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# Enrollment Forecast (2004-2010) for Lake Oswego School District

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# Enrollment Forecast (2004-2010) for Lake Oswego School District

Prepared by:
Population Research Center,
Portland State University

February 2004

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#### **Summary**

This report, prepared by the Population Research Center provides a medium-range school enrollment forecast, including background demographic information and analysis, for Lake Oswego School District (LOSD) and for its nine elementary schools, two junior high schools, and two high schools. The report considers several factors that are likely to affect the District's enrollment between 2004 and 2010 and examines elementary attendance areas within the District. The most likely scenario indicates that there will be a slight decrease in enrollments between 2003 and 2010.

For the district-wide forecasting, three scenarios of population, housing, and enrollment changes were developed to account for different probabilities of demographic events. Forecasts are made for the District by grade level using three scenarios: (a) the most likely enrollment growth which curbs recent trends of declining housing and population growth rates, (b) lower growth, assuming that growth rates in the district will continue to decrease, and (c) higher growth, assuming higher average growth rates closer to those of the mid 1990s.

Most of the District's population and housing growth during the 1990s took place during the first half of the decade. During the second half, although population and housing continued to grow, the rate of increase began to slow down. This trend has continued through 2003. In all three forecast scenarios there continues to be an increase in population and in the number of housing units in the District, but each scenario assumes the increase to occur in the future at different rates.

There are a few additional driving forces that have recently affected changes in enrollment growth in the Lake Oswego School district and will continue to influence enrollments in the future. Not only are fewer housing units being added to the District now than previously, but ageing-in-place of current residents with children who are presently in school, or with children already having passed through the school system, is occurring. Additionally, the capture rate – the proportion of children residing in the District and attending LOSD schools – is slightly lower than in the early 1990s. One other force that has some bearing on changes in District enrollment is the decline of the

total fertility rate. Women are having fewer children in the District. The fertility rate for the LOSD area is lower than the State of Oregon rate and has declined at a faster pace.

Under all three scenarios, the housing growth expected to take place in the District will inevitably bring in some school-aged children and will partially offset some of the effects of the above-mentioned trends.

The **most likely enrollment growth** forecast predicts slight total enrollment decreases from the present to the year 2010. Total enrollment will decrease by 161 students, or 2.3 percent, between 2003 and 2010. Enrollment in all grade levels will decrease, however at different rates. Enrollments in grades 7-8 will undergo the greatest change of all the grade levels: enrollment will decrease by 6.4 percent, a loss of 76 students between 2003 and 2010. Enrollment in grades K-6 will decline at smaller rate than at the Junior High level, but the number of students expected to decrease will be about the same (-78 students). High school, the grade level with the least amount of change, will have 4 fewer students in 2010 with a decline of only .2 percent.

Most Likely	2003	2010	2003-201	0 Change
			Number	Percent
Elementary, K-6	3,426	3,348	-78	-2.3%
Junior High, 7-8	1,194	1,118	-76	-6.4%
High School, 9-12	2,351	2,347	-4	2%
Special Ed	24	20	-4	-15.1%
Total	6,995	6,834	-161	-2.3%

Under the **low growth** forecast, there will be a sharper decline in enrollment over the next several years, with total enrollment decreases exceeding the most likely enrollment forecast by approximately 217 students. The low enrollment forecast suggests that total enrollment will decrease by 378 students, or –5.4 percent, between 2003 and 2010. Enrollment in all grade levels, K-6, 7-8, and 9-12 will experience decreases.

Low Growth	2003	2010	2003-201	0 Change
Low Growth	2003	2010	Number	Percent
Elementary, K-6	3,426	3,257	-169	-4.9%
Junior High, 7-8	1,194	1,087	-107	-9.0%
High School, 9-12	2,351	2,253	-98	-4.2%
Special Ed	24	20	-4	-17.9%
Total	6,995	6,617	-378	-5.4%

Under the **high growth** scenario, there will be an increase in enrollment in the District. Overall enrollment in 2010 will be 234 students higher than under the most likely enrollment growth forecast. The high enrollment forecast suggests that total enrollment will increase by 73 students, or 1.0 percent, between 2003 and 2010. Grade levels K-6 and 9-12 will add students to their enrollments, however, grades at the junior high school level will see the a decrease of 37 students.

High Growth	2003	2010	2003-201	0 Change
High Growth	2003	2010	Number	Percent
Elementary, K-6	3,426	3,511	85	2.5%
Junior High, 7-8	1,194	1,157	-37	-3.1%
High School, 9-12	2,351	2,379	28	1.2%
Special Ed	24	21	-3	-12.1%
Total	6,995	7,068	73	1.0%

For each of the nine elementary schools, two junior high schools, and two high schools, a separate enrollment forecast by grade level from 2004 to 2010 was developed in order to better reflect different population and housing dynamics that are likely to occur in different parts of the District.

All elementary schools are expected to experience overall decreases in enrollment from 2003 to 2010 except two. Enrollments in Palisades and River Grove elementary schools in 2010 will most likely increase, both by approximately 6 percent. The elementary schools in the district that are expected to see the highest decrease in enrollment are Oak Creek at –18.6 percent, Bryant at –13.1 percent, and Westridge at –3.6 percent.

During the forecast period, Waluga Junior High is expected to have growth of 1.0 percent, but Lake Oswego Junior High is anticipated to see a –12.8 percent change in enrollments. It is anticipated that Lake Oswego High School will see a minor decline at a rate of -0.6 percent. Lakeridge High School enrollment is expected to increase slightly by 0.4 percent.

#### Introduction

This study, conducted by the Population Research Center (PRC), forecasts enrollment changes for Lake Oswego School District (LOSD) from October 2003 to the year 2010. It provides a revision of enrollment projections that were prepared in previous study completed in 2001. In addition to the historical demographic trends considered in the previous study, this report examines recent demographic changes experienced in the District and places emphasis on the 1998-2003 time period as having the most influence on LOSD future enrollment patterns.

Expected future enrollments that will result from the most likely population and housing trends in the District are presented in this report along with two other district-wide enrollment forecasts based on lower and higher growth scenarios. The three scenarios presented here differ from those developed for the 2001 forecast report. Each scenario is based on alternate future population and housing growth assumptions predicted for the Lake Oswego area. Also included in this study is a forecast for the District's total population in 5-year age groups for the years 2005 and 2010.

An individual forecast for each of the nine elementary schools, two junior high schools, and two high schools in the District has been developed. Both District-wide and individual school enrollment forecasts are prepared by grade-level.

The report covers the following topics:

1. <u>District Demographic Trends.</u> A description of recent demographic trends, and factors that influence population changes in the District, including fertility, migration, and housing growth. Also included in this section is a description of some additional factors that influence enrollment changes – capture rates, and private and home schooling trends.

- 2. <u>Enrollment Trends.</u> A description of historical and current enrollment patterns in the District.
- 3. <u>Housing and Population Growth Assumptions</u>. A description of the assumptions used in the low, medium, and high growth District forecasts.
- 4. The Most-Likely, and Low and High District Enrollment Forecasts (District—Wide Results). The results are presented along with an analysis of enrollment changes.
- 5. <u>Elementary School Attendance Area Specific Trends.</u> A description of the significant population, housing, and enrollment trends that are specific to the individual elementary school attendance areas and individual schools.
- 6. <u>School Enrollment Forecasts.</u> A presentation of the results of the individual forecasts
- Methods and Data Employed for District Forecast. A description of the population and enrollment model and data sources used for the district-wide forecast.
- 8. <u>Methods and Data Employed for Individual School Forecasts.</u> A description of the model and data used for these forecasts.
- 9. Appendices. Detailed District and school forecast tables are presented.

Please note that when adding enrollments in the tables, some totals might be off by 1 due to rounding of numbers.

#### **Demographic Trends in the Lake Oswego School District**

#### **District Population**

Total population in the Lake Oswego School District was 39,451 in 2000 and had been increasing at an average rate of just under one percent per year since 1990. The population of persons between the ages of 0-19 had increased at a slightly higher rate during the same time period.

The population trends of the District have closely followed those for the City of Lake Oswego as the two areas have close geographic overlap. Population increased more rapidly in the first half of the 1990s than the second half in the City of Lake Oswego, and the same can be assumed for the District.

From 2000 to 2003 the population growth rates in the City of Lake Oswego have been smaller than in previous years with an estimated average annual rate of about one-half of 1 percent. Population growth has been slower than in surrounding cities, except Milwaukee. Assuming 2000-2003 growth rates similar to those of Lake Oswego, it is estimated that the population in the District in 2003 reached approximately 40,100.

Population growth rates in LOSD historically have been lower than in Clackamas County. Although it is estimated that the school-age population in Clackamas County has slightly increased during the last three years, the population of children ages 0-4 is estimated to have decreased. It is reasonable to assume that LOSD has also experienced a slight decrease in the population of children ages 0-4.

#### Housing and Households

Housing growth in the District, as population, is still occurring but at slower rates than in the 1990s. Housing growth during the second half of the 1990s was less than in the first half, and during 2000-2003, the growth rates were even lower. Average annual growth rates of housing during the 1990s was 1.9 percent; housing growth from 2000 to 2003 has been occurring at an average annual growth rate of approximately of .6 percent, about the same as population.

From 1990 to 1995, the number of new housing units (single-family and multi-family units combined) added in the district was approximately 340 units per year. From 1995 to 2000, the number of new units added was about 120 per year. From 2000 to 2003, 102 units on average were added to the District, which is less than one-third of the annual housing growth in the early 1990s. In 2000, there were 17,274 housing units in LOSD. It is estimated that there were 17,580 housing units in LOSD in 2003.

In 2000, the number of households with children was 5,728. The proportion of households with children compared to the total number of households in the District, was 35 percent, the same as it was in 1990. Assuming the same percentages as in 2000, it is estimated that there are 5,830 households in LOSD with children.

The average number of persons per housing unit in Lake Oswego is 1.99, which is lower than in surrounding sizable cities. By housing type, the average number of persons per single-family housing unit is 2.56, and per multi-family unit, the average is especially low at 1.43 persons.

#### Migration

During 1990 to 2000, the greatest net out-migration was of young adults ages 20-29 and seniors ages 65-74. There also was net out-migration of children ages 0-4 at a significant rate and of children 15-19 and adults 50-64 at lower rates. There was net in-migration of children in the age groups between 5-14 and in most of the corresponding age groups that their parents fall in, ages 30-49.

It is estimated that migration rates between 2000 and 2003 have decreased slightly to account for the declining population growth rates experienced in Lake Oswego and assumed to be occurring in the District.

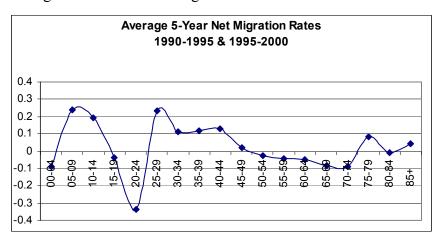


Figure 1. LOSD Net Migration Rates

#### Fertility and Births

Despite the increase in population during the 1990s, the total fertility rate decreased from 2.4 children per woman ages in 1990 to 1.4 in 2000. There was a decrease in the number of women of childbearing ages residing in the District from 1990 to 2000, and the women that were in the District were having fewer children. The result was that the number of births in the District had declined. In the first half of the 1990s, the average annual number of births was over 400, and during the second half, it was closer to 350.

The decrease in the number of births in the District which began after the early 1990s, stabilized during 2000-2002. The annual number of births in the District during 2000 - 2002 was about 330, which is 23 percent less than the number of births in 1990.

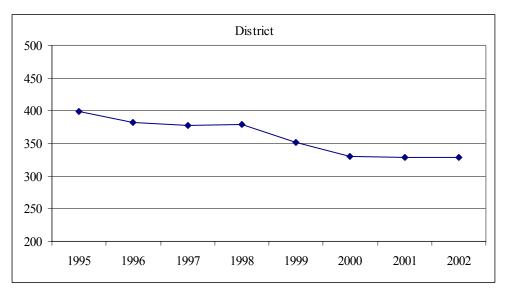


Figure 3. District Births, 1995-2002

In 2002, the most recent year for which data are available, 91 percent of all births in the District were White, 2 percent were Black, and 7 percent were Asian or Pacific Islander. Babies who were reported to be of any other racial group represented less than one percent of the total births. Babies of Hispanic origin and of any race captured 8 percent of all births. Since 1994, the number of White births has been decreasing and the number of ethnic minority births has been increasing. The proportion of births to individual minority groups has fluctuated during the same time period, but the proportion of Asian births and the proportion of Hispanic births have consistently been the highest of all ethnic minority groups.

#### LOSD Capture Rates, and Private and Home Schooling

Capture rates, the rates that reflect how many children attend local public education, was about .88 in 2000. It is estimated that the capture rates in 2003 haven't changed much since 2000. This means that 88 out of 100 school age children residing in the District have been attending LOSD schools. In 2000, the capture rate for grades 7-8 was the highest at .91, followed by grades 9-12 with a rate of .90. The lowest rate characterizes K-6 students at .85.

The number students that reside outside of the District and attend LOSD schools has declined from at least 2000 to 2003. In 2000, there were 348 out-of-district students attending LOSD schools; in 2003 the number was 216, which was 132 fewer than in 2000 – a decline of 38 percent.

Surveys of local private schools conducted annually by PRC since 1999 indicate that private school attendance of children residing in LOSD has been fluctuating annually with no apparent extreme or continuous trend influencing changes in LOSD enrollment. It is estimated that the number of children residing in LOSD that attend private schools is within a range of between 7 and 10 children per 100. Students in grades K-3 and 9-12 generally have a higher attendance rate in private schools than students in the other grades.

Children attending home schools doubled in 2000. The number continued to increase after 2000, but by 2003 there were only 98 students attending school at home. The increase in the number does not significantly affect district enrollment trends because they represent only 1 to 2 students per 100 children residing in the District.

#### **LOSD Enrollment Trends**

The District includes nine elementary schools, two junior high and two high schools. The configuration of the grade levels is grades K-6 in elementary schools, grades 7-8 in junior high, and grades 9-12 in high school.

#### **Historical and Recent Trends**

After experiencing almost continuous annual increases in total enrollment since at least 1990 (with an annual average rate of 2.5%), Lake Oswego School District began to see yearly decreases beginning in 1997. Every year since then, except in 2001 when there was an increase of 74 students, enrollment has dropped. The average annual rate of increase prior to the declines was 2.5 percent, a yearly addition of 170 students. The average annual rate of decrease since 1996 has been one-half of one percent, or -36 students per year. See Figures 4 and 5 and Table 1.

The increase from 2000 to 2001 was mostly due to an increase in K-3 students from the previous year (see Figures 4 & 5, and Table 1).

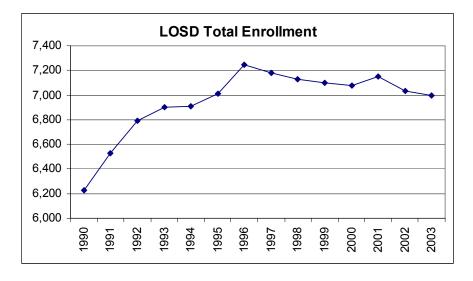


Figure 4. District Enrollment, 1990-2003



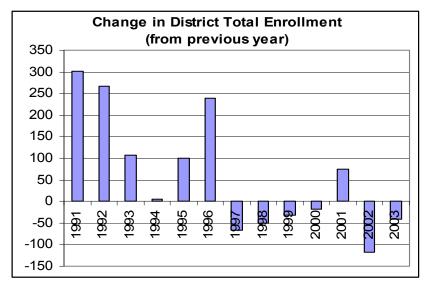


Table 1. Lake Oswego District Enrollment by Grade Level and Year.

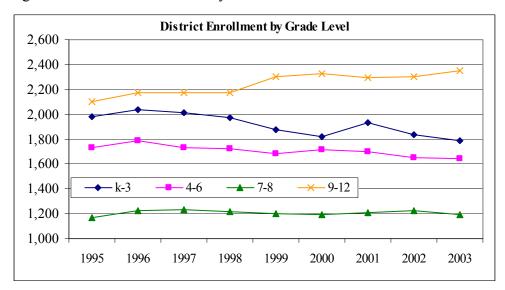
Grade	1995	1996	1997	1998	1999	2000	2001	2002	2003
K	436	442	415	415	374	380	411	332	385
1	499	517	519	461	487	469	481	466	395
2	506	532	540	545	469	492	502	509	484
3	540	544	540	555	545	476	535	531	521
4	563	567	557	561	561	554	520	536	540
5	588	589	582	574	562	576	585	529	543
6	584	630	590	592	562	585	597	589	558
7	600	605	623	596	605	588	602	606	595
8	565	618	612	625	597	608	605	616	599
9	535	563	600	590	624	575	594	596	621
10	559	549	537	587	583	614	562	581	607
11	522	549	500	522	584	563	595	554	564
12	487	512	535	475	514	571	544	573	559

Table 1, con	't. Lake Osw	ego District En	rollment by (	Grade Leve	el and Year.
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Summary	1995	1996	1997	1998	1999	2000	2001	2002	2003
K-3	1,981	2,035	2,014	1,976	1,875	1,817	1,929	1,838	1,785
4-6	1,735	1,786	1,729	1,727	1,685	1,715	1,702	1,654	1,641
7-8	1,165	1,223	1,235	1,221	1,202	1,196	1,207	1,222	1,194
9-12	2,103	2,173	2,172	2,174	2,305	2,323	2,295	2,304	2,351
SE	24	30	31	33	31	29	21	18	24
Total	7,008	7,247	7,181	7,131	7,098	7,080	7,154	7,036	6,995

Of all grade levels, grades K-3 and 4-6 experienced the greatest increases since 1996. Enrollment in grades 7-8 have been the most stable. (see Figure 6).

Figure 6. District Enrollment by Grade Level



Despite the increase of kindergarten students from 2000 to 2001, and again in 2003-2003, there was an overall decrease in kindergarten enrollment from 1996 to 2003. The drop is partially explained by the decline in births to families in the District that began in the previous 10 years. The decrease was 12.8 percent from 1995 to 2000, but 5.7 percent from 2000 to 2003 with some fluctuation.

There were a fewer number of students enrolled in kindergarten in 1998, 1999, 2000, and 2001 than the number of births in the district 5 years earlier. This indicates a net outmigration of families with children of the age to enter kindergarten during those specific years. During 1996, 1997, and 2003 the opposite was true. The number of kindergarten students was higher than the number of births 5 years earlier, which indicates inmigration of families with very young children (see Figure 7).

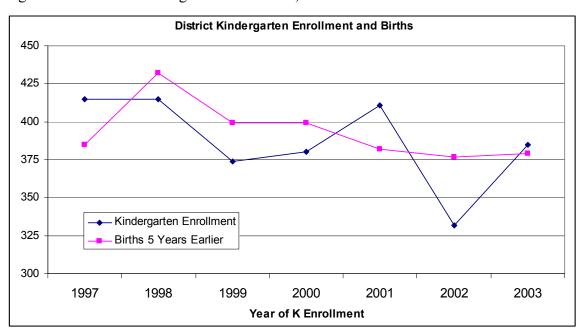


Figure 7. District Kindergarten Enrollment, 1997-2003 and Births

#### **Housing and Population Growth Assumptions**

Historically, dramatic demographic changes have not occurred in Lake Oswego School District, and they are not anticipated to occur in the future. The population and housing growth assumptions of the scenarios developed for this forecast have a stronger impact on future LOSD enrollments than under the scenarios in the previous enrollment forecast that was completed in 2001. The medium, low, and high growth scenarios here assume slightly lower growth rates than under the scenarios in the 2001 forecast report.

#### Assumptions of Housing and Population Change

The most-likely, or medium growth, forecast is based on the assumption that current trends of slower rates of population and housing growth will curtail and start to rebound slightly in the near future. Population and housing will continue to increase at lower rates than seen in the 1990s, but the trend of declining growth rates will reverse. The medium level forecast anticipates that there will be an average of **120 new housing units** added in the District each year from present until 2010. The average annual increase for the District's population and housing from 2004 to 2010 is 0.7 percent under this assumption.

For **the low-growth forecast**, an assumption is made that the current trends of declining population and housing growth rates will extend over the next 7 years. Housing and population will continue to increase in the District at a slower pace than under the most-likely scenario. By 2005 the growth rates will be further below current levels. The growth rates will continue to decrease gradually from 2005 to 2010. Under this scenario, it is assumed that an average of **53 new housing units** will be added annually in the District. If this should occur, the District's annual population and housing growth rates would be 0.3 percent.

It is assumed for **the high-growth forecast** that population and housing trends of declining growth rates will reverse themselves and rebound even more dramatically than in the medium growth scenario. Annual growth rates are anticipated to reach rates slightly higher than those seen during the late 1990s. Under the high growth scenario it is

projected that there will be an average **of 175 new housing units** added each year in the District. The average annual increase for population and housing under this model would be approximately 1.0 percent.

#### Components of Population and Enrollment Change

In addition to housing growth, there are other factors that directly influence population and enrollment growth. Although some are less sensitive to changes than others, there are components of population change that need to be taken into account. They are: survivorship, fertility, and net-migration. The capture rate is another factor that affects enrollment, not population growth. This factor is the proportion of school-age children residing in the District that are attending public schools. All three scenarios used to forecast population and enrollment in this study assume the same fertility, survival, and capture rates. However, the migration rates are adjusted differently for each scenario to yield higher or lower population in the District according to how much housing growth or net in-migration is predicted.

**Survival rates** reflect chances of a given cohort to live till the next five-year period and change vary little over time, especially for the young ages. Almost 100% of school-age children will survive to be included into the next cohort. This study utilizes the survival rates calculated from data provided by the Oregon Health Division (Figure 9).

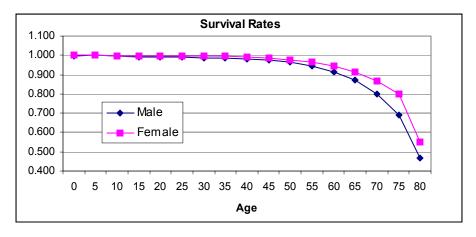


Figure 9. Oregon Survival Rates

Since the rates are likely to remain stable during the projection period, 2000 rates for Oregon are used for each forecasting period. It is unlikely that changes in mortality will affect the school enrollment forecast for the years 2004 to 2010.

**Fertility rates** tend to change more with time but are still rather stable. The study uses 2000 fertility rates with values that are an average of those for the area around Lake Oswego School District and the State of Oregon (see Figure 10). This average yields lower fertility rates than for the State of Oregon, but higher rates than for the District. If a larger proportion of in-migration were to include women with even higher fertility, this would lead to more students than are being forecasted in this report.

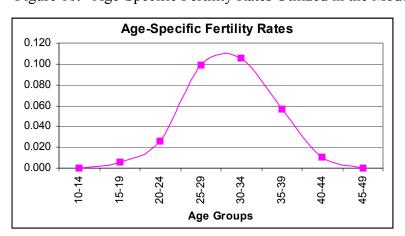


Figure 10. Age-Specific Fertility Rates Utilized in the Model

Of all demographic factors, **migration rates** tend to be least certain and are subject to a time lag, but they do have some upper and lower limits. An initial estimate of migration rates was made based on a comparison of the District's 1990 and 2000 population by age groups. The historical net in-migration data for the District's population was adjusted in order to predict enrollment from 1990 to 2003. This "calibration" ensures that the assumptions made about births, deaths, and migration correspond closely to actual changes in school enrollment from 1990 to 1995, and from 1995 to 2003. The pattern of net in-migration that was derived for the District is shown below (Figure 11). This figure shows that there is net in-migration of families with children as well as a net in-migration for the elderly. There is a distinctive pattern of net out-migration, however, for younger

adults in the ages of 18 to 24 years. This pattern is not unusual and reflects the movement out of the District of younger persons to attend college, obtain jobs in other cities, or simply to leave their parents' home. The usual trend is for them to eventually reutrn in their late 20s as Figure 11 shows.

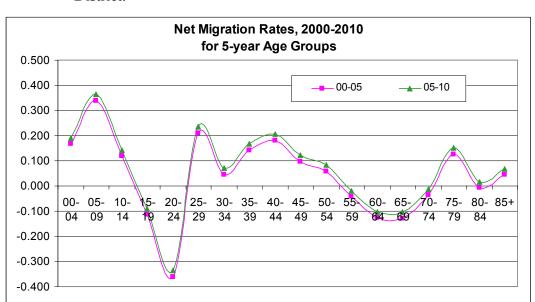


Figure 11. Net Migration Rates by Age Group, 2000-2010: Lake Oswego School District.

While migration rates were tested and produced a close fit with actual enrollment changes for 1990-1995 and 1995-2000, a longer forecast time period or unknown future influences on demographics provides more chances for the rates to change in response to a number of factors. Such factors could include a recession that would increase out-migration and halt in-migration, or accelerated economic growth with a surge of construction of high-density housing that would bring in many new residents at a rapid pace. However, in the absence of such major changes – an assumption reflected in the medium-growth scenario – the 2005-2010 migration rates were adjusted so that predicted trends of population growth and population composition are carried into the future.

Capture rates do not influence population components directly, but reflect how attractive public education is for families. Analyzing 1990 and 2000 Census data and data on LOSD enrollment, numbers of home-schooled children and children in private

schools, it is estimated that the capture rate for the District is at a level of 0.9. This means that 9 out of 10 school-age children attend public schools. The rate for grades K through 6 is the highest at 0.98, followed by a 0.96 capture rate for grades 7-8, and the lowest rate of 0.84 characterizes high school students. The lower capture rate for high school is typical and is due to students dropping out of school. All three growth scenarios assume the capture rates to remain stable throughout the whole forecasting period.

If the future population and housing trends deviate significantly from the assumptions presented here, this enrollment forecast will be affected.

#### **District Enrollment Forecast**

#### Results

Three growth scenarios (low, medium, and high) are assumed for the District-wide enrollment forecasts. The forecasts are based on population and housing assumptions derived from studies made by the Population Research Center and local planners. This section describes the assumptions made for each of the three growth scenarios. As Figure 8 illustrates, two scenarios – low growth and medium (or most likely) growth - predict that LOSD enrollment will decrease, and the high growth scenario predicts enrollment will increase during the forecast period. The forecasting model employed in this study projects medium-range school enrollment levels, but will not necessarily be accurate on a year-to-year basis.

The difference between the low, medium, and high assumptions become more pronounced after a few years. In the immediate two or three years, there are relatively smaller differences between the three assumptions. After a few years, it will become fairly apparent whether the District's population resumes more rapid growth or continues somewhat lower recent growth levels.

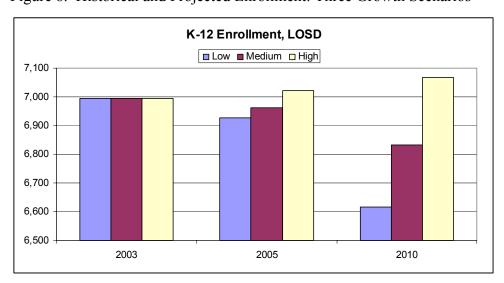


Figure 8. Historical and Projected Enrollment: Three Growth Scenarios

Tables 2, 3, and 4 below provide enrollment forecasts by grade level for each of the three scenarios. More detailed tables are located at the end of this report in Appendix 1. Each trend is discussed in more detail below.

#### Medium Growth (most likely)

The amount of housing and population growth predicted to most-likely occur in the District will not produce substantial enrollment changes over the next 7 years. The medium growth assumption indicates that overall school enrollments will decrease from present levels of 6,995 to 6,834 in 2010, a decrease of 161 students. The decrease in enrollments for the district represents a small change. Overall, enrollments are relatively stable, with the annual decreases being one-half of one percent, or less, in all grade levels, as detailed below.

Between 2003 and 2010, the model forecasts that there will be a decrease of 78 students in K-6 grades, a decrease of 76 students in grades 7-8, and a decrease of 4 students in grades 9-12, Students in special education programs will decrease by 4. Annually, total enrollment will only decrease by about 23 students from 2003 to 2010, at an average annual rate of -0.30 percent. Elementary (K-6) and junior high (7-8) enrollment will see similar declines with a loss of 11 students per year, or annual average growth rates of -0.3 and -0.10 percent, respectively. Enrollment in High School will remain more stable and will see an average of less than 1 student per year during the same period.

Table 2. Medium Growth District Enrollment Forecast

	2003 (actual)	2004	2005	2010
K-6	3,426	3,413	3,393	3,348
7-8	1,641	1,659	1,659	1,118
9-12	1,194	1,181	1,176	2,347
Special Ed	24	21	21	20
Total	6,995	6,974	6,963	6,834

#### Low Growth

The low growth assumption forecasts greater enrollment decreases for the District. The low growth assumption suggests that overall school enrollments will decrease from 2003 levels of 6995 to 6617 in 2010, a decrease of 378 students. In the low growth scenario, between the years 2003 to 2010, total school enrollment will decrease by 54 students per year, at an average annual rate of -0.8 percent. Enrollment in the elementary grade levels (K-6) will have the largest decrease at 24 students per year, or an annual average decline of -0.7 percent. Junior High School enrollment will remain somewhat stable with an average annual increase of 15 students, at a rate of -1.3 percent per year. High School enrollment will see a decrease of 14 students per year, a rate of -0.6 percent annually.

Table 3. Low Growth District Enrollment Forecast

	2003 (actual)	2004	2005	2010
K-6	3,426	3,407	3,378	3,257
7-8	1,194	1,178	1,170	1,087
9-12	2,351	2,353	2,358	2,253
Special Ed	24	21	21	20
Total	6,995	6,959	6,927	6,617

#### High Growth

If there is a more rapid level of population and housing growth than the medium-growth scenario predicts, the high growth assumption indicates that overall school enrollments will increase from the 2003 level of 6995 to 7,068 in 2010, an increase of 73 students. If the high growth assumption were to occur, K-6 enrollment would increase by 85 students, and enrollment in grades 9-12 would increase by 28. Under the high growth scenario, enrollment in grades 7-8 will decrease by 37 students. The District as a whole during the period of 2003-2010 will see an average annual increase of 10 students, at an average annual growth rate of 0.1 percent. Growth in the elementary grades (K-6) will be at an average annual rate of 0.3 percent, or 12 students added each year. Increases

at the High school level will be 4 students per year, with average annual rate of .2 percent. Junior high school enrollment will decline at an average rate of 0.5 percent, a loss of 5 students per year.

Table 4. High Growth District Enrollment Forecast

	2003 (actual)	2004	2005	2010
K-6	3,426	3,426	3,424	3,511
7-8	1,194	1,185	1,185	1,157
9-12	2,351	2,368	2,391	2,379
Special Ed	24	21	21	21
Total	6,995	7,001	7,021	7,068

#### **Elementary School Attendance Area Trends**

Different growth patterns occur in different parts of the District. Each of the nine elementary school attendance areas (ESAA) was examined for any significant characteristics or changes in population or housing growth that might influence individual school forecasts.

#### **Population**

The most recent year for which population data are available is 2000 (census data). The attendance area that experienced the greatest population increase during 1990-2000 is Lake Grove, followed by Uplands and Hallinan. Westridge, Oak Creek, and Forest Hills all had population decreases.

Uplands ESAA captures the largest share of the District's population, followed by Forest Hills. This has not changed since 1990. In 2000, Westridge and Oak Creek had the smallest share of the district's population and in 1990 Lake Grove and Bryant did.

#### Housing

Most housing growth during 1998-2003 occurred in Forest Hills and Hallinan ESAAs. One hundred sixty units were added to Forest Hills and 127 units were added to Hallinan. The highest number of housing units that were added during 1998-2003 - 160 units - were to Forest Hills ESAA. Approximately one-third were multi-family units. One hundred twenty-seven units were added to the Hallinan ESAA, which included 32 condominiums. Oak Creek ESAA had the least amount of housing growth adding only 14 units during the same time period.

Of the 1998-2003 time period, all ESAAs experienced the most growth during 1998-2001 except for Forest Hills, Palisades, and Westridge. During the period, most units were added to Hallinan ESAA (112). From 2001-2003, Forest Hills added by far the largest number of units (98) followed by Westridge ESAA, where 21 units were added (see Table 5).

Uplands and Forest Hills ESAAs have had the largest share of District housing units since at least 1990 – 23 percent and 14 percent respectively. The areas with the smallest share of housing units in the district are Westridge (6 percent) and Oak Creek (7 percent).

Table 5. Housing Units Added By ESAA

Total Units Added	1998-2001	2001-2003	1998-2003
Bryant	25	10	35
Forest Hills	62	98	160
Hallinan	112	15	127
Lake Grove	19	9	28
Oak Creek	12	2	14
Palisades	11	15	26
River Grove	43	3	46
Uplands	58	19	77
Westridge	16	21	37

Source: Building Permit Data, Metro Data Resource Center

#### Births

Of the total number of births during 1995-2002, most occurred in the River Grove, Uplands and Lake Grove ESAAs. River Grove and Uplands each captured 16 percent of all births during the period, and 14 percent were in Lake Grove. Westridge and Palisades had the lowest shares, with 4 percent and 7 percent respectively. The other ESAAs had between 9 percent and 12 percent (see Table 6).

Table 6. Births in LOSD, 1995-2002

		Share of
ESAA	Births	District Births
Bryant	257	8.9%
Forest Hills	353	12.3%
Hallinan	314	10.9%
Lake Grove	405	14.1%
Oak Creek	319	11.1%
Palisades	189	6.6%
River Grove	454	15.8%
Uplands	457	15.9%
Westridge	127	4.4%
Total	2,875	

Bryant, Hallinan, and Uplands saw the greatest decline of births during 1995 and 2002. River Grove, Westridge, and Palisades were the only ESAAs to experience an increase during the same period.

Table 7. Change in LOSD Births, 1995-2002

ESAA	1995 Births	2002 Births	Change
Bryant	44	22	-50.0%
Forest Hills	50	40	-20.0%
Hallinan	50	31	-38.0%
Lake Grove	55	48	-12.7%
Oak Creek	42	38	-9.5%
Palisades	22	28	27.3%
River Grove	52	60	15.4%
Uplands	69	43	-37.7%
Westridge	15	18	20.0%
Total	399	328	-17.8%

#### Kindergarten Enrollment Trends

The ratio of the number of births to the number of students enrolled in LOSD kindergarten 5 years later by attendance area is highest in Westridge and Palisades. The 4-year average ratio is 1.9 in Westridge, and 1.7 in Palisades, which means the number of students entering kindergarten in Westridge and Palisades elementary schools is almost double the number of births in Westridge and Palisades ESAAs 5 years previous. River Grove and Uplands have the lowest average birth-to-kindergarten ratio at 0.67 and 0.70 respectively, which means that fewer students attend kindergarten at River Grove and Uplands than were born in their ESAAs 5 years earlier. Almost the same number of kindergartners are attending LOSD schools as were born 5 years earlier as the district ratio is .98 (see Table 8).

A high ratio indicates that either the elementary school is popular amongst students living elsewhere in the District, or that there is in-migration of young children into the ESAA. A low ratio provides evidence that children that were born in the ESAA are either moving away, or are attending school elsewhere.

Table 8. Births to Kindergarten Enrollment

	4-year Average
	Births to K
ESAA/Elementary	Enrollment
School	Ratio*
Bryant	1.01
Forest Hills	0.95
Hallinan	1.05
Lake Grove	1.08
Oak Creek	0.97
Palisades	1.67
River Grove	0.67
Uplands	0.70
Westridge	1.88
District	0.98

<sup>\*1999</sup> through 2003 kindergarten enrollments to 1994 through 1998 births.

#### School Enrollment Trends, 2000-2003

Of the elementary schools, Oak Creek experienced the greatest decrease in enrollment during 2000-2003. K-6 enrollment declined by 13.2 percent, or 67 students. Enrollment at Uplands also decreased, but by 11.5 percent, or 56 students. Bryant also saw a decrease by 22 students. River Grove's enrollment slightly decreased with a loss of 4 students.

Lake Grove's enrollment increased at the highest rate — 2.6 percent, or by 12 students. Westridge gained 8 students, a change of 2.4 percent. Small increases were experienced by Hallinan, Forest Hills, and Palisades gains were by 6 students or less at each school. River Grove lost 5.4 percent of their enrollment by 26 and 20 students, respectively. Enrollments at Forest Hills and Palisades grew rather steadily during the period and enrollments in Bryant and Westridge fell — also at a steady pace. The remaining elementary schools experienced fluctuating growth.

The enrollments at Waluga Junior High and Lakeridge High schools underwent declines between 5 and 6 percent from 2000 to 2003. There were 33 fewer students at Waluga and 27 fewer students at Lakeridge. Both Lake Oswego Junior High and Lake Oswego High

school enrollments increased by approximately 5 percent. Thirty-one more students were attending Lake Oswego Junior High school in 2003 than in 2000, and there were 55 more enrolled in Lake Oswego High school.

Table 9. Historical Enrollment of Individual LOSD Schools

Elementary										Change 2000-
Schools	1995	1996	1997	1998	1999	2000	2001	2002	2003	2003
Bryant	335	354	348	345	337	332	350	336	310	-6.6%
Forest Hills	393	412	396	403	413	418	438	430	424	1.4%
Hallinan	428	429	391	404	406	403	390	372	404	0.2%
Lake Grove	479	491	469	442	423	457	503	475	469	2.6%
Oak Creek	606	601	523	497	470	469	459	442	407	-13.2%
Palisades	306	342	354	354	346	332	369	327	338	1.8%
River Grove	338	335	399	383	369	333	310	334	329	-1.2%
Uplands	495	533	536	545	476	489	501	476	433	-11.5%
Westridge	360	354	358	363	351	328	332	318	336	2.4%
Jr.High										
Schools										
Lake	616	629	645	622	608	608	601	638	639	5.1%
Oswego JH										
Waluga JH	549	594	590	599	594	588	606	584	555	-5.6%
High										
Schools										
Lake	1,117	1,143	1,150	1,090	1,168	1,191	1,198	1,226	1,246	4.6%
Oswego HS	1,117	1,175	1,150	1,000	1,100	1,171	1,170	1,220	1,240	1.070
Lakeridge HS	986	1,030	1,022	1,084	1,137	1,132	1,097	1,078	1,105	-2.4%

#### Propensity for Students to Attend the School in their Attendance Area

In 2003, the percentage of students attending the elementary school located in the attendance area in which they reside is greatest in Forest Hills. However, most elementary schools attract at least 94 percent of the students that reside in its corresponding attendance area. The smallest percentage of students attending the school in the attendance are they reside in is River Grove (88%).

The junior and high schools located in the south side of the District both attract more students from their attendance area than those in the north. More students residing in the

north side of the District attend Waluga and Lakeride than students residing in the south side attending Lake Oswego Junior High and Lake Oswego High School.

Table 10. Percent Students Attending the School in the Attendance Area they Reside In

School	2000	2003
Bryant	89.9%	91.2%
Forest Hills	98.0%	97.6%
Hallinan	95.4%	96.8%
Lake Grove	96.2%	94.2%
Oak Creek	97.8%	94.3%
Palisades	96.9%	96.2%
River Grove	86.2%	88.1%
Uplands	94.7%	94.6%
Westridge	95.6%	97.0%
Lake Oswego JH	90.6%	91.6%
Waluga JH	95.6%	96.6%
Lake Oswego HS	85.9%	87.3%
Lakeridge	92.2%	91.4%

Currently, 216 LOSD Oswego students reside outside of the District. Eighty-nine of those students attend elementary schools, most of which are enrolled in Westridge.

There 20 are students attending junior high school in Lake Oswego that do not live in the District. About two-thirds attend Lake Oswego Junior High School. At the high school level, 52 students do not reside in LOSD. Almost two-thirds of these students are enrolled at Lake Oswego High School.

#### **Individual School Enrollment Forecasts**

The following charts display enrollment projections for each individual school within the Lake Oswego School District.

Five elementary schools are expected to experience decreases in enrollments from 2003 to 2010. Oak Creek is predicted to undergo the greatest change, losing 76 students during the forecast period. Bryant is forecasted to have 41 fewer students in 2010, and Westridge will have lost 12 students. Hallinan will lose 5 students and Uplands will lose 4 by 2010.

Enrollments are anticipated to increase at River Grove and Palisades elementary schools by 21 and 19 students respectively. Attendance will be just 8 students higher in 2010 than in 2003 at Forest Hills and Lake Grove schools.

Table 11. Enrollment Forecasts for LOSD Elementary Schools

Total	2003	2004	2005	2010	Change 2003-2010	
Enrollment, K-6	(actual)				Number	Percent
Bryant	310	308	300	269	-41	-13.1%
Forest Hills	424	431	418	432	8	1.9%
Hallinan	404	411	403	399	-5	-1.3%
Lake Grove	469	474	488	477	8	1.6%
Oak Creek	407	383	364	331	-76	-18.6%
Palisades	338	350	354	357	19	5.7%
River Grove	329	320	326	350	21	6.4%
Uplands	433	427	435	429	-4	-1.0%
Westridge	336	329	328	324	-12	-3.6%

In the Junior High Schools, during the forecast period, Lake Oswego Junior High is expected to lose 82 students, while Waluga Junior High is projected to gain 6 students.

Table 12. Enrollment Forecasts for LOSD Junior High Schools

Total Enrollment, Grades 7-8	2003 (actual)	2004	2005	2010	2003- Cha Number	2010 inge Percent
Lake Oswego						
Jr. High	639	607	585	557	-82	-12.8%
Waluga Jr.						
High	555	573	591	561	6	1.0%

At the High School level, change will not be as pronounced as in other schools. Enrollment in Lake Oswego High School is projected to decrease by 8 students from 2003 to 2010 and Lakeridge High School is predicted to add 4 students.

Table 13. Enrollment Forecasts for LOSD High Schools

Total Enrollment, Grades 9-12	2003 (actual)	2004	2005	2010	2003- Cha Number	
Lake Oswego High	1246	1279	1307	1,238	-8	-0.6%
Lakeridge High	1,105	1,079	1,067	1109	4	0.4%

Detailed forecast tables by grade level for each school are presented in Appendix 2.

#### **Methods and Data Used for District Forecasts**

### Cohort-Component Model

The method used in this study employs an enhanced version of a commonly used demographic projection model called the Cohort-Component Model. It models future populations and school enrollments as outcomes of the life events that occur in populations over time. These events are comprised of births, deaths, and relocations (migrations) into or out of the area. Thus, the District population grows when births outnumber deaths and more people move into the District than leave it. These events occur more often in certain age groups, or **cohorts**, than in others. For example, people tend to move around the most when they are in their 20s and the elderly have lower chances than people in their 40s to survive over the next 5 years. Applying appropriate age- and gender-specific rates of birth, death and migration to the existing population cohorts of the District would produce its future population including school-age children. Most of these children would attend the area's public schools, however, some of them would not be "captured" by the system: some might attend private schools, be homeschooled, or attend schools outside of the local school district. To address this phenomenon, capture rates have to be applied to derive figures of future public school enrollment.

The cohort-component method of forecasting enrollment depends on the availability of accurate data on age and sex composition of the District's population. The most precise information about population structure in an area is usually provided by the most recent U.S. Census of Population. The cohort-component model is also sensitive to the rates of life events that are applied to the known population cohorts. These rates are usually derived from known data such as those provided by the U.S. Census, and then modified to account for the most recent trends as well as for future ones. Examples of such trends that may affect the future population of an area include the recent tendency among women of childbearing ages to delay having their first child, or a predisposition of young men (ages 20 to 24) to be more mobile than women in the same age cohort. After a decision is made about the plausibility of these trends to evolve in the study area, a set of

assumptions is developed to address likely changes in the initial rates of life events. Since the existing population structure defines future population composition of the area, the method works best in the short and medium range.

The population and housing data came from the 1990 and 2000 Censuses of Population; additional housing information and building permit data were obtained from the Metro Data Resource Center and the Lake Oswego Planning Department; the Oregon Health Division provided information on fertility and mortality; the Department of Education and the Lake Oswego School District furnished past and current enrollment data and information about home schooling; and PRC conducted a survey of local private schools.

The 1990 and 2000 population of the Lake Oswego School District was derived from the 1990 and 2000 Census at the census-block level by age group and sex. The census blocks were allocated into the District's boundaries using Geographic Information Systems (GIS); the allocation was required since the census blocks did not match the District's boundaries. The 1990 population data were then organized into five-year cohorts, such as 0 to 4 years, 5 to 9 years, and so on. Each of these cohorts was then "survived", or aged into the next cohort by the year 1995. "Surviving" the cohorts is accomplished by applying age- and sex-specific survival rates. These rates represent the proportion of population in each younger cohort that would survive during a given time period (such as the 5 years between 1990 and 1995) to become the next older cohort. This process is repeated for each five-year interval between 1990 and 2010. Forecasting known population enables appropriate adjustments to be made to the model so that the forecasted population becomes aligned with the actual population and ensures the accuracy of the model's projections.

During each five-year interval, a certain number of live births occur to the women in childbearing ages. To calculate the number of newly born residents of the District, age-specific fertility rates were applied to the numbers of women in childbearing cohorts (10-14, 15 to 19, 20 to 24, and so on till 45 years and over). Fertility rates indicate how many children women in a given age group are likely to have during each five-year period.

Once developed, the data on new children become subject to survival rates and is "moved" through the system like all the other cohorts.

The most difficult part is an estimate of the in- and out-migration for the area. In reality, since little reliable data are available to study in- and out-migration, one works with net migration rates, or the balance between in- and out-migration. Net migration can be calculated if the population is known at the beginning and the end of a time period, as well as the number of births and deaths. Net migration is positive when more people move into the area than leave it; it is negative if the opposite is true. Net migration rates used in the cohort-component model can be interpreted as the number of people who are added to (or subtracted from) a given cohort per each 100 persons due to migration over a given period of time (in this case, five years). The initial net migration rates for the cohort-component model were derived from the 1990 and 2000 population cohorts of the census tracts that the District lies in, and births and deaths that occurred in them during 1990-2000. The rates were adjusted so that the forecasted population for the year 2000 fit the actual population obtained from the 2000 Census. The net migration rates used to forecast the District's population in 2002-2010 were further modified to reflect the most likely future migration patterns; these migration patterns are greatly influenced by housing growth in the area, both current and forecasted. When making the final adjustments to the net migration rates, consideration was given to what local planners predict will happen in the area. This study shows that migration is and will remain the major force behind the rates of population and enrollment growth in the District.

The longer the time span of the forecast, the more variables come into play, increasing the uncertainty in rates and assumptions. Thus, it is crucial to have recent data that would allow testing, or calibrating, the assumptions used in the model. The District's historical enrollment helped to calibrate and adjust original migration rates so that a better fit between actual and predicted enrollment figures could be achieved.

### **Methods Used in School Forecasts**

## The Grade Progression Model

Enrollment forecasts for individual schools in LOSD from 2004 to 2010 were prepared based on current trends in each of the elementary attendance areas. To capture localized recent trends, a grade progression ratio (GPR) model was created for each school. The Grade Progression Model accounts for the effects of migration, changes in population, housing growth due to new construction, dropout rates, and the percentage of students residing within the District attending private schools or in home-schooling. The Grade Progression Model is comprised of recent grade progression ratios for LOSD students by grade level and school attending. The grade progression ratio is the proportion of students enrolled at one grade level divided by the number of students enrolled in the preceding grade level in the previous year.

In order to predict the grade progression ratios for 2004, weighted averages of ratios from the past four years were calculated and then applied to the Fall 2003 enrollments to forecast the 2004 enrollments. The weighted averages "smooth" annual enrollment fluctuations and yield a more accurate forecast than using averages that are not weighted. This procedure was repeated on the forecasted enrollments until 2010. Slight adjustments were made to the grade progression ratios by grade level to account for predicted future demographic change in the District. Adjustments were made depending on changes in migration, the number of births in the District, residential building activity, and patterns of students to remain in the attendance area they reside in to attend school. The adjustments were based on findings from the analysis of data on student enrollment and geocoded student addresses, birth and building permit records.\*

Only minor adjustments had to be made to the grade progression ratios in order to reconcile the sum of attendance of all schools to equal the District total. The District-wide forecast under the most-likely scenario served as the control.

<sup>\*</sup> Data sources: Historical and current student data, Lake Oswego School District; Birth data, Oregon Department of Human Services, Health Division; Building permit data, Metro.

To forecast the number of kindergartners enrolled in LOSD after 2007, the number of births that occurred annually between 2002 and 2005 had to be predicted. The births were projected based on four-year historical trends. The ratio of the actual number of LOSD kindergarten students to the number of births in the District five years earlier was calculated for four separate years. A weighted average of the kindergarten enrollment to births ratios were used to forecast the number of kindergartners that will attend LOSD schools in 2004 to 2010.

# Appendix 1

# Lake Oswego School District Population And Enrollment Forecast, 2004-2010: Detailed Results

## Medium Growth Enrollment Forecast by Grade, 2004-2010 Lake Oswego School District

	Actual	Projected	>					
	2003	2004	2005	2006	2007	2008	2009	2010
K	385	380	370	371	372	374	375	376
1	395	437	427	416	420	423	424	426
2	484	436	483	470	456	461	462	463
3	521	502	454	507	495	480	483	484
4	540	538	530	488	549	535	518	520
5	543	556	556	546	501	561	545	527
6	558	564	573	568	555	508	568	551
7	595	583	591	600	592	579	529	591
8	599	598	584	591	598	590	576	527
9	621	608	610	597	604	612	606	593
10	607	620	609	612	600	609	620	615
11	564	593	603	589	589	577	587	598
12	559	537	550	550	537	540	531	542
K-6	3,426	3,413	3,393	3,366	3,348	3,340	3,375	3,348
7-8	1,194	1,181	1,176	1,191	1,190	1,169	1,105	1,118
9-12	2,351	2,359	2,373	2,348	2,331	2,339	2,344	2,347
SE	24	21	21	21	21	21	20	20
Total	6,995	6,974	6,963	6,926	6,889	6,868	6,845	6,834

Low Growth Enrollment Forecast by Grade, 2004-2010 Lake Oswego School District

	Actual	Projected	>					
	2003	2004	2005	2006	2007	2008	2009	2010
K	385	378	368	368	367	367	367	366
1	395	437	425	413	415	416	415	415
2	484	435	481	466	451	453	453	452
3	521	501	453	503	489	472	473	471
4	540	537	527	484	541	525	506	506
5	543	555	554	541	494	550	531	511
6	558	563	570	563	548	499	555	536
7	595	581	589	595	585	569	518	576
8	599	597	581	586	589	578	561	511
9	621	607	607	589	593	596	586	569
10	607	618	605	604	587	590	595	585
11	564	592	599	582	578	562	568	573
12	559	536	547	545	529	530	519	526
K-6	3,426	3,407	3,378	3,339	3,305	3,281	3,300	3,257
7-8	1,194	1,178	1,170	1,181	1,174	1,147	1,080	1,087
9-12	2,351	2,353	2,358	2,320	2,287	2,278	2,266	2,253
SE	24	21	21	20	20	20	20	20
Total	6,995	6,959	6,927	6,860	6,787	6,727	6,666	6,617

High Growth Enrollment Forecast, 2004-2010 Lake Oswego School District

	Actual	Projected	>					
	2003	2004	2005	2006	2007	2008	2009	2010
K	385	382	373	377	381	385	389	393
1	395	439	432	422	429	435	440	445
2	484	438	487	479	467	476	482	487
3	521	503	459	516	510	498	507	513
4	540	540	534	496	562	554	540	548
5	543	558	561	554	512	577	567	550
6	558	566	578	576	566	521	586	575
7	595	585	596	608	604	593	546	613
8	599	600	589	599	608	603	591	544
9	621	611	615	602	610	619	613	602
10	607	622	613	617	604	612	621	616
11	564	596	608	595	595	583	593	604
12	559	540	556	558	547	552	545	558
K-6	3,426	3,426	3,424	3,419	3,426	3,446	3,510	3,511
7-8	1,194	1,185	1,185	1,207	1,212	1,196	1,137	1,157
9-12	2,351	2,368	2,391	2,371	2,356	2,366	2,373	2,379
SE	24	21	21	21	21	21	21	21
Total	6,995	7,001	7,021	7,018	7,014	7,029	7,042	7,068

# **Total and School-Age Population** by 5-year age groups, 1990-2010

## **Medium Growth Forecast**

	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
1990	2,337	2,508	2,608	2,276	1,555	2,143	2,969	3,655	3,947	3,157	2,045	1,533	1,413	1,325	981	741	447	337	35,976
1995	2,133	2,661	2,929	2,516	1,558	1,949	2,507	3,220	3,883	3,690	2,755	1,901	1,495	1,262	1,023	853	563	435	37,333
2000	1,992	2,855	3,241	2,812	1,592	1,884	2,028	2,844	3,772	4,202	3,836	2,561	1,580	1,209	1,086	968	642	553	39,658
2005	1,966	2,666	3,191	2,869	1,777	1,922	1,964	2,301	3,333	4,081	4,362	3,565	2,129	1,277	1,040	1,026	732	660	40,861
2010	1,991	2,679	3,044	2,901	1,880	2,186	2,049	2,279	2,751	3,684	4,331	4,147	3,046	1,769	1,125	1,001	792	786	42,439

# **Low Growth Forecast**

	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
1990	2,337	2,508	2,608	2,276	1,555	2,143	2,969	3,655	3,947	3,157	2,045	1,533	1,413	1,325	981	741	447	337	35,976
1995	2,133	2,661	2,929	2,516	1,558	1,949	2,507	3,220	3,883	3,690	2,755	1,901	1,495	1,262	1,023	853	563	435	37,333
2000	1,772	2,855	3,241	2,812	1,592	1,884	2,028	2,844	3,772	4,202	3,836	2,561	1,580	1,209	1,086	968	642	553	39,658
2005	1,936	2,656	3,176	2,853	1,763	1,914	1,955	2,291	3,319	4,062	4,341	3,547	2,117	1,270	1,034	1,022	728	657	40,663
2010	1,931	2,608	2,953	2,793	1,784	2,116	1,983	2,210	2,671	3,570	4,192	4,001	2,929	1,700	1,085	969	765	761	41,021

## **High Growth Forecast**

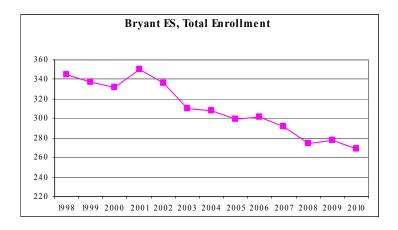
	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
1990	2,337	2,508	2,608	2,276	1,555	2,143	2,969	3,655	3,947	3,157	2,045	1,533	1,413	1,325	981	741	447	337	35,976
1995	2,133	2,661	2,929	2,516	1,558	1,949	2,507	3,220	3,883	3,690	2,755	1,901	1,495	1,262	1,023	853	563	435	37,333
2000	1,992	2,855	3,241	2,812	1,592	1,884	2,028	2,844	3,772	4,202	3,836	2,561	1,580	1,209	1,086	968	642	553	39,658
2005	1,985	2,688	3,222	2,905	1,807	1,939	1,985	2,323	3,364	4,122	4,407	3,606	2,156	1,294	1,052	1,036	740	667	41,298
2010	2,078	2,815	3,160	2,964	1,864	2,301	2,119	2,375	2,870	3,824	4,489	4,267	3,114	1,810	1,161	1,043	816	814	43,883

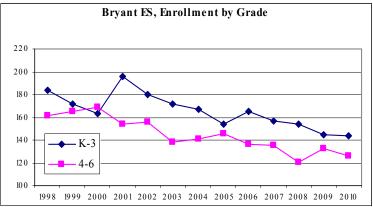
# Appendix 2

## Individual School Enrollment Forecasts, 2004-2010: Detailed Results

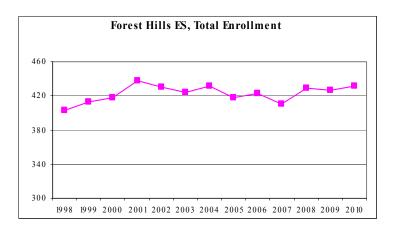
**Elementary School Forecasts** 

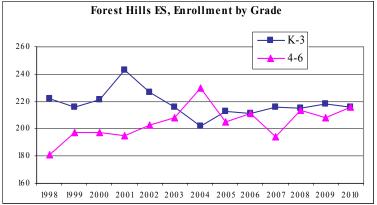
	Actual >						Projected	<u> </u>					
<b>Bryant</b>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	41	25	41	46	23	36	35	34	32	29	34	26	34
1	36	48	39	52	58	28	44	41	40	39	35	40	31
2	60	40	44	47	53	59	31	48	45	44	42	38	43
3	47	59	39	51	46	49	58	30	47	45	43	41	36
4	59	46	57	40	54	39	47	56	30	47	44	42	40
5	57	61	49	63	42	51	40	48	57	30	47	44	42
6	45	58	63	51	60	48	54	42	49	58	30	47	44
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	345	337	332	350	336	310	307	299	301	291	275	277	269



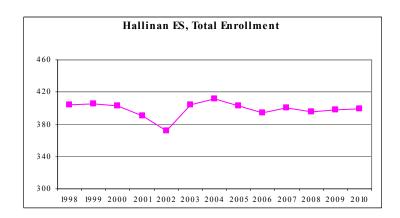


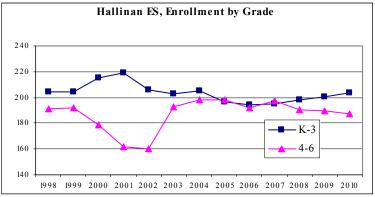
Forest	Actual >						Projected	] >					
Hills	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	55	44	46	43	46	42	45	44	47	44	44	46	44
1	48	65	52	71	50	58	51	54	53	58	54	54	56
2	56	47	71	55	75	46	62	54	57	56	61	57	57
3	63	60	52	74	56	70	45	61	54	58	56	62	58
4	68	67	60	55	77	64	76	51	70	63	67	65	71
5	58	69	69	67	57	79	68	82	54	75	67	71	69
6	55	61	68	73	69	65	85	73	87	58	80	72	76
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	403	413	418	438	430	424	432	418	422	410	428	426	432



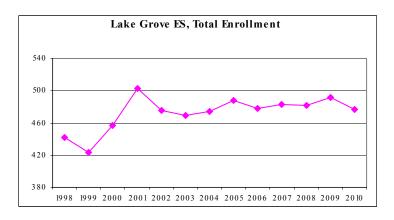


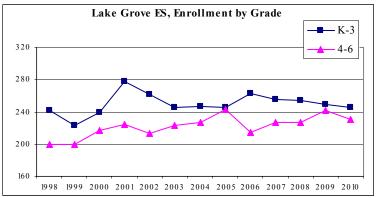
	Actual >						Projected	1>					
Hallinan	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	49	47	48	48	39	42	44	42	41	43	46	43	43
1	47	61	52	47	58	48	46	48	46	45	48	51	48
2	43	53	63	60	44	58	51	50	51	50	48	51	55
3	65	43	52	64	65	55	64	57	56	58	56	55	57
4	62	60	46	55	62	66	56	67	61	60	62	60	59
5	67	68	64	45	51	69	69	58	70	63	62	64	62
6	62	64	69	62	47	58	73	72	61	73	66	65	67
SE	9	10	9	9	6	8	8	8	8	8	8	8	8
Total	404	406	403	390	372	404	411	403	394	400	396	397	399



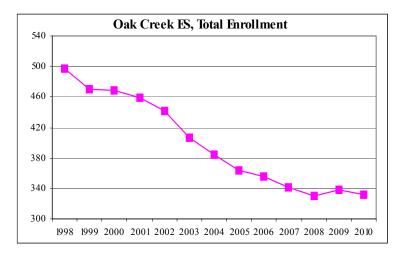


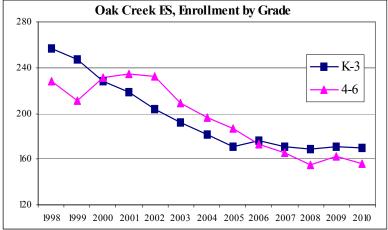
Lake	Actual >						Projected	<u> </u> >					
Grove	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	47	49	48	67	48	64	59	57	60	58	57	52	58
1	56	55	76	67	66	48	69	62	61	64	62	61	56
2	68	54	57	78	66	65	51	72	65	63	67	64	64
3	71	65	59	66	82	69	69	54	77	70	68	72	69
4	76	69	65	73	68	88	75	77	61	88	80	76	80
5	59	71	73	72	71	61	87	75	76	60	86	77	73
6	65	60	79	80	74	74	64	91	78	79	62	88	78
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	442	423	457	503	475	469	473	488	478	483	482	491	477



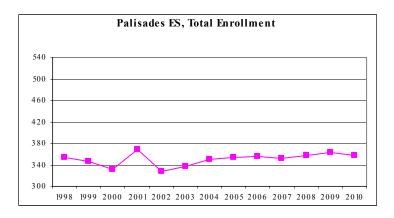


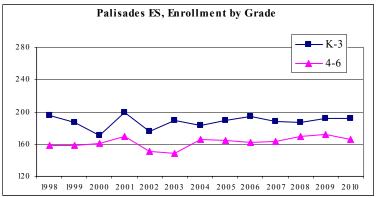
	Actual >						Projected	<u>1</u> >					
Oak Creek	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	54	41	46	47	30	40	39	38	38	39	39	43	39
1	62	61	48	52	56	36	44	43	41	41	41	41	45
2	73	68	67	53	60	57	41	50	47	45	44	44	44
3	68	77	67	67	58	59	57	40	49	46	44	43	42
4	72	78	76	71	71	57	61	60	43	53	51	48	47
5	65	73	83	83	76	73	61	65	64	47	58	55	53
6	91	60	72	80	85	79	74	62	65	65	47	59	56
SE	12	12	10	6	6	6	6	6	6	6	6	6	6
Total	497	470	469	459	442	407	383	364	355	342	330	338	331



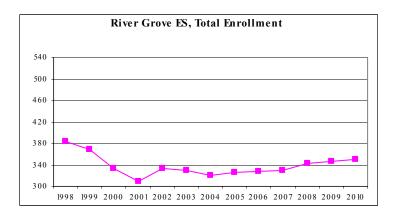


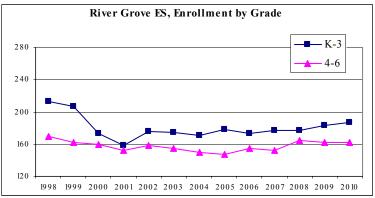
	Actual >						Projected	<u> </u> >					
Palisades	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	41	42	39	44	33	45	41	40	41	40	40	44	41
1	44	44	47	50	41	41	49	44	43	45	44	44	48
2	57	44	45	49	54	45	46	55	50	49	51	50	49
3	54	57	40	57	48	58	47	49	59	54	52	55	53
4	41	61	58	44	49	53	59	49	52	62	56	55	57
5	62	36	61	60	43	51	54	60	50	52	62	56	54
6	55	62	42	65	59	45	53	56	61	50	51	62	55
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	354	346	332	369	327	338	350	354	356	352	357	364	357



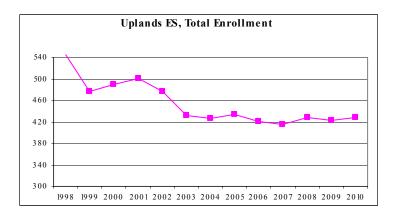


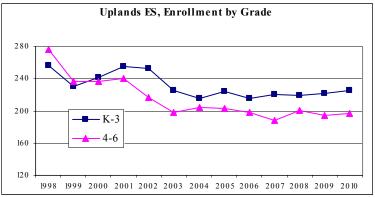
River	Actual >	Actual > Projected >												
Grove	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
K	35	43	41	24	42	36	37	36	35	40	36	42	37	
1	59	41	40	45	37	45	41	42	41	40	46	42	48	
2	60	61	41	44	53	41	53	48	49	48	47	54	49	
3	59	62	51	45	44	52	40	52	48	49	48	47	54	
4	57	47	55	55	43	46	53	42	55	51	53	52	51	
5	57	60	43	57	58	47	49	56	44	58	54	56	55	
6	56	55	62	40	57	62	48	49	56	44	58	55	57	
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	383	369	333	310	334	329	320	326	328	330	342	346	350	





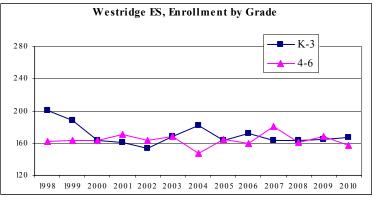
	Actual >						Projected >						
Uplands	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	50	45	49	48	45	41	45	44	43	45	44	45	45
1	55	60	72	71	50	61	51	56	54	53	56	55	56
2	80	51	59	71	73	51	65	54	59	58	56	59	59
3	72	75	62	65	85	72	55	71	59	65	64	62	65
4	78	74	89	68	63	80	73	57	75	63	70	68	66
5	95	72	73	88	66	55	76	69	54	71	60	66	64
6	103	90	75	84	88	63	56	77	70	55	71	61	66
SE	12	9	10	6	6	10	7	7	7	7	7	7	7
Total	545	476	489	501	476	433	427	435	420	416	428	423	429





	Actual >						Projected	<u> </u> >					
Westridge	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
K	43	38	22	44	26	39	35	34	33	34	34	34	34
1	54	52	43	26	50	30	43	37	37	36	37	37	38
2	48	51	45	45	31	62	36	52	45	44	43	45	45
3	56	47	54	46	47	37	67	40	57	50	49	48	50
4	48	59	48	59	49	47	38	71	42	60	53	51	50
5	54	52	61	50	65	57	52	43	77	45	65	56	54
6	60	52	55	62	50	64	57	51	41	74	43	61	53
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	363	351	328	332	318	336	329	328	332	344	324	333	324

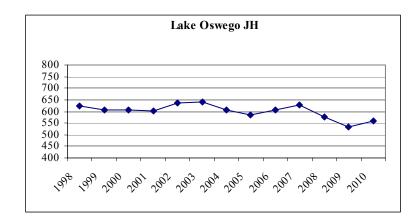


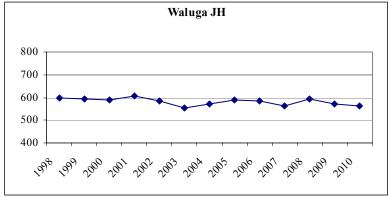


# **Junior High School Forecasts**

Lake	Actual >						Projected >							
Oswego Jr. High	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
7	291	312	284	308	322	314	293	292	316	312	266	270	289	
8	331	296	324	293	316	325	315	293	291	314	310	264	268	
Total	622	608	608	601	638	639	607	585	607	626	576	534	557	

Waluga Jr.	Actual >						Projected >							
High	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
7	305	293	304	294	284	281	290	299	284	281	312	259	301	
8	294	301	284	312	300	274	283	292	300	284	280	312	259	
Total	599	594	588	606	584	555	573	591	584	564	593	571	561	





**High School Forecasts** 

Lake	Actual >						Projected >							
Oswego	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
High														
9	281	329	288	328	308	327	330	321	299	298	322	318	272	
10	303	283	323	284	317	317	333	341	332	310	310	335	333	
11	259	305	276	318	292	302	319	337	341	331	310	310	335	
12	247	251	304	268	309	300	297	308	319	322	315	296	298	
Total	1,090	1,168	1,191	1,198	1,226	1,246	1,279	1,307	1,291	1,262	1,257	1,261	1,238	

Lakeridge	Actual >						Projected	<b>i</b> >					
High	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
9	309	295	287	266	288	294	278	289	298	306	291	288	321
10	284	300	291	278	264	290	286	269	280	290	299	284	282
11	263	279	287	277	262	262	275	266	248	258	268	277	262
12	228	263	267	276	264	259	240	242	231	215	225	235	244
Total	1,084	1,137	1,132	1,097	1,078	1,105	1,079	1,067	1,057	1,069	1,082	1,083	1,109

