

VI. Membership Projections Summary: 2003-04 to 2009-10

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 historical kindergarten enrollment and historical births (adjusted for school year). These projections were used to determine kindergarten enrollment for the next six years. 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 2004-05 to 2009-10 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. Information supplied by the State Demographer, and the State Bureau of Vital Statistics, has 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 2003, 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.

However, the military and dependent population is expected to increase on Fort Richardson to accommodate new troops to support the Stryker Brigade. Consequently, projections for Fort Richardson schools show this anticipated growth starting with in the 2005-06 school year.

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 to enrollments (Table 8), and what is projected to happen 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, 2003. EED capacities are based on square foot allowance for each student. 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 253 and for Ptarmigan as 412. These totals assume that the 65 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 2009-2010 by Grades**

	9/30/2003 Actual	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Kindergarten	3,570	3,566	3,565	3,561	3,556	3,552	3,547
Grade One	3,627	3,679	3,673	3,672	3,668	3,663	3,659
Grade Two	3,546	3,596	3,656	3,650	3,649	3,645	3,640
Grade Three	3,633	3,553	3,626	3,686	3,680	3,679	3,675
Grade Four	3,829	3,649	3,575	3,649	3,709	3,703	3,702
Grade Five	3,785	3,819	3,652	3,578	3,652	3,712	3,706
Grade Six	4,076	3,784	3,843	3,675	3,601	3,675	3,735
Subtotal 1-6	22,496	22,080	22,025	21,910	21,959	22,077	22,117
Subtotal K-6	26,066	25,646	25,590	25,471	25,515	25,629	25,664
Grade Seven	4,090	4,202	3,892	3,952	3,779	3,703	3,779
Grade Eight	4,099	3,940	4,092	3,790	3,849	3,680	3,606
Grade Nine	3,711	3,970	3,817	3,965	3,672	3,729	3,565
Grade Ten	3,837	3,661	3,931	3,779	3,926	3,636	3,692
Grade Eleven	3,353	3,629	3,461	3,717	3,573	3,712	3,438
Grade Twelve	3,345	3,270	3,546	3,382	3,632	3,491	3,627
Subtotal 7-8	8,189	8,142	7,984	7,742	7,628	7,383	7,385
Subtotal 9-12	14,246	14,530	14,755	14,843	14,803	14,568	14,322
Subtotal 7-12	22,435	22,672	22,739	22,585	22,431	21,951	21,707
Special Services *	1,162	1,181	1,159	1,153	1,150	1,141	1,136
TOTAL	49,663	49,499	49,488	49,209	49,096	48,721	48,507

* 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

East Area

	Actual 2002-03 9/30/2003	Projected Enrollment					
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Number of Classrooms	254	254	254	254	254	254	254
EED Capacity	4,925	4,925	4,925	4,925	4,925	4,925	4,925
Membership							
Kindergarten	565	572	570	571	568	568	568
1st Grade	584	562	576	575	575	573	573
2nd Grade	591	599	576	589	588	587	585
3rd Grade	584	584	599	575	588	586	586
4th Grade	677	588	588	603	578	591	588
5th Grade	658	682	592	593	608	579	591
6th Grade	676	662	694	605	603	621	588
Level 3	48	47	47	47	47	46	46
Total	4,383	4,296	4,242	4,158	4,155	4,151	4,125
% Capacity	89%	87%	86%	84%	84%	84%	84%
Additional Capacity	542	629	683	767	770	774	800

Includes: Airport Heights Mt. View Tudor
College Gate Rogers Park Tyson, William
Kasuun Russian Jack Williwaw
Lake Otis

Table 14

Elementary Projections Summary: 2003-2009
Districtwide Schools

	Actual 2002-03 9/30/2003	Projected Enrollment					
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Membership							
Kindergarten	211	207	234	232	232	233	231
1st Grade	244	230	228	257	257	257	257
2nd Grade	226	243	231	226	253	253	255
3rd Grade	245	226	244	229	226	256	256
4th Grade	267	250	230	246	237	233	264
5th Grade	239	265	249	229	243	239	237
6th Grade	257	227	248	234	214	228	227
7th Grade	61	64	60	62	59	58	58
8th Grade	55	57	59	56	58	55	54
Level 3	3	2	3	3	3	3	3
Total	1,808	1,771	1,786	1,774	1,782	1,815	1,842

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	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Abbott Loop	506	437	435	445	447	454	464	457
Airport Heights	328	258	252	251	242	242	240	244
Alpenglow	523	437	423	414	412	406	402	397
Aquarian Charter		251	257	253	246	245	245	246
Aurora	470	419	418	420	406	411	416	413
Baxter	540	408	384	383	368	331	331	333
Bayshore	509	589	584	584	580	569	569	576
Bear Valley	431	514	528	537	549	567	587	597
Birchwood ABC K-8	413	331	349	354	359	361	366	369
Bowman, Willard	579	474	453	444	443	449	442	454
Campbell	534	508	493	481	478	481	490	499
Chester Valley	329	253	251	262	265	267	277	270
Chinook	497	548	532	531	523	519	525	513
Chugach Opt. K-6	259	235	230	241	247	256	271	284
Chugiak Elem.	535	490	500	489	476	479	471	467
College Gate	522	370	363	345	328	336	333	342
Creekside Park	520	441	450	461	460	477	481	482
Denali	547	449	445	440	448	457	462	474
Eagle River	504	361	354	343	327	321	321	323
Fairview	560	439	436	434	424	426	427	432
Family Part. Charter		246	218	208	195	188	183	176
Fire Lake	431	273	278	266	257	249	249	250
Frontier Charter		81	73	77	77	75	79	78
Girdwood K-8	123	173	171	181	186	190	191	190
Government Hill	507	478	476	476	472	477	480	484
Homestead	448	430	427	435	457	469	467	456
Huffman	527	472	466	442	433	427	429	442
Inlet View	257	262	259	255	255	258	249	250
Kasuun	536	480	466	445	445	439	426	420
Kincaid	536	531	529	532	541	542	548	538
Klatt	431	407	396	399	410	416	424	447
Lake Hood	536	447	420	418	410	400	405	401
Lake Otis	502	440	412	416	399	392	384	386
Mount Spurr	348	305	304	299	293	295	294	290
Mt. View	505	410	402	396	400	402	417	427
Muldoon	536	457	453	442	451	453	440	433
North Star	662	449	426	416	420	423	416	411
Northern Lights ABC	536	612	596	596	591	584	585	594
Northwood	532	289	285	272	273	273	269	271
Nunaka Valley	373	260	250	244	233	229	229	228
Ocean View	519	556	568	579	596	621	618	622
O'Malley	432	309	298	302	305	307	309	314
Orion	649	372	369	370	367	364	361	357
Polaris K-6	71	228	234	243	250	265	284	294
Ptarmigan	302	412	390	393	396	396	397	407

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

School Name	EED	Actual						
	Capacity	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Rabbit Creek	463	368	352	341	335	331	337	334
Ravenwood	431	407	408	426	455	461	474	465
Rogers Park	479	522	521	517	504	533	530	525
Russian Jack	536	359	354	358	353	350	353	346
Sand Lake	486	633	635	636	642	655	656	659
Scenic Park	438	523	484	463	455	434	423	424
Spring Hill	431	412	410	405	400	394	399	394
Susitna	476	574	587	590	592	596	610	600
Taku	460	398	392	397	391	393	381	369
Trailside	536	518	520	531	507	511	505	506
Tudor	492	512	498	491	481	464	458	452
Turnagain	466	296	280	269	262	248	243	240
Tyson, William	536	451	441	431	415	401	406	392
Ursa Major	517	372	355	391	401	409	431	447
Ursa Minor	352	229	225	248	270	286	290	300
Village Charter K-8		155	163	168	168	169	168	170
Williwaw	489	581	587	592	591	596	604	591
Willow Crest	469	441	440	428	425	417	416	413
Wonder Park	454	386	372	359	357	355	352	352
Wood, Gladys	408	481	485	501	500	498	504	506
TOTAL	28,324	26,209	25,812	25,756	25,644	25,689	25,793	25,823

Note: Level 3 special ed students are included, but preschool students are not included.

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

School Name	EED Capacity	Actual 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Central	568	790	787	761	741	730	708	709
Clark	807	944	944	919	895	881	855	857
Goldenview	964	929	916	896	869	858	831	830
Gruening	752	609	599	597	583	574	557	556
Hanshew	908	992	958	929	905	892	864	865
Mears	911	1104	1069	1041	1013	1000	968	967
Mirror Lake	960	674	701	710	688	672	657	660
Romig	757	842	834	808	787	775	751	752
Wendler	676	840	868	902	878	866	837	838
TOTAL	7,303	7,724	7,676	7,563	7,359	7,248	7,028	7,034

Note: Level 3 special ed students are included.

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

School Name	EED Capacity	Actual 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Bartlett	1,937	2,025	2,051	1,981	1,953	1,957	1,921	1,896
Chugiak	1,582	2,025	2,020	1,566	1,502	1,501	1,477	1,438
Dimond	1,624	2,314	1,880	1,858	1,857	1,850	1,814	1,782
East	2,136	2,246	2,070	2,116	2,162	2,137	2,100	2,063
New Eagle River	800	0	0	587	699	694	695	683
Service	1,799	2,473	1,919	1,795	1,851	1,867	1,869	1,838
New South Anchorage	1,600	0	1323	1575	1587	1573	1548	1519
West	2,065	1,823	1,839	1,841	1,857	1,869	1,843	1,810
TOTAL	13,543	12,906	13,102	13,319	13,468	13,448	13,267	13,029

Note: Level 3 special ed students are included.

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

School Name	EED Capacity	Actual 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Polaris (7-12)	71	232	236	214	195	194	185	183
Steller (7-12)	200	294	287	260	247	238	235	231
Family Partnership		291	304	292	283	275	270	269
Frontier Charter		106	111	99	98	96	94	93
Highland Tech		295	372	421	409	403	390	377
Alternatives*	135	817	799	789	735	735	696	708
TOTAL	406	2,035	2,109	2,075	1,967	1,941	1,870	1,861

*Includes AVAIL, Benson SAVE, Benson SEARCH, McLaughlin, SAVE I, High School Completion, Continuation Program, and Crossroads.

Note: Level 3 special ed students are included.

Table 19

**Special Services Population Projections
2002-2008**

School Name	EED Capacity	Actual 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Mt. Iliamna Pre-Elem.	221	121	111	110	109	109	108	107
Whaley	244	143	156	144	143	142	141	141
Special Programs*		525	533	521	519	518	514	511
TOTAL	465	789	800	775	771	769	763	759

* Includes ACT, ASSDHH, Booth, Charter North, Jesse Lee, McKinley Heights, North Star Hospital, Outreach, Providence Heights, Whaley, and Pre-elementary housed in schools.

Note: Level 3 special ed students are included.