes that are demolished or replaced. In particular, in the unincorporated area, new homes are often replacements for previously existing homes.

2. The source (Assessor's data as of October, 2008) may not include all homes built in 2007.

3. Current (2008-09) attendance areas.

Source: Data compiled by PSU-PRC, using geographic shape files and attribute data from Jackson County, Geographic Information Systems Services, October 2008. Attribute data, including year built and building type, is from the Jackson County Assessor's office.

Among the District’s three elementary attendance areas, Bellview has added the most new homes, in subdivisions such as Ashland Meadows, Clay Creek Gardens, Birchwood at Ashland, and Oaks of Ashland, built primarily early in the decade. Construction in the Hellman and Walker attendance areas has been spread more evenly throughout the decade. The largest subdivision in the Walker area this decade has been Riverwalk, built between 2003 and 2005, while the largest developments in the Helman area, Meadowbrook Park and Billings Ranch, are now only partly complete.

Table 7 shows that the number of permits for new single family homes in Ashland peaked at over 200 each year in 1999 and 2000, averaged over 100 annually in 2001 to 2005, and then slowed considerably beginning in 2006.

Table 7
Housing Units Authorized by Building Permits

Year Permit Issued	City of Ashland	
	Single Family	Multiple Family
1997	119	17
1998	129	26
1999	273	14
2000	208	18
2001	101	55
2002	99	9
2003	125	64
2004	103	55
2005	128	43
2006	47	57
2007	52	11
2008 (Jan.-Oct.)	20	12

Source: City of Ashland, Department of Community Development.

Land use applications listed in Table 8 are generally those submitted to the Ashland Planning Department between January 2004 and October 2008. Their status varies widely. Some have changed substantially since they were first submitted, so we attempted to update the list with the latest information that we could find. Some of the developments are completed and occupied, some are subdivided and partially built, some have gained approval but are being postponed or are for sale, and some have not yet been

Table 8
Recent and Current Residential Developments
City of Ashland

Year*	Elem. Area	Development Name or Location	Type	Lots/Units
2004	Bellview	Hamilton Place LLC, Tolman Creek	SFD, Apts	8
	Bellview	Cota Homes, Deerfield Estates, Clay St.	SFD	10
	Bellview	McCall Condos at Barclay Square	condos	16
	Bellview	2001 Siskiyou (RVCDC)	SFA	9
	Helman	Billings Ranch	SFD, SFA	73
	Helman	Orchard St.	SFD	4
	Helman	Van Ness Ave.	4-plex	4
	Helman	E. Nevada St.	SFD	8
	Walker	Carrington Court (B St.)	Apartments	12
	Walker	S. Mountain and Prospect	SFD	4
	Walker	116 Lincoln St.	MF	16
	Walker	Bear Grass Village (Fordyce St. Cohousing)	Cohousing	13
	2004 total:			
2005	Helman	Meadowbrook Park	SFA, SFD, condos	92
	Walker	1651 Ashland St.	Mixed Use, condos	23
	Walker	58-74 Mountain Ave.	condos	8
	Walker	150 Clear Creek Drive	live/work	6
2005 total:				129
2006	Bellview	Terrace Court (RVCDC)	SFA	6
	Helman	Verde Village	SFA, SFD	68
	Helman	829-857 N. Main St.	condos	11
	Walker	Three Redwoods (1500 Oregon St.)	SFD	5
	Walker	1651 Ashland St.	Mixed Use	23
	Walker	Mattice Cottages (31 N. Mountain Ave.)	MF	11
2006 total:				124
2007	Bellview	840 Faith Avenue	SFD	9
	Bellview	Willowbrook	Apts, SFD	78
	Helman	247 Otis Street	SFD	17
	Walker	1219 Iowa St	condos	7
	Walker	Aleph Springs	SFD, condos	14
2007 total:				125
2008 (Jan.-Oct.)	Bellview	2300 Siskiyou Blvd.	condos	13
	Helman	500 Strawberry Subdivision	MF	5
2008 total:				18
2004-2008 grand total:				573

**Note: "Year" usually refers to the year that the land use application was submitted. Planning Commission approval, final plat, construction and occupancy may be in later years.*

Sources: Compiled by Population Research Center, PSU; information from the Ashland Planning Department supplemented by additional research. Excludes senior housing, college housing, and minor land partitions. Information from the November 2005 ASD demographic study has been updated where changes are known.

platted. If all are built as currently planned, they may ultimately contribute 573 units to the District's housing stock, including at least 100 homes that have already been built.

The developments listed in Table 8 that are likely to have the greatest impact on school enrollment are Willowbrook, on Clay Street in the Bellview attendance area, and Verde Village, north of Nevada Street close to Helman Elementary.

Willowbrook is a 10 acre site that had been submitted to the Planning Commission in 2004 as a 107 lot subdivision. On November 4, 2008, the Ashland City Council approved a land swap that will enable the Jackson County Housing Authority to build 60 rental units on part of the land. Housing Authority staff estimate that 82 to 106 children will live in the affordable housing development.² The estimate is consistent with student generation rates from similar developments that we have observed in other cities. Assuming that about one third of the children are in elementary grades, the project could house between 25 and 40 elementary school children. The net impact on District schools is less certain; many of the residents are likely to relocate from substandard or rent-burdened living situations in other parts of the District. Another small portion of the Willowbrook site could be developed as 18 affordable town homes for homebuyers earning below 120 percent of area median income, and the rest could be a park. Those plans are not as firm as the Housing Authority development.

Verde Village also includes an affordable housing component. Fifteen town homes will be built in two phases of seven or eight homes each under the Rogue Valley Community Development Corporation's (RVCDC) Mutual Self-Help Housing program that helps very low and low-income households construct their own homes. The other homes in Verde Village will be 53 market-rate detached and attached homes designed to achieve zero net energy, in a range of sizes and prices.

The shortage of affordable housing in Ashland is well documented, and the community displays a keen awareness of the problem. Recent news has highlighted the drop in home prices, as the median sales price of existing single family residences in Jackson County

² "Council OKs Affordable Housing Land Swap" Ashland Daily Tidings, November 7, 2008.

during the three-month period ending Sept. 30 declined 13.4 percent from the same period in 2007.³ However, prices are still much higher than they were a few years ago, and credit requirements have tightened, making it more difficult to buy a home.

The implications of rising home prices were addressed at a Workforce Housing Summit in Medford in February, 2006. Between 2000 and 2005 the average price of resale homes increased by 84 percent in Ashland. According to Charlie Mitchell, Economic Development Coordinator for the City of Grants Pass, “if workers cannot afford to live in or relocate to this area, it will exacerbate an already shrinking labor pool.”⁴ Recent results from the Census Bureau’s 2007 American Community Survey shown in Charts 4a and 4b on the next page estimate that Jackson County ranks fourth highest among Oregon’s 15 largest counties in the average value of owner-occupied homes, but fourth lowest in family income for families with children under 18.⁵

³ “Local real estate sees small boost” Medford Mail-Tribune, October 8, 2008.

⁴ Southern Oregon Workforce Housing Summit, Medford, Oregon, February 21, 2006. Document available at http://www.ashland.or.us/Files/wfh_book_final.pdf.

⁵ U.S. Census Bureau, 2007 American Community Survey, Tables B25077 and B19125.

Chart 4a
2007 Median Value, Largest Oregon Counties
Owner-Occupied Housing Units

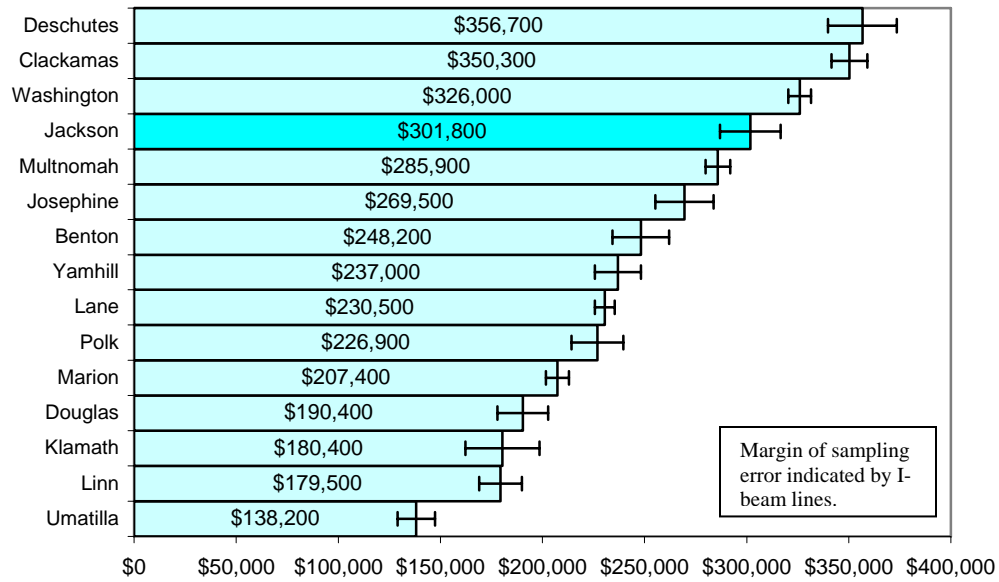
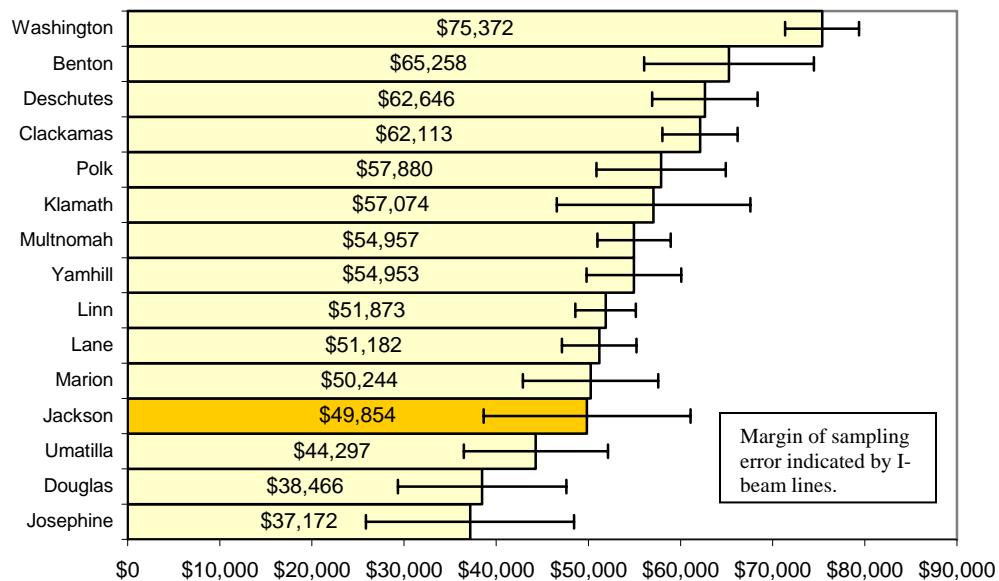


Chart 4b
2007 Median Family Income, Largest Oregon Counties
Families with Children Under 18



ENROLLMENT TRENDS

The ASD's K-12 school enrollment of 2,627 students in Fall 2008 was 703 students (21 percent) fewer than it enrolled in Fall 2000. The long period of falling enrollment began after the 1993-94 school year; enrollment has not grown by more than a few students in any year since. In 10 of the last 15 years there have been significant K-12 enrollment losses ranging from 31 to 133 students.

The enrollment decline is almost entirely due to progressively smaller incoming kindergarten and 1st grade classes between the early 1990s and today. Nearly every year the District has had net enrollment gains attributable to students progressing from one grade to the next. Although the District may be keeping its established families whose children are already in school, it appears that more young families are moving out before their children reach kindergarten.

Elementary (K-5) enrollments peaked in 1993-94 at 1,557. By 2005-06 they had fallen by 36 percent to 994. As the enrollment changes rippled through the grade levels, enrollment in middle (6-8) grades peaked at 869 in 1995-96, and have fallen by 28 percent to 622 as of 2008-09. High school (9-12) enrollment continued to grow until reaching a peak of 1,228 in 1999-2000, and has experienced the least decline thus far. The 2008-09 high school enrollment of 1,038 students is only 15 percent below its peak nine years ago, but likely has further to fall as it follows the trend from lower grades.

Trends in elementary enrollment since 2005-06 suggest that the large enrollment losses have eased. Kindergarten enrollments in Fall 2006 and Fall 2007 were the largest since 2001-02, and overall K-5 enrollments also increased in both years. Fall 2008 is characterized by extremely low kindergarten enrollment, but some of the plunge is likely related to an unusually small birth cohort in the District between September 2002 and August 2003, the age group eligible to enroll in Kindergarten in Fall 2008. Young families are very mobile, so trends in birth cohorts do not translate directly into

kindergarten trends, but the estimate of 28 fewer births to residents of the ASD in 2002-03 compared with 2001-02 is a larger year to year change than in any of the previous 11 years for which we have detailed birth records. There were more births in 2003-04, corresponding to the Fall 2009 kindergarten cohort, but birth totals in the two following years returned almost to the lower 2002-03 level.

Table 9 on the next page summarizes the enrollment history for the District by grade level annually from 1998-99 to 2008-09. At the bottom of the table, summaries of change by five year interval show that the biggest elementary enrollment declines occurred between 1998-99 and 2003-04, while the largest high school enrollment losses have occurred more recently.

The enrollment trends by five year interval are also illustrated in Charts 5a and 5b following Table 9, and enrollments for individual schools are presented in Table 10. Table 10 includes historic enrollments at Briscoe and Lincoln, which were closed in 2003 and 2005, respectively. The 64 John Muir K-5 students are included in the 2008-09 elementary school totals, giving the District's elementary schools an identical enrollment to the 2005-06 figure.

**Table 9
Ashland School District, Historic Enrollment, 1998-99 to 2008-09**

Grade	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
K	171	170	187	198	146	146	149	142	164	161	117
1	220	200	190	192	206	149	150	142	162	170	165
2	219	227	204	191	189	191	153	158	146	177	175
3	215	230	233	207	200	199	189	159	172	162	167
4	243	231	242	239	213	205	197	193	160	178	166
5	248	254	245	242	238	218	200	200	210	171	177
6	264	263	268	243	246	243	218	210	210	214	188
7	271	266	264	274	240	239	240	221	214	213	223
8	297	292	270	265	270	240	228	247	230	220	211
9	332	322	306	297	291	300	298	260	274	259	263
10	311	323	322	298	301	294	292	280	265	272	264
11	298	300	301	313	302	294	280	289	277	256	267
12	258	283	298	296	299	290	298	277	280	264	244
Total*	3,347	3,361	3,330	3,255	3,141	3,008	2,892	2,778	2,764	2,717	2,627
K-5	1,316	1,312	1,301	1,269	1,192	1,108	1,038	994	1,014	1,019	967
6-8	832	821	802	782	756	722	686	678	654	647	622
9-12	1,199	1,228	1,227	1,204	1,193	1,178	1,168	1,106	1,096	1,051	1,038

	5 Year Change: 1998-99 to 2003-04		5 Year Change: 2003-04 to 2008-09		10 Year Change: 1998-99 to 2008-09	
	Change	Pct.	Change	Pct.	Change	Pct.
K-5	-208	-16%	-141	-13%	-349	-27%
6-8	-110	-13%	-100	-14%	-210	-25%
9-12	-21	-2%	-140	-12%	-161	-13%
Total	-339	-10%	-381	-13%	-720	-22%

*Note: Does not include students at Willow Wind, Lithia Springs, or Southern Oregon CSTC.

Source: Ashland School District.

Chart 5a
Enrollment by School Level, 1998-99 and 2003-04
Ashland School District

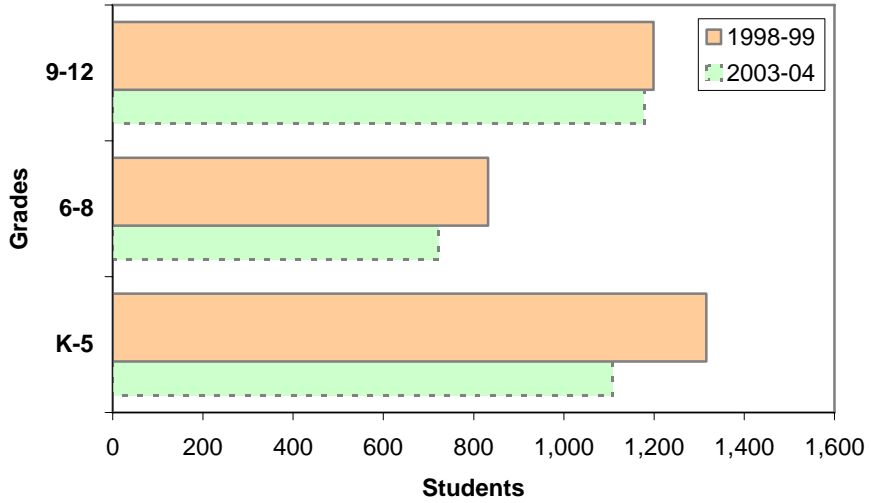


Chart 5b
Enrollment by School Level, 2003-04 and 2008-09
Ashland School District

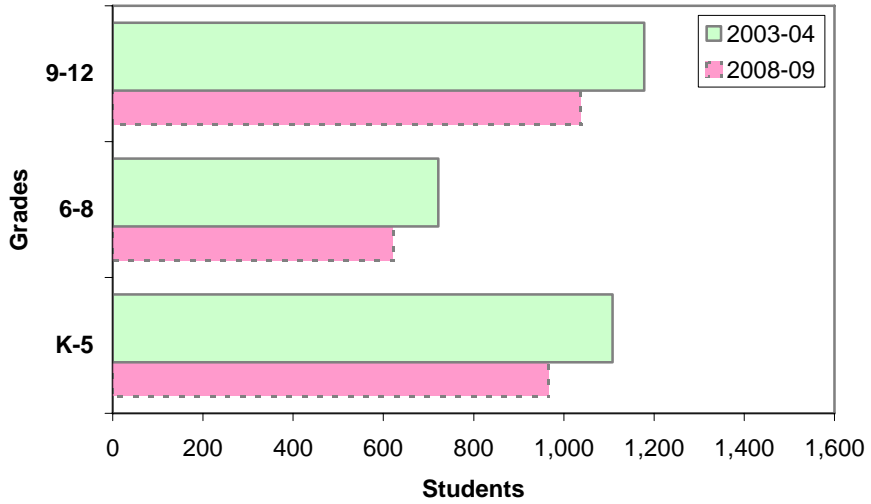


Table 10
Ashland School District, Historic Enrollment by School, 1998-99 to 2008-09

School	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Change 1998-99- 2008-09
Bellview	244	258	230	243	217	229	225	278	301	296	273	29
Briscoe	257	246	254	243	216	closed						-257
Helman	227	239	223	226	223	348	334	305	296	316	295	68
Lincoln	304	289	305	266	258	207	165	closed				-304
Walker	291	280	295	291	278	324	315	382	333	343	333	42
Elementary Totals¹	1,323	1,312	1,307	1,269	1,192	1,108	1,039	965	987	1,016	965	-358
John Muir School (K-8)	-	-	-	-	-	-	-	-	70	95	100	100
Ashland Middle School	825	821	796	782	756	722	685	707	668	616	588	-237
Middle School Totals²	825	821	796	782	756	722	685	707	681	650	624	-201
Ashland High School	1,199	1,228	1,227	1,204	1,193	1,178	1,168	1,106	1,096	1,051	1,038	-161
District Totals³	3,347	3,361	3,330	3,255	3,141	3,008	2,892	2,778	2,764	2,717	2,627	-720

1. Includes K-5th grade students at John Muir School.

2. Includes 6th-8th grade students at John Muir School.

3. Does not include students at Willow Wind, Lithia Springs, or Southern Oregon CSTC.

Source: Ashland School District.

Private and Home School Enrollment and Inter-district Transfers

Most of the largest private schools in Jackson County are located in or near the City of Medford, drawing students from a wide geographic area that includes the entire county and as far away as Grants Pass. Cascade Christian and St. Mary's, both secondary schools, have been growing in the past several years. Cascade moved into a new larger facility in 2007 and has capacity for further growth. The largest Medford area K-8 schools, Grace Christian and Sacred Heart, have lost enrollment in each of the past two years. Ashland's largest private school, the 1st-8th grade Siskiyou School, has been growing and now enrolls 172 students. Table 11 on the next page shows total enrollment at the County's six largest private schools.

Responses to the "long form" of the 2000 Census indicate that about 250 of the ASD's residents enrolled in 1st through 12th grade attended private schools. The private school share of eight percent, while lower than Jackson County's nine percent share, was an increase from six percent in 1990.

In addition to public and private schools, the other option is home schooling. Home schooled students living in the District are required to register with the Southern Oregon Education Service District (SOESD). In 2008-09 there are 130 ASD residents registered as home schooled. Table 11 shows that home school enrollment peaked in 2006-07, though statistics 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. The current share of registered home school students is about four percent of the ASD's total school age population.

The District continues to gain more students than it loses due to transfers to and from other public school districts. The net inflow of 28 students at the elementary level is the lowest in several years, but the net gain of 42 students in high school remains high. Table 11 presents interdistrict transfer information each year from 1999-00 to 2008-09.

Table 11
Area Private School Enrollments, ASD Home Schooled Students, and Interdistrict Transfers

Private School¹	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Cascade Christian H.S. (9-12)	299	240	211	214	225	226	265	289	315	346
Grace Christian (K-8)	651	643	648	621	657	678	652	645	615	588
Rogue Valley Adventist (K-12)	127	126	125	102	108	157	154	136	135	138
Sacred Heart (K-8)	208	236	221	217	249	275	290	301	292	250
St. Mary's (6-12)	345	346	301	300	320	319	321	366	433	430
The Siskiyou School (1-8)	0	0	0	0	0	0	127	N/A	N/A	172
Home Schooled ASD Residents										
Registered with SOESD	NA	58	104	122	143	132	162	202	159	130
Interdistrict Transfers²										
Into ASD (K-12)	107	108	88	96	127	113	119	128	134	114
<i>Into ASD (K-5)</i>	50	46	28	40	58	50	46	44	47	35
<i>Into ASD (6-8)</i>	9	17	18	15	23	25	40	38	32	32
<i>Into ASD (9-12)</i>	48	45	42	41	46	38	33	46	55	47
Out of ASD (K-12)	25	23	42	28	45	17	29	24	30	16
<i>Out of ASD (K-5)</i>	10	11	16	10	12	7	13	12	10	7
<i>Out of ASD (6-8)</i>	2	5	10	2	12	2	7	4	7	4
<i>Out of ASD (9-12)</i>	13	7	16	16	21	8	9	8	13	5
Net gain or loss (K-12)	82	85	46	68	82	96	90	104	104	98
<i>Net gain or loss (K-5)</i>	40	35	12	30	46	43	33	32	37	28
<i>Net gain or loss (6-8)</i>	7	12	8	13	11	23	33	34	25	28
<i>Net gain or loss (9-12)</i>	35	38	26	25	25	30	24	38	42	42

1. This table reports the total enrollment at each of the large private schools in the area. Enrollments may or may not include a significant number of ASD residents. Excludes pre-kindergarten enrollments.

2. Excludes home-schooled students at the Community Learning Center (CLC)/Willow Wind.

Sources: Private schools, Oregon Department of Education and contact with schools; home schooled students, SOESD; interdistrict transfers, Ashland School District.

Enrollment Change Due to Migration

First grade enrollments in the 1996-97 to 2002-03 period were between six and eleven percent larger than the number of corresponding births six years earlier, indicating that the District gained enrollment due to net in-migration of families with young children. In contrast, the number of ASD first grade students has been less than the number of corresponding births every year since 2003-04. During these six years, the difference has been about 14 percent, nearly equal to the share of District first grade residents who do not attend ASD schools. Therefore, the numbers of children moving into and out of the ASD between birth and age six has been relatively balanced and the District has gained very little enrollment due to the mobility of young children.

Among children already of school-age, a different trend is evident. The mobility of children already enrolled in school continues to contribute to a net inflow of students to the ASD. This conclusion is based on an analysis of historic grade progression rates (GPRs). The GPR is the ratio of enrollment in a specific grade to the enrollment in the preceding grade in the previous year. For example, the number of students enrolled in 2nd grade this year divided by the number of students enrolled in 1st grade last year. Rates for some grades may be consistently high, indicating that new students are entering the District from private schools. For this reason, it is common to see higher GPRs for the kindergarten to 1st and the 8th to 9th grade transitions. After grade 9, low GPRs can indicate that students are dropping out of school. But for most elementary grades, if the population entering and leaving the District is in balance and students are not being retained at particular grades for academic reasons, one can expect GPRs very close to 1.00. Rates above 1.00 in the elementary grades usually indicate net migration into the District.

Table 12 compares the average GPRs observed in the past 10 years. The District usually gains students between kindergarten and 1st grade. This transition is probably related more to school choice (students who attend private kindergartens and then enter ASD schools in 1st grade) than to migration. Large gains that occur at 9th grade are largely explained by inter-district transfers, students entering from private schools, and Pinehurst

students who attend Ashland High School. The GPRs for elementary students entering 2nd, 3rd, 4th, and 5th grades are usually the best indicator of net migration of residents, because they are less likely to be affected by school choice. These elementary grade transitions shown in Table 12 averaged about 1.025 in the 1998-99 to 2003-04 period, and about 1.03 in the 2003-04 to 2008-09 period. Therefore, net migration has contributed about two and a half to three percent annually to the population of elementary age children residing in the ASD.

Table 12
Average Grade Progression Rates *
ASD, 1998-99 to 2008-09

Grade Transition	1998-99 to 2003-04	2003-04 to 2008-09
K-1	1.07	1.04
1-2	0.99	1.05
2-3	1.04	1.03
3-4	1.04	1.02
4-5	1.03	1.03
5-6	1.03	1.04
6-7	1.00	1.02
7-8	1.02	1.01
8-9	1.09	1.16
9-10	0.99	0.99
10-11	0.97	0.98
11-12	0.97	0.98

**Ratio of enrollment in an individual grade to enrollment in the previous grade the previous year. The figures are averages for each period.*

Neighboring Districts

Table 13 displays several facts about ASD demographic and enrollment trends in comparison to three other nearby Jackson County school districts. All four districts have seen growth slow down or turn negative since the 1990s, but the ASD had the least growth (or greatest decline) in each period shown in the table. Ashland stands out from the other districts in almost every category, though it can be argued that the presence of Southern Oregon University contributes to the high multi-family share and lower shares

of school-age and pre-school age population. Phoenix-Talent's low school age population share is influenced by its large retirement communities.

Table 13
Selected Jackson County School Districts
Demographic and Enrollment Highlights, 1990 to 2007

	Ashland	Central Point	Medford	Phoenix-Talent
Enrollment growth, 1990-91 to 1995-96	6%	9%	15%	13%
Enrollment growth, 1995-96 to 2000-01	-4%	6%	9%	6%
Enrollment growth, 2000-01 to 2007-08	-18%	2%	-2%	-2%
Latino enrollment, 2007-08	6%	7%	17%	24%
Grades 9-12 enrollment, 2007-08	39%	33%	33%	30%
Population growth, 1990 to 2000	19%	23%	26%	32%
Multi-family housing share, 2000	32.5%	10.8%	24.5%	26.5%
Population age 5 to 17, 1990	16.8%	20.5%	17.4%	15.8%
Population age 5 to 17, 2000	15.3%	19.4%	19.2%	15.9%
Population under age 5, 1990	4.9%	6.3%	7.3%	6.1%
Population under age 5, 2000	4.1%	6.0%	6.7%	5.8%
Population rural, 2000	12.9%	36.2%	11.2%	14.6%

Data assembled by Population Research Center, PSU, from several sources: U.S. Census Bureau; OR Dept. of Education; U.S. Dept. of Education. Enrollments may include charter schools and special programs not typically included in District reports.

ENROLLMENT FORECASTS

District-wide Forecast Methodology

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

The 1990 and 2000 Census results are used as a baseline for the population forecasts. By “surviving” the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the “survived” population to the actual 2000 population by age group, we are able to estimate the overall level of net migration between 1990 and 2000 as well as net migration by gender and age cohort. The net migration data was used to develop initial net migration rates, which were used as a baseline for rates used to forecast net migration for the 2000 to 2020 period. Due to slower growth since 2000, the forecast rates generally contribute less migration each decade than occurred between 1990 and 2000, but the relative contributions of the age groups are similar in each decade. Migration adds the most to the population in their late teens and early 20s and smaller amounts to the population of children under 15 and adults age 35 and over. ASD migration flows are negative for the cohorts entering their late 20s and early 30s.

We estimated the number of births to women residing within the District each year from 1990 to 2007, using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers enabled us to calculate fertility rates by age group for both 1990 and 2000. In the forecast we adjusted

the future fertility rates to reflect trends of decreasing fertility rates for women under age 30. These trends are based on state and national observations, and they better predict the number of births occurring within the District during the 2001 to 2007 period for which birth totals are known.

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

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

District-wide Population Forecasts

Since we are nearing the end of the 2000 to 2010 forecast period, we have a substantial amount of data to compare to the 1990 to 2000 baseline period, including several years of school enrollment, birth, and housing development data. All indicate that population gains within the District in the current decade will be lower than in the 1990s. Planning documents from several local and regional agencies suggest that population growth will continue to slow down.

Jackson County Comprehensive Plan

The recently revised Population Element of the Jackson County Comprehensive Plan allocates the county forecast to incorporated cities, and the 2020 population forecast for the City of Ashland is 22,020.⁶ As of 2005, the City's population estimate was 20,880. Comparing the 2020 forecast with the 2000 Census implies an average annual growth rate of 0.6 percent for the 20 year period.

Greater Bear Creek Valley Regional Plan

This recently prepared plan is the culmination of several years of regional planning efforts known as Regional Problem Solving (RPS). The plan proposes to manage future growth, acknowledging that "increasing population in the Region will create an ongoing demand for additional lands available for urban levels of development."⁷

The plan identifies urban reserves in other parts of the Valley, but states "although the City of Ashland is a participating member jurisdiction in this RPS process, to date it has elected to accommodate all of its future population within its existing UGB and has not proposed any new growth areas."⁸

Additional information from the Plan relevant to Ashland's future growth rates includes:

The geographical realities of the City's location limit the ultimate growth of the community, as Ashland has chosen not to jump over the interstate freeway to accommodate additional growth on foothills of the Cascades, nor keep lengthening an already linear community. The community has taken strong steps to preserve its livable character, from adopting an Open Space Program funded by a local meals tax, to restricting "big box" retail development, to enacting strong design standards for all developments. Ashland also has taken the direction of strong controlled growth, carefully annexing new properties into the community based on need and public good, and encouraging affordable housing whenever possible in new residential developments.⁹

⁶ Table 7, Jackson County Comprehensive Plan, Revised Population Element, adopted by Ordinance #2007-3 on 2/21/07.

⁷"Greater Bear Creek Valley Regional Problem Solving Agreement, October 29, 2008." Draft from Rogue Valley Council of Governments web site at http://rvcog.org/MN.asp?pg=rps_main_page

⁸Memorandum from Fregonese Calthorpe Associates, February 22, 2006. In "Greater Bear Creek Valley Regional Plan", Appendix VI., October 2008.

⁹Exhibit 4-7, Key Elements of Community Identity. In "Greater Bear Creek Valley Regional Plan", October 2008.

Also:

Clearly, the Region has chosen to allocate a majority of population growth (over 78 percent of the projection) to three cities [Medford, Central Point, and Eagle Point], where populations are expected to more than double. Phoenix growth will be closest to the regional average, while Ashland proposes a radically reduced growth rate.¹⁰

Southern Oregon University

Southern Oregon University is currently developing a Master Academic Plan. An initial draft prepared in October includes a goal of increasing enrollment by 200 students in each year of the five year plan.¹¹ That would be significant growth for the 5,000 student university, but it is not clear how much that would impact the population of Ashland, because the goal includes examining the potential of expanding distance learning and programs in Medford.

If the University were to enact a facilities plan that included new faculty housing or expanded family housing beyond the current 165 units, that might contribute to an increase in school age population. There are currently no plans to expand family housing, but a study last Spring explored the feasibility of providing faculty housing.¹² The project's viability is uncertain, and if it were to occur, we expect that it would take several years to complete. Therefore, this population and enrollment forecast does not include any additional family housing at SOU.

Population Forecasts

In Table 14, the forecast rates of growth for the District are compared to the adopted county and city forecasts. The 1990 to 2000 growth rates for each area are included for historic comparison.

¹⁰In "Greater Bear Creek Valley Regional Plan", Appendix I, October 2008.

¹¹Southern Oregon University Master Academic Plan 2009-2014 Draft dated October 8, 2008.

¹²"SOU Examines Potential for Faculty Housing," *Ashland Daily Tidings*, March 18, 2008.

Table 14
Comparison of Population Growth Rates
Jackson County, City of Ashland, and ASD

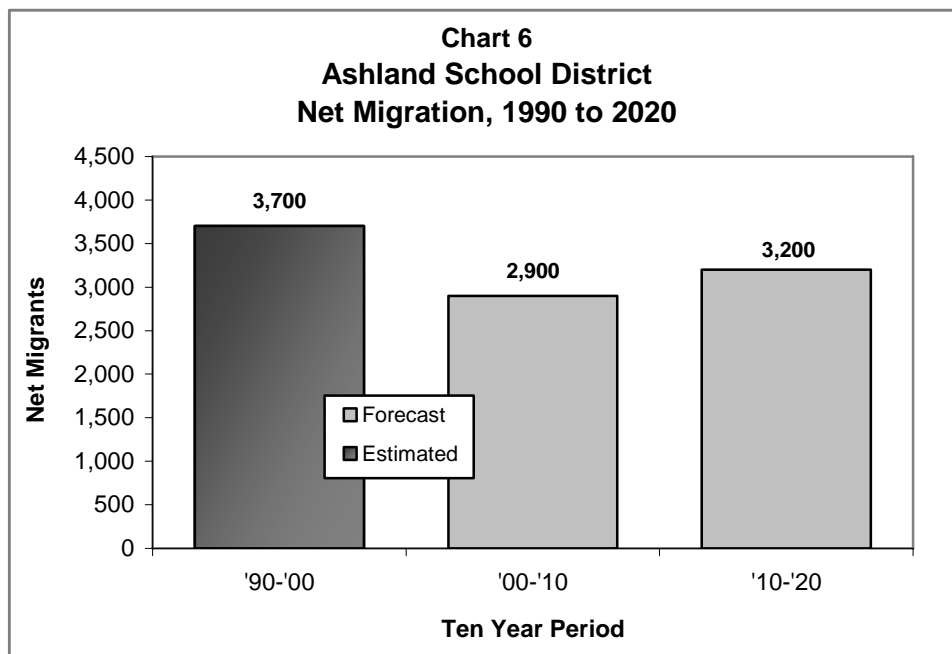
Area	Average Annual Growth Rates		
	1990 to 2000 Historic	2000 to 2010 Forecast*	2010 to 2020 Forecast*
Jackson County (OEA) ¹	2.2%	1.4%	1.4%
Jackson County ²	2.2%	1.7%	1.4%
City of Ashland ²	1.9%	0.9%	0.3%
Ashland S.D. ³	1.8%	0.9%	0.7%

1. Jackson County 2000 to 2020 Forecast from "Forecasts of Oregon's County Populations and Components of Change, 2000 to 2040." Oregon Department of Administrative Services, Office of Economic Analysis, April, 2004.

2. Table 7, Jackson County Comprehensive Plan, Revised Population Element, adopted by Ordinance #2007-3 on 2/21/07.

3. Ashland School District Population Forecast, PSU, Population Research Center.

The overall population increase attributable to net migration is shown in Chart 6. In the 1990s, natural increase (births minus deaths) was close to zero, so net migration accounted for almost all of the District's population growth. In the forecast period there are more deaths than births in the District, so the population gain due to net migration



(6,100 forecast in 20 years) is forecast to exceed overall population growth (4,000 forecast in 20 years).

The district-wide population forecast by age group is presented in Table 15. School-age population (5 to 17) has fallen in the current decade, but is forecast to remain relatively stable between 2010 and 2020. The population under age 10 is forecast to gain between 2010 and 2020, while the population age 10 to 17 continues its decline. By 2020, the fastest growing age groups are the “baby boom” generation ages 60 to 74.

Table 15
Population by Age Group
Ashland School District, 1990 to 2020

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2000 to 2020 Change	
					Number	Percent
Under Age 5	973	972	866	942	-30	-3%
Age 5 to 9	1,255	1,139	1,003	1,067	-72	-6%
Age 10 to 14	1,342	1,471	1,262	1,196	-275	-19%
Age 15 to 17	718	1,000	849	778	-222	-22%
Age 18 to 19	984	1,179	1,161	1,167	-12	-1%
Age 20 to 24	1,925	2,488	2,602	2,561	73	3%
Age 25 to 29	1,116	1,385	1,597	1,489	104	8%
Age 30 to 34	1,369	1,099	1,289	1,272	173	16%
Age 35 to 39	1,870	1,175	1,383	1,624	449	38%
Age 40 to 44	1,883	1,766	1,381	1,568	-198	-11%
Age 45 to 49	1,235	2,157	1,479	1,659	-498	-23%
Age 50 to 54	799	2,032	1,981	1,539	-493	-24%
Age 55 to 59	752	1,342	2,315	1,651	309	23%
Age 60 to 64	801	886	2,114	2,090	1,204	136%
Age 65 to 69	881	804	1,378	2,241	1,437	179%
Age 70 to 74	718	815	905	1,986	1,171	144%
Age 75 to 79	580	761	723	1,163	402	53%
Age 80 to 84	333	541	640	681	140	26%
Age 85 and over	216	544	788	879	335	62%
Total Population	19,750	23,556	25,717	27,553	3,997	17%
Total age 5 to 17	3,315	3,610	3,114	3,041	-569	-16%
share age 5 to 17	16.8%	15.3%	12.1%	11.0%		

	1990-2000	2000-2010	2010-2020
Population Change	3,806	2,161	1,836
Percent	19%	9%	7%
Average Annual	1.8%	0.9%	0.7%

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

District-wide Enrollment Forecasts

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

The capture rates used in the long run forecast are 0.81 for kindergarten and 0.83 for first grade. That means that about 19 percent of kindergarten-age children and 17 percent of first grade age children are assumed to not be enrolled in ASD schools, accounting for students enrolled in private schools, net transfers to and from other public school districts, home schooled students, or children not yet attending school, since school enrollment is not compulsory until age seven.

Several years of recent ASD enrollment history were evaluated to develop baseline grade progression rates (GPRs). These are the rates used to move students from one grade to the next before migration is factored in. For students entering the grades 2nd to 8th, the rates are exactly or very close to 1.00. We observed consistently higher GPRs for students entering 2nd and 6th grade (middle school), so we use a rate of 1.01. Rates for students entering later middle school grades, 7th and 8th, are consistently lower, so we use baseline GPRs of 0.99. We used a very high rate of 1.12 for students progressing from 8th to 9th grade, as the District gains at the high school level from inter-district transfers, students entering from private schools, and Pinehurst. For 10th through 12th grade, the rates are slightly below 1.00, reflecting attrition from Ashland High School. Table 16 shows these baseline rates, along with the calculation of GPRs from the historic and forecast enrollment.

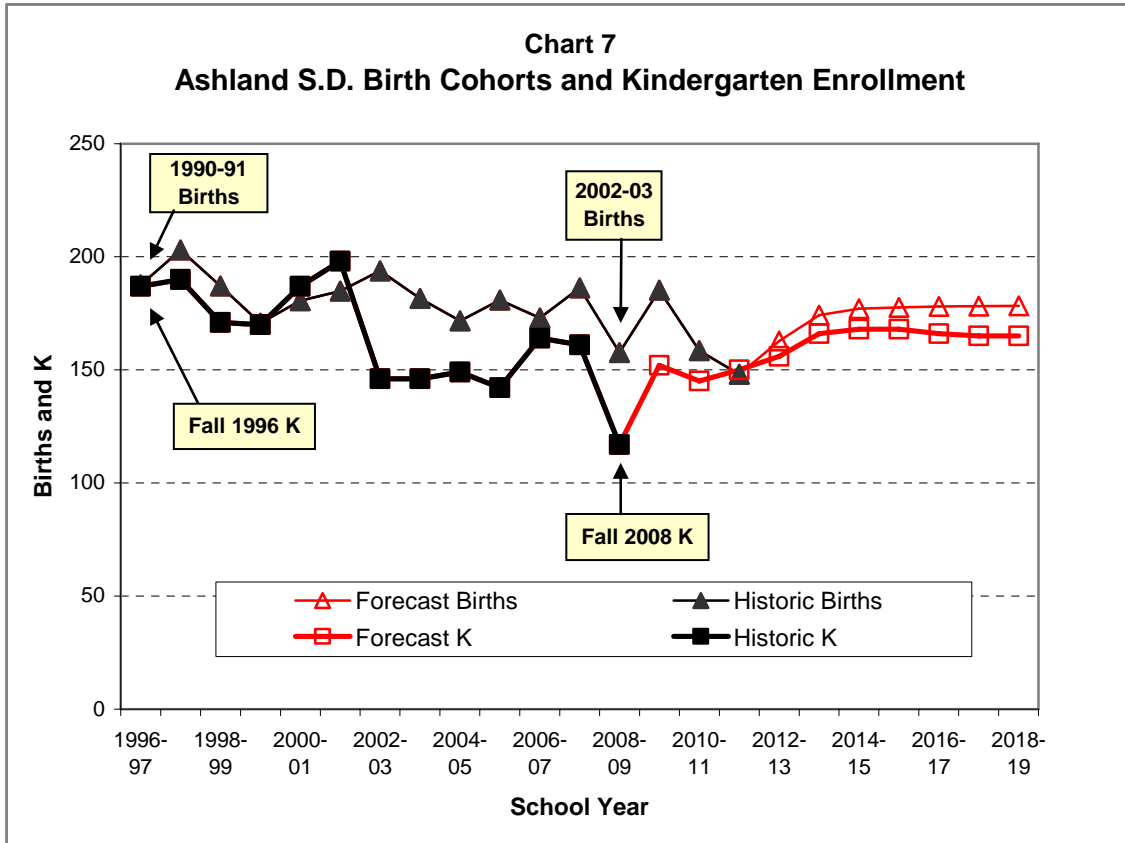
Table 16
Grade Progression Rates¹
Ashland S.D. Forecast

Grade Transition	Historic Average: 1998-99 to 2008-09	Baseline (without the influence of migration)	Forecast Average: 2008-09 to 2018-19
K-1	1.06	-- ²	1.07
1-2	1.02	1.01	1.04
2-3	1.04	1.00	1.03
3-4	1.03	1.00	1.03
4-5	1.03	1.00	1.04
5-6	1.04	1.01	1.05
6-7	1.01	0.99	1.02
7-8	1.01	0.99	1.02
8-9	1.13	1.12	1.16
9-10	0.99	0.96	0.99
10-11	0.97	0.96	0.98
11-12	0.97	0.96	0.98

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.

Chart 7 shows that the number of kindergarten students each year between 1996-97 and 2001-02 was similar to the number of births five years earlier. The ratio of kindergarten enrollment to births was well above the District’s capture rate, indicating that migration contributed significantly to the number of young children residing in the District. Beginning in the 2002-03 school year, kindergarten classes have been smaller than the corresponding birth cohort. The current small kindergarten class in 2008-09 reflects a small birth cohort as well as a large shortfall between enrollment and lagged births. We observed an increase in births between 2006 and 2007 and forecast further increase due to a small increase in women of child-bearing ages. Migration contributes modestly to population growth between birth and age five due to the City’s expected success at including some affordable family housing in future residential developments and a development climate that favors more multi-family and rental housing.



Total K-12 enrollment is forecast to be relatively stable, especially when compared with the loss of 720 students in the last 10 years. ASD elementary enrollment is forecast to grow very slowly in the next few years as growth from new affordable housing developments in the City of Ashland is tempered by recent smaller birth cohorts that will soon be entering kindergarten and first grade. The pace of elementary enrollment growth increases later in the 10 year forecast horizon, but secondary enrollments continue to decline after 2013-14.

Table 17 on the next page contains grade level forecasts for the Ashland School District for each year from 2009-10 to 2018-19. The forecasts are also summarized by grade level groups (K-5, 6-8, and 9-12).

Table 17
Ashland School District Enrollment Forecasts, 2009-10 to 2018-19

Grade	Actual	Forecast									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
K	117	152	145	150	156	166	168	168	166	165	165
1	165	131	166	159	160	164	175	180	179	176	175
2	175	171	139	175	165	166	170	181	186	185	182
3	167	180	179	145	179	169	170	174	185	190	189
4	166	172	191	188	149	185	174	175	179	190	195
5	177	171	183	202	195	154	191	180	180	185	196
6	188	184	183	195	211	203	161	199	187	187	192
7	223	191	193	190	199	215	207	164	202	190	190
8	211	227	200	201	194	203	219	211	167	205	193
9	263	243	267	236	233	225	236	254	244	193	237
10	264	259	243	266	232	229	221	232	249	239	189
11	267	259	257	240	260	227	224	216	226	243	233
12	244	260	253	251	234	254	221	219	211	220	237
Total	2,627	2,600	2,599	2,598	2,567	2,560	2,537	2,553	2,561	2,568	2,573
K-5	967	977	1,003	1,019	1,004	1,004	1,048	1,058	1,075	1,091	1,102
6-8	622	602	576	586	604	621	587	574	556	582	575
9-12	1,038	1,021	1,020	993	959	935	902	921	930	895	896

	5 Year Growth: 2008-09 to 2013-14		5 Year Growth: 2013-14 to 2018-19		10 Year Growth: 2008-09 to 2018-19	
	Change	Pct.	Change	Pct.	Change	Pct.
K-5	37	4%	98	10%	135	14%
6-8	-1	0%	-46	-7%	-47	-8%
9-12	-103	-10%	-39	-4%	-142	-14%
Total	-67	-3%	13	1%	-54	-2%

Enrollment does not include students at Willow Wind, Lithia Springs, or Southern Oregon CSTC.

Population Research Center, Portland State University, November 2008.

Individual School Forecasts

In addition to the district-wide enrollment forecasts, we have also prepared forecasts for individual schools under a scenario in which current boundaries and grade configurations remain constant. The individual school forecasts depict what future enrollments might be if today's schools and programs were unchanged.

The methodology for the individual school forecasts relies on GPRs unique to each school as well as those from the district-wide forecast, and the observed ratio of kindergarten and first grade enrollment to lagged births within the school's attendance area. New kindergarten and first grade classes were forecast each year based on recent trends and historic and forecast births. Subsequent grades were forecast using the GPRs, which were adjusted to account for expected future housing growth in individual school attendance areas. The final forecasts for individual schools are controlled to match the district-wide forecasts.

The greatest amount of elementary growth occurs at Bellview, initially because of the apartments at Willowbrook that may be completed during the 2010-11 school year. In the longer run, perhaps by the end of the 10 year forecast horizon, additional multi-family development may occur at the Croman Mill redevelopment site, also within the current Bellview boundary. Most of the site is planned for employment uses, but the concepts currently under consideration for the site include 250 to 270 housing units. Enrollment growth is also forecast at Helman and Walker, though Helman does not grow in the first several years due to relatively small incoming kindergarten classes. Enrollment at John Muir is held constant at 100 students. Table 18 presents the enrollment forecasts for each school.

Table 18
Enrollment Forecasts for Individual Schools, 2009-10 to 2018-19

School	Actual	Forecast										Change 2008-09- 2018-19
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
Bellview	273	275	298	305	305	312	329	332	333	340	346	73
Helman	295	297	295	298	288	283	293	297	310	316	319	24
Walker	333	341	346	352	347	345	362	365	368	371	373	40
Elementary Totals¹	965	977	1,003	1,019	1,004	1,004	1,048	1,058	1,075	1,091	1,102	137
John Muir School (K-8)	100	100	100	100	100	100	100	100	100	100	100	0
Ashland Middle School	588	566	540	550	568	585	551	538	520	546	539	-49
Middle School Totals²	624	602	576	586	604	621	587	574	556	582	575	-49
Ashland High School	1,038	1,021	1,020	993	959	935	902	921	930	895	896	-142
District Totals³	2,627	2,600	2,599	2,598	2,567	2,560	2,537	2,553	2,561	2,568	2,573	-54

1. Includes K-5th grade students at John Muir School.

2. Includes 6th-8th grade students at John Muir School.

3. Does not include students at Willow Wind, Lithia Springs, or Southern Oregon CSTC.

Population Research Center, Portland State University, November 2008

FORECAST ERROR AND UNCERTAINTY

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

In Table 19, we compare the actual ASD enrollment by grade level in Fall 2008 with the 2008-09 forecasts that were prepared as part of a long range enrollment forecast study three years ago. In general, enrollments were forecast to be lower than actual 2008-09 enrollments. The November 2005 forecast of total K-12 enrollment in 2008-09 was 96 students (3.7 percent) lower than actual 2008-09 enrollment. The three-year-old forecast is remarkably accurate for the elementary level — within half of a percent. Each of the secondary levels exhibit greater errors — eight percent for the middle school level and four percent for the high school level.

Level	Actual	Three year forecast*		
		Fcst.	Diff.	Error
K-5	967	964	-3	-0.3%
6-8	622	571	-51	-8.2%
9-12	1038	996	-42	-4.0%
Total	2627	2531	-96	-3.7%

**Note: Forecast for 2008-09 by Dr. Judith A. Barmack, November 2005, based on historic enrollment through 2005-06.*

In general, forecast error varies according to the size of the population being forecast. As Table 19 shows, the average absolute errors for two of the three school levels are larger than the absolute error for the K-12 total. Similarly, the average absolute error for individual school forecasts is likely to be greater than for the District total. The school

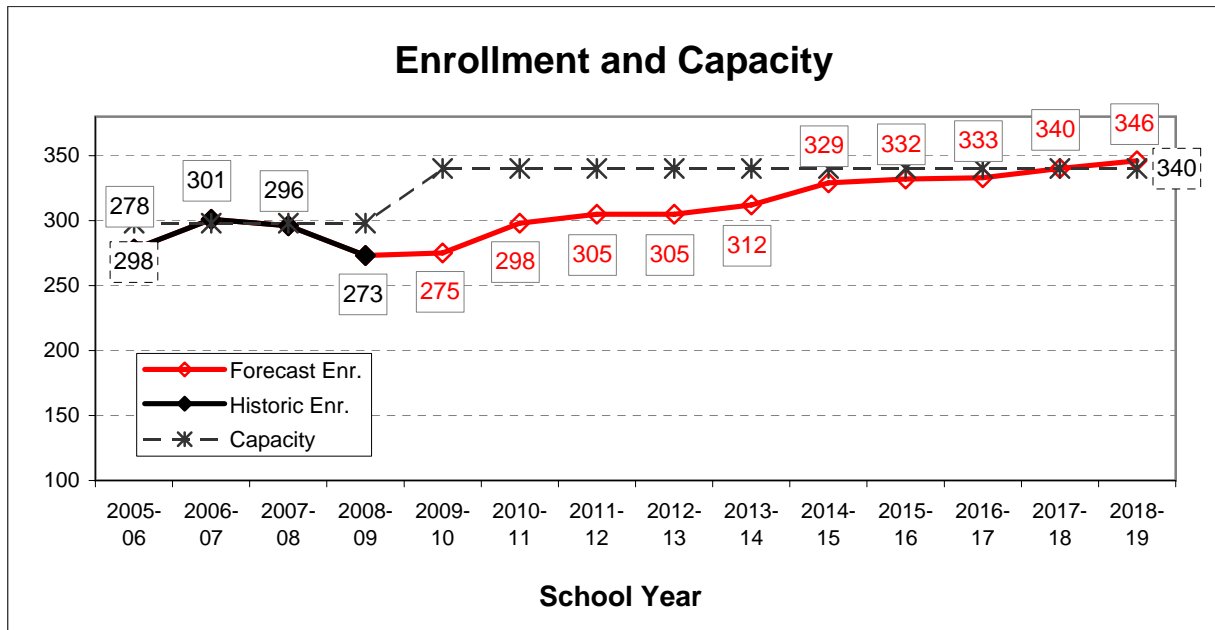
level forecasts depend on assumptions about the distribution of housing growth and population change in small areas within the District over a ten-year period. They also assume that current enrollment patterns and choices that residents make among ASD schools will remain unchanged. The school forecasts should be used as only one of many tools in the planning process.

Because of the uncertainties of forecasts described in this section, it is important to monitor the results and update the forecast as new information becomes available. New information may be school enrollment data, new census data, proposals for major new housing development, or land use changes that may result in housing or economic growth that differs significantly from recent and current trends.

APPENDIX

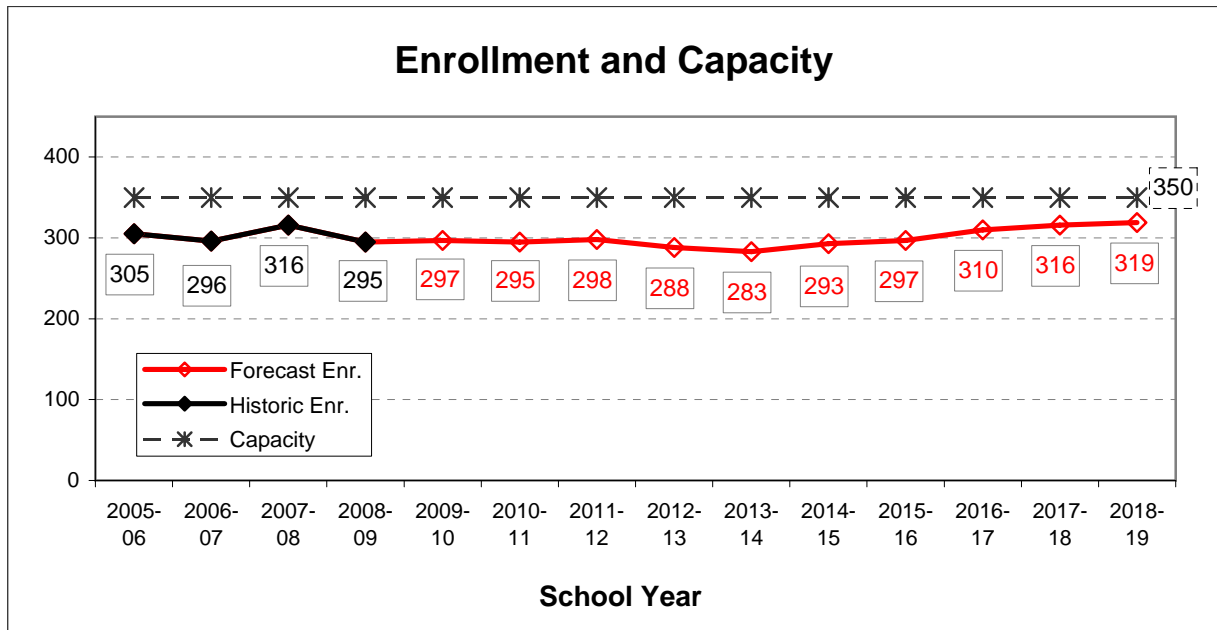
ENROLLMENT PROFILES FOR INDIVIDUAL SCHOOLS

Bellview Elementary School



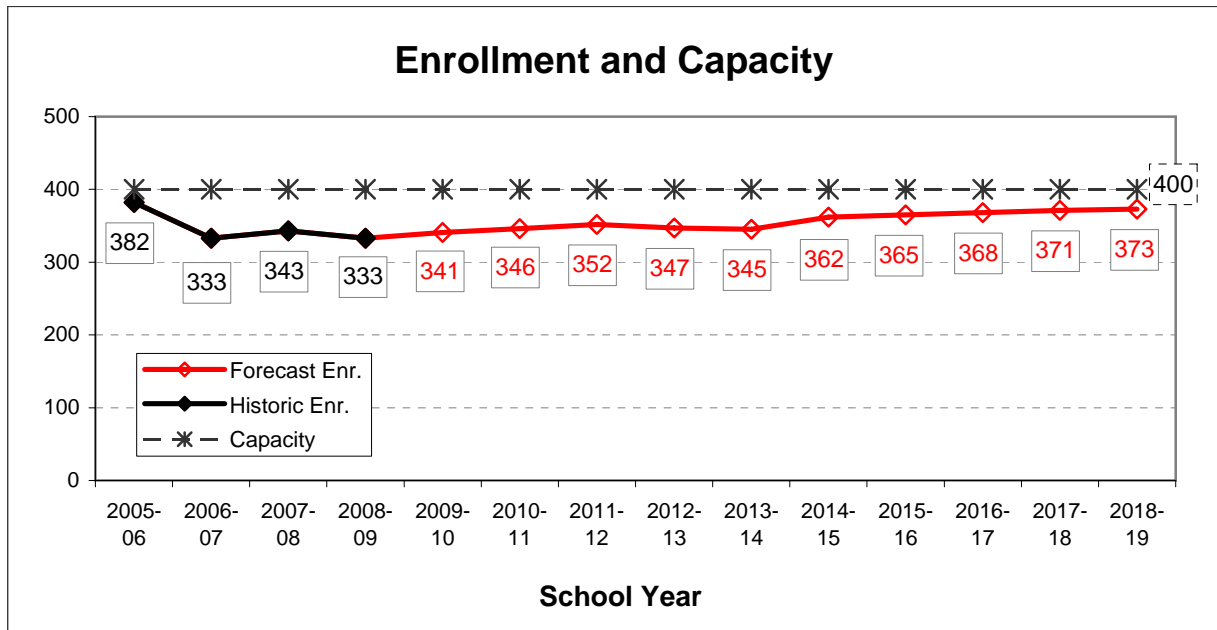
Year	October Enrollment	Annual Change		Capacity		Percent Occupied
		Number	Percent	Total	Available	
2005-06	278	-	-	298	20	93%
2006-07	301	23	8.3%	298	-3	101%
2007-08	296	-5	-1.7%	298	2	99%
2008-09	273	-23	-7.8%	298	25	92%
2009-10 (forecast)	275	2	0.7%	340	65	81%
2010-11 (forecast)	298	23	8.4%	340	42	88%
2011-12 (forecast)	305	7	2.3%	340	35	90%
2012-13 (forecast)	305	0	0.0%	340	35	90%
2013-14 (forecast)	312	7	2.3%	340	28	92%
2014-15 (forecast)	329	17	5.4%	340	11	97%
2015-16 (forecast)	332	3	0.9%	340	8	98%
2016-17 (forecast)	333	1	0.3%	340	7	98%
2017-18 (forecast)	340	7	2.1%	340	0	100%
2018-19 (forecast)	346	6	1.8%	340	-6	102%

Helman Elementary School



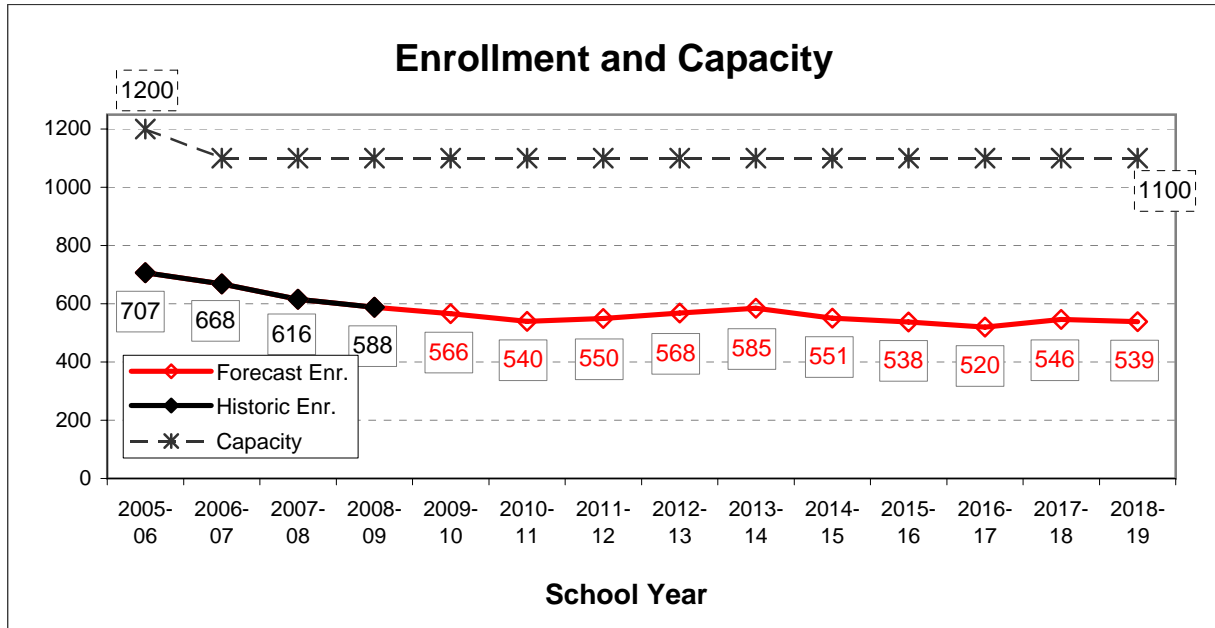
Year	October Enrollment	Annual Change		Capacity		Percent Occupied
		Number	Percent	Total	Available	
2005-06	305	-	-	350	45	87%
2006-07	296	-9	-3.0%	350	54	85%
2007-08	316	20	6.8%	350	34	90%
2008-09	295	-21	-6.6%	350	55	84%
2009-10 (forecast)	297	2	0.7%	350	53	85%
2010-11 (forecast)	295	-2	-0.7%	350	55	84%
2011-12 (forecast)	298	3	1.0%	350	52	85%
2012-13 (forecast)	288	-10	-3.4%	350	62	82%
2013-14 (forecast)	283	-5	-1.7%	350	67	81%
2014-15 (forecast)	293	10	3.5%	350	57	84%
2015-16 (forecast)	297	4	1.4%	350	53	85%
2016-17 (forecast)	310	13	4.4%	350	40	89%
2017-18 (forecast)	316	6	1.9%	350	34	90%
2018-19 (forecast)	319	3	0.9%	350	31	91%

Walker Elementary School



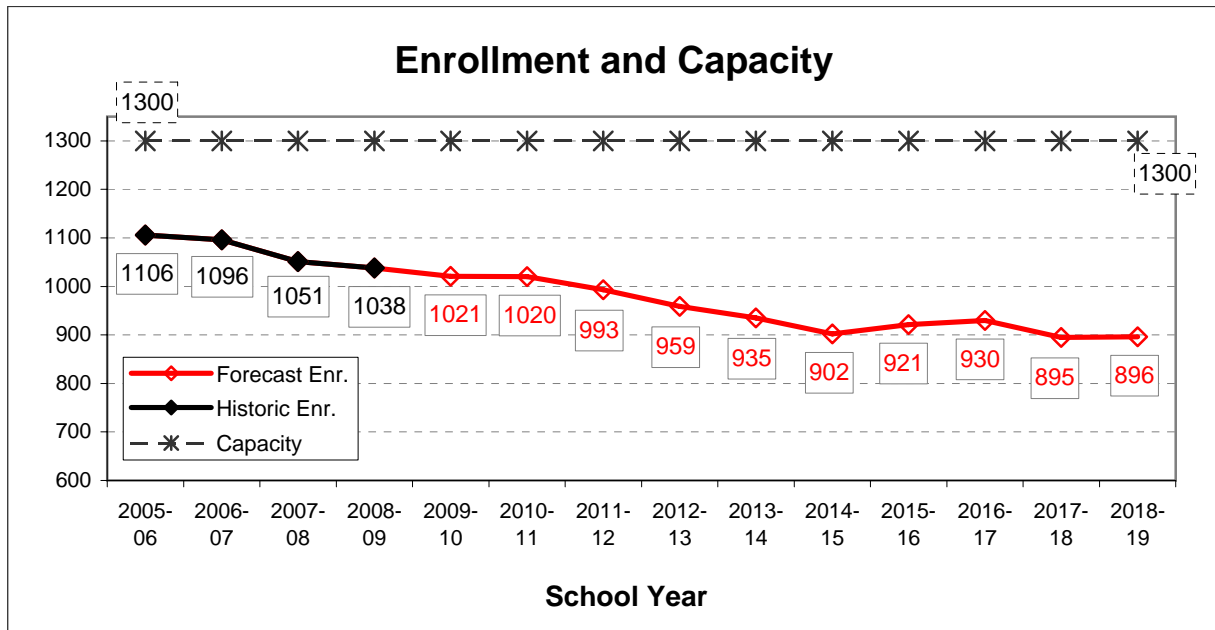
Year	October Enrollment	Annual Change		Capacity		Percent Occupied
		Number	Percent	Total	Available	
2005-06	382	-	-	400	18	96%
2006-07	333	-49	-12.8%	400	67	83%
2007-08	343	10	3.0%	400	57	86%
2008-09	333	-10	-2.9%	400	67	83%
2009-10 (forecast)	341	8	2.4%	400	59	85%
2010-11 (forecast)	346	5	1.5%	400	54	87%
2011-12 (forecast)	352	6	1.7%	400	48	88%
2012-13 (forecast)	347	-5	-1.4%	400	53	87%
2013-14 (forecast)	345	-2	-0.6%	400	55	86%
2014-15 (forecast)	362	17	4.9%	400	38	91%
2015-16 (forecast)	365	3	0.8%	400	35	91%
2016-17 (forecast)	368	3	0.8%	400	32	92%
2017-18 (forecast)	371	3	0.8%	400	29	93%
2018-19 (forecast)	373	2	0.5%	400	27	93%

Ashland Middle School



Year	October Enrollment	Annual Change		Capacity		Percent Occupied
		Number	Percent	Total	Available	
2005-06	707	-	-	1200	493	59%
2006-07	668	-39	-5.5%	1100	432	61%
2007-08	616	-52	-7.8%	1100	484	56%
2008-09	588	-28	-4.5%	1100	512	53%
2009-10 (forecast)	566	-22	-3.7%	1100	534	51%
2010-11 (forecast)	540	-26	-4.6%	1100	560	49%
2011-12 (forecast)	550	10	1.9%	1100	550	50%
2012-13 (forecast)	568	18	3.3%	1100	532	52%
2013-14 (forecast)	585	17	3.0%	1100	515	53%
2014-15 (forecast)	551	-34	-5.8%	1100	549	50%
2015-16 (forecast)	538	-13	-2.4%	1100	562	49%
2016-17 (forecast)	520	-18	-3.3%	1100	580	47%
2017-18 (forecast)	546	26	5.0%	1100	554	50%
2018-19 (forecast)	539	-7	-1.3%	1100	561	49%

Ashland High School



Year	October Enrollment	Annual Change		Capacity		Percent Occupied
		Number	Percent	Total	Available	
2005-06	1106	-	-	1300	194	85%
2006-07	1096	-10	-0.9%	1300	204	84%
2007-08	1051	-45	-4.1%	1300	249	81%
2008-09	1038	-13	-1.2%	1300	262	80%
2009-10 (forecast)	1021	-17	-1.6%	1300	279	79%
2010-11 (forecast)	1020	-1	-0.1%	1300	280	78%
2011-12 (forecast)	993	-27	-2.6%	1300	307	76%
2012-13 (forecast)	959	-34	-3.4%	1300	341	74%
2013-14 (forecast)	935	-24	-2.5%	1300	365	72%
2014-15 (forecast)	902	-33	-3.5%	1300	398	69%
2015-16 (forecast)	921	19	2.1%	1300	379	71%
2016-17 (forecast)	930	9	1.0%	1300	370	72%
2017-18 (forecast)	895	-35	-3.8%	1300	405	69%
2018-19 (forecast)	896	1	0.1%	1300	404	69%