

## **VI. Membership Projections Summary: 2002-03 to 2007-08**

**Forecasting Methodology and Assumptions:** The principal methodology used in forecasting is known as the cohort-survival technique. The basic technique involves calculating the ratio of the number of students in one grade during one year compared to the number of students who "survive" the year and enroll in the next grade in the following year. This survival rate calculation treats the student body in an aggregate fashion, using historical membership data. It is affected by such factors as school promotion, net migration and withdrawal rates. All of these factors are included in the term "survival" as it is used in this context.

Fluctuations in the data from year to year create a pattern from which an average survival rate can be calculated to project future student membership. For example, if over a period of several years, an average of 96 percent of the student membership in grade 3 goes on to grade 4, and if 300 children are now enrolled in grade 3, then next year's grade 4 membership may be estimated at 96 percent of 300 or 288 students. Twelve average rates of survival are calculated for a system with thirteen grades (kindergarten is considered to be a grade). These rates can then be applied to present student membership and used to project membership levels for each succeeding year. Thus, if the average survival rate from grade 4 (with its 288 students) to grade 5 is 1.10, then for the second projected year the estimate for grade 5 is 1.10 of 288 or 317 students.

Projecting future kindergarten membership is more complex. Grade to grade cohort survival cannot be used, since there is no preceding grade for kindergarten. Therefore, information such as estimates of the number of children in the 1-5 year old population cohorts, the number of live births five years previously, and recent trends in kindergarten are utilized. This year's forecast for kindergarten enrollment was derived from the State of Alaska age cohort population projections by the Alaska Department of Labor. Singular age population projections for Anchorage were then extrapolated from the state projections. These projections were used to determine kindergarten enrollment for the next six years. This was done by using a weighted index of the average ratio of ASD kindergarten enrollment to the 5-year-old Anchorage population

and applying it to the singular age projections. Indicators of housing and development trends were then incorporated into these projections.

Projections for individual schools are derived using the benchmark numbers realized through the cohort-survival and kindergarten projection methods. The allocation of students to each school is done by examining historical trends in individual school membership, as well as historical and projected housing and economic trends for that area.

A good population forecast should be driven by assumptions. If the assumptions behind the forecast are considered reasonable and the methodology employed is professionally acceptable, the forecast will represent a credible attempt to estimate future School District membership levels for planning purposes. The assumptions, which were employed in developing the 2003-04 to 2008-09 membership forecasts, are described in the following paragraphs.

The ASD projections contained in this document do not reflect the impact of any major events occurring in the next six years: construction of the natural gas pipeline, opening of ANWR for oil exploration, closure of military installations; major changes in the state's economic or political structure. It is assumed, however, that oil and mineral exploration will continue in Alaska throughout the decade, perhaps at a more rapid pace than in recent years. However, due to decreasing oil production and fluctuating oil prices in the state, this exploration may not have a dramatic overall impact on the state's finances and consequently its population. It is also assumed that the air cargo industry in Anchorage will continue to develop and that employment levels in these industries will affect the School District population.

Economic and housing data are utilized in the formulation of long-range student membership projections. The Municipality of Anchorage's Population Estimate Surveys, as well as information supplied by the State Demographer have been utilized in formulating the six-year student membership projections.

The projection series presented in this document reflects a continuing stabilization of the Anchorage economy. Demographic changes indicate a

leveling off or reduction of ASD enrollment over the next six years. While a very young age structure sustained growth in the elementary grades during the late 80's and has resulted in growth through the 90's in the secondary grades, a maturing age composition will drive a decline in the elementary population over the next six years. This trend is already evident in recent kindergarten enrollments. From 1993 to 1998, the average kindergarten enrollment averaged over 3,900. From 1998 to 2002, kindergarten enrollment has averaged 3,600, or 300 less. This decline in kindergarten enrollment has lowered the growth rate of the District's elementary population and will give rise to a decline in the elementary membership over the next six years.

The decline in kindergarten enrollment, as well as the low elementary growth rate, is a result of shifting demographics in the Anchorage area. U.S. Census data indicate that from 1990 to 2000, the population of the child-rearing age cohort (20-34 year olds) declined by 13 percent. The population of the 0 - 4 age group declined by nearly 2,000 children, or 9%. The median age in Anchorage increased from 29.6 in 1990 to 32.4 in 2000. Additionally, the Municipality of Anchorage's Anchorage Indicators: 2000 shows that from 1990 until 1999, the military and dependent population decreased by 16 percent.

U.S. Census data also indicate that from 1990 to 2000, the 10-14 and 15-19 age groups grew by 32% and 28%, respectively. This growth can be seen in our secondary enrollment, which is projected to continue to increase over the next 2-3 years, peaking in 2005 or 2006. From that time on, secondary enrollment is projected to decline slowly, as a result of the smaller classes coming from the elementary schools.

Table 13 shows the Districtwide membership projections for the next six years by grade. This table reflects a very stable membership level over these years, with a slight decline projected for years starting in 2004. This decline comes mostly in the elementary grades, and later from the middle schools, as discussed above.

Table 14 shows the elementary projections for each geographic area. These projections follow the same structure as former years, in terms of the

elementary schools assigned to each area. However, rather than calling the areas “High School Attendance Area”, this report labels them by geographic region. Prior reports have created some confusion, because of the terminology it appeared that all students from a particular elementary school would be going to a single high school. Some split boundaries do not allow for a one-to-one match from feeder schools. Since it is still useful to look at what has happened (Table 8) and what will be happening to enrollments in various parts of the District, Table 14 is maintained in this report by geographic region.

Table 15 summarizes the projections for each elementary school, and includes the EED Capacity and actual enrollment for September 30, 2002. EED capacities are lower for all schools than in prior reports, due to a change in EED regulations in December 2002. This regulation change increased the square foot allowance for each student, which lowers the EED capacity of each facility. It should be noted that in Table 15, as well as other tables throughout this document, the September 30, 2002 membership for Chester Valley is shown as 256 and for Ptarmigan as 421. These totals assume that the 54 Ptarmigan kindergarten students housed at Chester Valley (due to crowding at Ptarmigan) should be counted as Ptarmigan students and not included in the Chester Valley membership.

Tables 16 and 17 provide the same information for middle school and high school memberships, respectively. Tables 18 and 19 summarize this information for the secondary district-wide schools, charter schools, alternative schools, and special services programs.

**Table 13****Projections to 2008-2009 by Grades**

	<b>9/30/2002 Actual</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Kindergarten</b>	3,573	3,539	3,556	3,548	3,552	3,550	3,551
<b>Grade One</b>	3,607	3,723	3,680	3,698	3,689	3,694	3,691
<b>Grade Two</b>	3,634	3,590	3,700	3,657	3,675	3,666	3,671
<b>Grade Three</b>	3,829	3,653	3,605	3,715	3,672	3,690	3,681
<b>Grade Four</b>	3,814	3,854	3,672	3,624	3,735	3,691	3,710
<b>Grade Five</b>	4,128	3,804	3,841	3,660	3,612	3,723	3,679
<b>Grade Six</b>	4,044	4,136	3,809	3,846	3,664	3,616	3,727
<b>Subtotal 1-6</b>	23,056	22,760	22,307	22,200	22,047	22,080	22,159
<b>Subtotal K-6</b>	26,629	26,299	25,863	25,748	25,599	25,630	25,710
<b>Grade Seven</b>	4,203	4,207	4,301	3,961	4,000	3,810	3,761
<b>Grade Eight</b>	3,930	4,015	4,018	4,108	3,783	3,820	3,639
<b>Grade Nine</b>	3,866	3,843	3,926	3,929	4,017	3,699	3,735
<b>Grade Ten</b>	3,581	3,832	3,809	3,891	3,894	3,981	3,666
<b>Grade Eleven</b>	3,417	3,393	3,631	3,609	3,687	3,690	3,772
<b>Grade Twelve</b>	3,276	3,345	3,322	3,555	3,533	3,609	3,612
<b>Subtotal 7-8</b>	8,133	8,222	8,319	8,069	7,783	7,630	7,400
<b>Subtotal 9-12</b>	14,140	14,413	14,688	14,984	15,131	14,979	14,785
<b>Subtotal 7-12</b>	22,273	22,635	23,007	23,053	22,914	22,609	22,185
<b>Special Services *</b>	1,127	1,288	1,286	1,284	1,277	1,270	1,261
<b>TOTAL</b>	<b>50,029</b>	<b>50,222</b>	<b>50,156</b>	<b>50,085</b>	<b>49,790</b>	<b>49,509</b>	<b>49,156</b>

\* Includes Special Programs, level 3 special ed, and Pre-elementary housed in schools

Note: Level 3 special ed students are not included in the grade levels.















**Table 14**

**Elementary Projections Summary: 2003-2009**  
**Districtwide Schools**

	Actual 2002-03 9/30/2002	Projected Enrollment					
		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Membership</b>							
Kindergarten	229	221	220	220	220	220	220
1st Grade	215	262	254	252	253	253	253
2nd Grade	228	235	243	267	232	234	234
3rd Grade	271	230	235	244	232	231	231
4th Grade	240	258	243	248	252	244	243
5th Grade	264	221	239	221	226	233	224
6th Grade	246	266	224	246	227	229	232
7th Grade	74	75	81	74	76	72	72
8th Grade	52	65	63	66	61	62	60
Level 3	2	1	1	1	1	1	1
<b>Total</b>	1,821	1,834	1,803	1,839	1,780	1,779	1,770

**Includes:** Aquarian Charter  
 Chugach Opt.  
 Family Part. Charter K-6  
 Northern Lights ABC K-8  
 Polaris K-6  
 Village Charter K-8

**Table 15****Elementary Student Population Projections by Schools  
2002-2008**

School Name	EED	Actual						
	Capacity	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Abbott Loop	506	441	438	442	452	446	455	460
Airport Heights	328	276	257	246	244	223	225	223
Alpenglow	523	463	458	464	478	514	543	564
Aquarian Charter		228	240	240	239	237	238	235
Aurora	470	405	393	370	369	348	348	349
Baxter	540	435	421	406	400	380	345	346
Bayshore	509	562	569	544	524	516	494	484
Bear Valley	431	510	498	489	476	473	470	477
Birchwood ABC K-8	413	313	323	317	314	312	304	295
Bowman, Willard	579	499	485	466	453	455	459	451
Campbell	534	511	516	484	462	455	445	444
Chester Valley	329	310	228	220	220	216	217	215
Chinook	497	556	548	534	525	512	510	522
Chugach Opt. K-6	259	239	227	221	216	208	202	198
Chugiak Elem.	535	494	480	478	465	449	446	453
College Gate	522	391	360	342	321	300	308	304
Creekside Park	520	465	477	486	498	489	494	494
Denali	547	373	399	419	435	457	480	507
Eagle River	504	380	381	376	371	363	363	367
Fairview	560	476	471	465	453	451	455	457
Family Part. Charter		333	331	312	312	289	294	304
Fire Lake	431	284	274	274	268	276	270	270
Girdwood K-8	123	164	167	172	180	177	179	174
Government Hill	507	494	494	485	487	478	478	476
Homestead	448	434	439	440	454	481	507	523
Huffman	527	481	477	486	467	457	456	462
Inlet View	257	255	249	244	246	245	247	240
Kasuun	536	525	516	521	534	546	561	559
Kincaid	536	533	539	541	553	566	579	593
Klatt	431	422	428	441	446	457	461	462
Lake Hood	536	474	440	425	419	415	406	414
Lake Otis	502	433	407	367	355	340	327	320
Mount Spurr	348	319	314	320	320	314	322	325
Mt. View	505	461	450	434	405	384	370	361
Muldoon	536	496	488	458	443	429	424	415
North Star	662	502	498	473	452	439	427	420
Northern Lights ABC	536	620	604	589	587	591	589	574
Northwood	532	300	290	283	281	281	277	274
Nunaka Valley	373	305	293	289	285	276	268	264
Ocean View	519	572	584	594	615	621	644	634
O'Malley	432	316	294	270	267	257	252	254
Orion	649	312	310	289	277	276	275	269
Polaris K-6	71	218	212	206	203	201	201	204
Ptarmigan	302	367	410	396	406	412	407	405
Rabbit Creek	463	393	387	374	365	365	362	369

**Table 15****Elementary Student Population Projections by Schools  
2002-2008**

<b>School Name</b>	<b>EED</b>	<b>Actual</b>						
	<b>Capacity</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Ravenwood	431	411	423	429	448	485	493	506
Rogers Park	479	528	514	510	504	481	498	497
Russian Jack	536	386	380	377	369	368	356	356
Sand Lake	486	617	633	631	619	613	628	621
Scenic Park	438	535	532	515	507	516	506	516
Spring Hill	431	396	398	413	423	443	449	457
Susitna	476	567	572	576	581	581	593	606
Taku	460	417	412	420	433	437	445	444
Trailside	536	514	529	535	561	553	559	566
Tudor	492	550	546	534	535	536	534	539
Turnagain	466	321	309	311	311	317	315	315
Tyson, William	536	442	432	423	416	414	410	424
Ursa Major	517	402	396	388	381	371	359	360
Ursa Minor	352	268	268	275	274	278	274	270
Village Charter K-8		183	220	235	250	254	255	255
Williwaw	489	560	543	528	530	510	513	511
Willow Crest	469	455	438	424	416	411	417	413
Wonder Park	454	448	436	429	415	414	406	393
Wood, Gladys	408	488	466	455	465	477	470	477
<b>TOTAL</b>	<b>28,324</b>	<b>26,828</b>	<b>26,511</b>	<b>26,100</b>	<b>25,980</b>	<b>25,836</b>	<b>25,864</b>	<b>25,936</b>

Note: Level 3 special ed students are included.

**Table 16****Middle School Population Projections by Schools  
2002-2008**

<b>School Name</b>	<b>EED Capacity</b>	<b>Actual 2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Central	568	776	795	810	785	758	743	720
Clark	807	977	952	966	936	905	887	862
Goldenview	964	941	941	954	927	894	876	850
Gruening	752	635	654	672	652	627	616	596
Hanshew	908	963	955	983	954	921	901	874
Mears	911	1069	1102	1100	1068	1030	1011	980
Mirror Lake	960	685	670	644	628	602	593	585
Romig	757	838	855	871	844	815	799	774
Wendler	676	933	967	963	935	902	885	858
<b>TOTAL</b>	<b>7,303</b>	<b>7,817</b>	<b>7,891</b>	<b>7,963</b>	<b>7,729</b>	<b>7,454</b>	<b>7,311</b>	<b>7,099</b>

Note: Level 3 special ed students are included.

**Table 17****Senior High School Population Projections by Schools  
2002-2008**

<b>School Name</b>	<b>EED Capacity</b>	<b>Actual 2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Bartlett	1,937	2,072	2,125	2,149	2,207	2,218	2,189	2,161
Chugiak	1,582	2,032	2,041	2,051	2,071	2,118	2,096	2,069
Dimond	1,843	2,331	2,394	1,505	1,528	1,535	1,518	1,501
East	2,136	2,254	2,331	2,371	2,411	2,421	2,396	2,366
Service	1,799	2,453	2,430	1,858	1,903	1,931	1,905	1,879
West	2,065	1,898	1,930	1,999	2,018	2,037	2,017	1,989
New South Anchorage	1,600			1559	1598	1617	1603	1583
<b>TOTAL</b>	<b>12,962</b>	<b>13,040</b>	<b>13,251</b>	<b>13,492</b>	<b>13,736</b>	<b>13,877</b>	<b>13,724</b>	<b>13,548</b>

Note: Level 3 special ed students are included.

**Table 18****Secondary District-wide, Charter School Alternative School Projections  
2002-2008**

<b>School Name</b>	<b>EED Capacity</b>	<b>Actual 2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Polaris (7-12)	71	229	238	251	257	253	252	247
Steller (7-12)	200	296	304	303	298	298	295	290
Family Partnership		316	340	354	368	361	351	337
Alternatives*	135	803	828	836	862	861	868	862
<b>TOTAL</b>	<b>406</b>	<b>1,644</b>	<b>1,710</b>	<b>1,744</b>	<b>1,785</b>	<b>1,773</b>	<b>1,766</b>	<b>1,736</b>

\*Includes AVAIL, Benson SAVE, Benson SEARCH, McLaughlin, SAVE I, High School Completion, and part-time students.

Note: Level 3 special ed students are included.

**Table 19**

**Special Services Population Projections  
2002-2008**

<b>School Name</b>	<b>EED Capacity</b>	<b>Actual 2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Mt. Iliamna Pre-Elem.	221	88	108	107	107	107	106	105
Whaley	244	152	181	181	181	179	177	176
Special Programs*		460	569	568	568	565	563	559
<b>TOTAL</b>	<b>465</b>	<b>700</b>	<b>858</b>	<b>856</b>	<b>856</b>	<b>851</b>	<b>846</b>	<b>840</b>

\* Includes ACE, ACT, Booth, Charter North, Jessee Lee, Maplewood Group Home, McKinley Heights, Outreach, Providence Heights, North Star Hospital, and Pre-Elementary housed in elementary schools.

Note: Level 3 special ed students are included.

