

Minnesota School Enrollment Trends

**Working Paper 99-15
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April 1999**



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School enrollments increased in the 1990s.

Minnesota public school enrollments have risen during the 1990s. The number of public school K-12 students has gone up every year in this decade, reaching 844,410 in 1997-1998, the last year for which data is available. This number compares to 731,992 in the 1989-1990 fall student count. The rising enrollments reflect in part the effect of the baby boomlet (children of the baby boom generation) and in part the in-migration that Minnesota has experienced in recent years.

Much of the gain reflects rising secondary school enrollments. Enrollments in grades 7-12 rose from 316,995 in the 1989-1990 head count to 399,625 in 1997-1998, a gain of more than 82,000. Gains in K-6 enrollment have been modest. This number grew from 414,997 in 1989-1990 to 447,677 in 1996-1997, and then fell to 444,785 the following year.

Private school enrollments have been steady in the 1990s, ranging from 9.8 percent of all enrollments in 1989-1990 to 9.1 percent in 1996-1997. In the most recent 5-year period, the variation has been even smaller. Each year, between 9.1 percent and 9.3 percent of all K-12 students were enrolled in private schools. Overall, private schools do not appear to be gaining or losing popularity as an educational option.

Minority enrollments grew rapidly.

Minority student enrollments have increased much faster than white enrollments. Between the 1989-1990 and 1997-1998 school years, the Hispanic enrollment count grew by 133 percent, the black count by 96 percent, Asian by 69 percent and American Indian by 39 percent. The number of white students grew much more slowly, at 9 percent. Overall, the proportion of students who were nonwhite or Hispanic grew from 9.2 percent of the total to 14.5 percent of the total.

The two large central city districts, Minneapolis and St. Paul, enroll about half of Minnesota's minority students, but enrollments have grown in many other districts as well. In the 1997-1998 year, Minneapolis and St. Paul accounted for 49 percent of total minority enrollments, down slightly from 52 percent of the total in 1989-1990.

Black and American Indian enrollments have become less concentrated in the two largest districts. Minneapolis and St. Paul combined had 66 percent of the state's black students in 1997-1998, down from 75 percent in 1989-1990. This suggests the black population is becoming somewhat more dispersed. The same is true of American Indian enrollments.

Minnesota Public School Fall Enrollment by Grade, 1989-1990 through 1997-1998
 (Source: Minnesota Department of Children, Families and Learning, Civil Rights System,
 Student Fall Enrollment Data)

Grade	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998
Kindergarten	61,916	64,264	63,383	61,966	62,391	62,908	63,896	62,383	62,126
1	62,320	62,462	63,881	63,609	62,242	62,466	63,268	64,508	62,339
2	61,051	61,467	61,816	63,793	63,754	61,956	62,511	63,465	64,122
3	60,403	61,664	61,819	62,713	64,274	63,873	62,564	63,203	63,628
4	58,846	61,026	62,057	62,606	63,225	64,604	64,545	63,024	63,494
5	56,212	59,550	61,459	63,289	63,312	63,659	65,191	65,090	63,436
6	54,249	57,052	60,275	62,294	63,698	63,916	64,439	66,004	65,640
7	54,289	56,483	59,188	62,705	64,563	65,383	65,677	66,306	67,536
8	51,807	54,417	56,761	59,775	63,118	64,592	65,647	65,907	66,585
9	53,837	54,058	56,831	59,145	62,336	65,094	67,158	68,569	68,806
10	52,413	54,357	54,484	57,471	59,879	61,663	64,391	66,825	68,475
11	50,968	51,079	53,017	53,691	56,329	57,369	59,425	62,359	64,792
12	53,681	51,324	51,813	53,356	54,272	55,620	57,362	60,080	63,431
K-6	414,997	427,485	434,690	440,270	442,896	443,382	446,414	447,677	444,785
7-12	223,596	234,111	242,979	250,894	254,798	257,562	259,852	260,424	260,106
Total	731,992	749,203	766,784	786,413	803,393	813,103	826,074	837,723	844,410

Minnesota Public School Fall Enrollment by Race and Ethnicity, 1989-1990 through 1997-1998

	American Indian	Asian	Hispanic	Black	White	Total	Minority as % of total
1989-1990	12,251	22,161	8,886	23,974	664,450	731,722	9.2%
1990-1991	12,869	23,766	9,907	26,255	676,406	749,203	9.7%
1991-1992	13,531	25,064	11,016	27,725	689,448	766,784	10.1%
1992-1993	13,483	26,080	12,077	30,190	704,583	786,413	10.4%
1993-1994	14,812	28,279	13,315	33,310	713,677	803,393	11.2%
1994-1995	15,349	30,085	14,881	36,372	716,416	813,103	11.9%
1995-1996	15,679	32,102	16,662	39,822	721,809	826,074	12.6%
1996-1997	16,276	34,447	18,821	43,629	724,550	837,723	13.5%
1997-1998	16,971	37,470	20,690	46,932	722,347	844,410	14.5%

About 22 percent of Indian students were in Minneapolis or St. Paul in 1997-1998, down from 30 percent at the beginning of the decade.

Asian students, on the other hand, have become slightly more concentrated in the central cities. About 51 percent of Asian students were in Minneapolis or St. Paul in 1997-1998, compared to 47 percent in 1989-1990.

The proportion of Hispanic students enrolled in central city schools did not change much. The figure was 31 percent in 1989-1990 and 30 percent in 1997-1998.

Births are a good short-term predictor of school enrollments.

What will enrollment trends be in the future? One of the most crucial determinants of future enrollments will be births. Historical data show that births are a very good predictor of school enrollment trends. Knowing the number of births gives a good idea of kindergarten enrollments 5 years later, first grade enrollment 6 years later, and so on. The effect of births lasts into the high school years.

Births are not the sole determinant of enrollments, of course. Migration to and from other states, immigration from other countries, and changing preferences for public or private schools are also important.

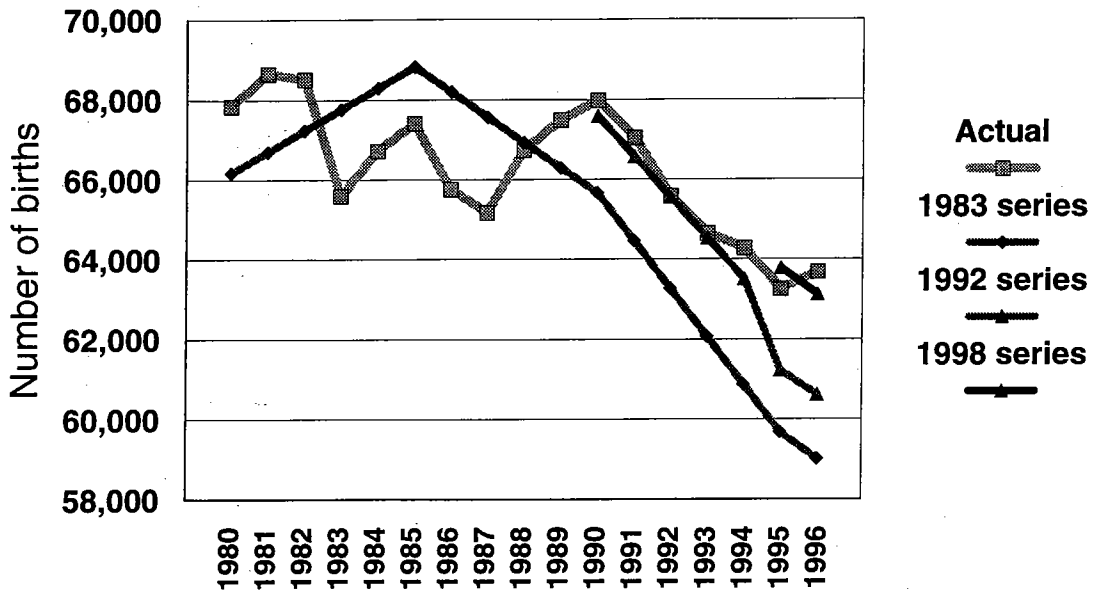
Short-run birth projections are reasonably accurate.

The State Demographic Center projections of births have generally been fairly close in the short run, say for the first five years of each projections cycle. The 1983 projections series underprojected births by a total amount of 1,175 over 5 years, with an average absolute error of 2.6 percent per year. The 1992 projections underprojected births by 1,803 during the first five years, with an average absolute error of 0.6 percent per year. The most recent projection series is off by a total of 48 births in the first two years.

Over a longer time span, the birth projections become less accurate. However, it should be noted that though the exact numbers were off, both the 1983 and 1992 projections reports foresaw the declining birth trend of the 1990s. (Chart "Actual versus projected Minnesota births, 1980 to 1996.") As the baby boom women aged into their late thirties and forties, the number of women in the prime childbearing years began to go down. This trend, which was apparent many years before it happened, is the reason for the drop in births.

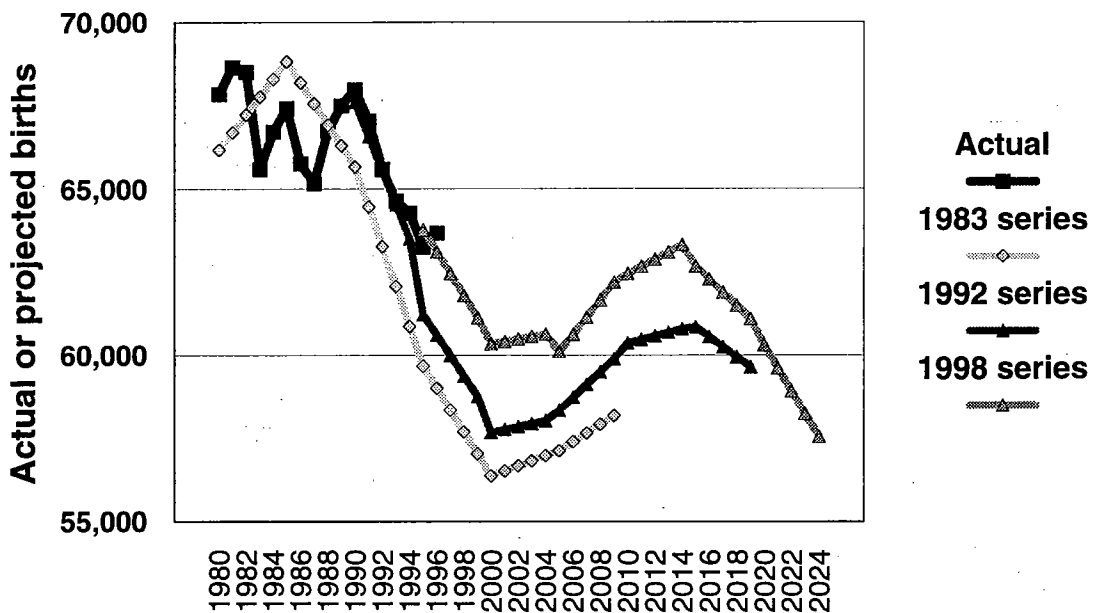
After falling through the first half of the 1990s, births rose slightly in 1996, and preliminary results suggest another unexpected rise in 1997. There are several possible reasons for this unanticipated increase in births. First, the strong economy in the last few years may have encouraged more people to have children. This might affect the timing of births more than the ultimate number. A second reason could be in-migration from other states. The number of women moving into Minnesota may have been enough to offset the baby bust effect. A recent surge in immigration from foreign countries could

Actual versus projected Minnesota births, 1980 to 1996



State Demographic Center projections
Births from MCHS

Projected versus actual births in Minnesota: 1980 to 2025



Sources: MN Demographic Center
MN Center for Health Statistics

be another factor, particularly since foreign-born women tend to have higher fertility rates.

Enrollments projected to peak in 1999-2000 school year.

The enrollment projections presented here reflect a combination of birth projections, recent birth trends, and recent trends in grade progression ratios.

For grades that are already in the system, the standard way to project enrollments is to use grade progression ratios. Grade progression ratios express the ratio of the number of students in each grade to the number of students in the previous grade one year earlier. For example, the grade progression ratio from fifth to sixth grade is the ratio of the number of sixth-graders to the number of fifth graders in the preceding year. Grade progression ratios are usually very close to 1.0. To project the number of sixth graders next year, you multiply the number of current fifth graders by this grade progression ratio. Sometimes the most recent progression ratio is used, and sometimes the ratios are averaged over several years. In the State Demographic Center enrollment projections presented in this report, the average of the five most recent progression ratios for each grade was used to project future enrollments.

For kindergartners, the grade progression ratio method cannot be used because there is no previous grade. To project kindergarten enrollment, we used the number of births five years earlier and multiplied this by a five-year average of the ratio of kindergarten enrollment to births five years earlier. Actual births were used to project kindergarten enrollments through the 2001-2002 school year. Starting in school year 2002-2003, projected births were used.

The most recent State Demographic Center population projections assume that births will decline through the 1990s and continue to decline until about 2005. After that the annual number should increase, though it is projected to remain below the current number. Future births are not projected to reach the levels of the early 1980s baby boomlet.

Birth projections reflect the projections of the female population ages 15 to 44 and the projected fertility rates for women in this age group. If more women move into Minnesota, or if women begin to have larger families, the number of births could be larger than expected. If more women move out of the state or if fertility levels go down, births could be less than projected.

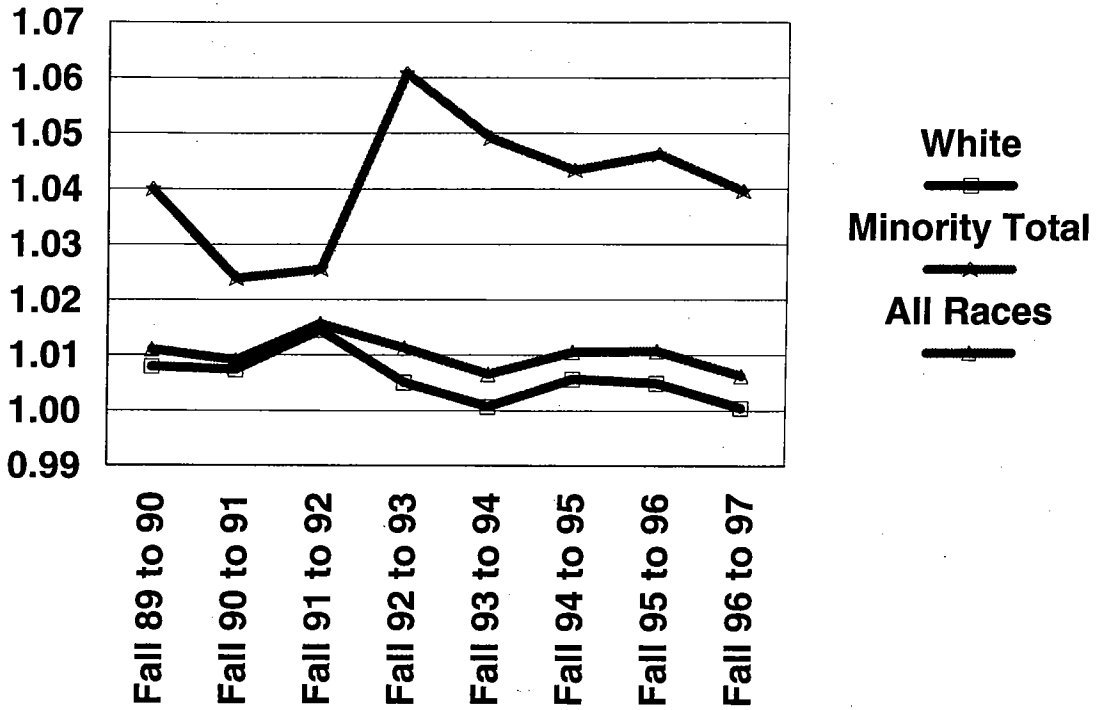
State Demographic Center projections of total K-12 enrollment suggest it will peak at about 848,000 in the 1999-2000 school year and then begin to fall to 815,000 in the 2008-2009 school year. Though lower than the 1997-1998 figure, the projected 2008-2009 number is still considerably higher than the enrollments experienced through most of the 1990s. In the table showing the projected enrollments, the bold face figures are based wholly or in part on projected rather than actual births.

**Minnesota State Demographic Center projections of public school enrollments,
using 5-year average of grade progression ratios**

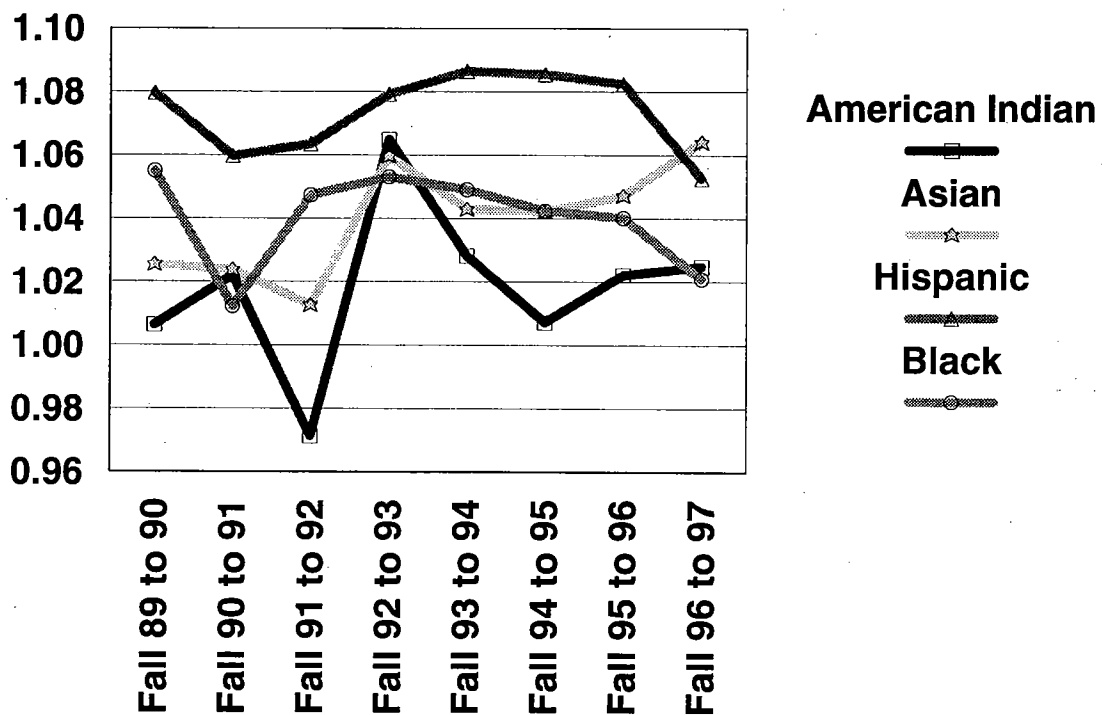
	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Births (yr-5)	65,591	64,646	64,277	63,258	63,681	63,237	62,792	62,348	61,903	61,459	61,014	60,570
Grade K	62,126	61,747	60,858	60,510	59,551	59,949	59,531	59,112	58,694	58,276	57,857	57,439
Grade 1	62,339	62,378	61,997	61,104	60,755	59,792	60,192	59,772	59,352	58,932	58,512	58,092
Grade 2	64,122	62,283	62,322	61,942	61,050	60,701	59,739	60,138	59,719	59,299	58,879	58,459
Grade 3	63,628	64,543	62,693	62,731	62,349	61,451	61,100	60,131	60,533	60,111	59,689	59,266
Grade 4	63,494	64,083	65,005	63,141	63,180	62,795	61,890	61,537	60,562	60,967	60,541	60,116
Grade 5	63,436	64,030	64,624	65,554	63,674	63,714	63,325	62,413	62,057	61,073	61,481	61,052
Grade 6	65,640	64,060	64,660	65,260	66,199	64,300	64,340	63,948	63,027	62,667	61,674	62,086
Grade 7	67,536	67,512	65,887	66,504	67,121	68,087	66,134	66,175	65,772	64,824	64,454	63,433
Grade 8	66,585	67,790	67,766	66,135	66,754	67,373	68,343	66,383	66,424	66,019	65,068	64,697
Grade 9	68,806	69,280	70,533	70,509	68,811	69,456	70,100	71,109	69,070	69,113	68,691	67,702
Grade 10	68,475	68,592	69,065	70,315	70,290	68,598	69,240	69,883	70,888	68,855	68,898	68,478
Grade 11	64,792	66,283	66,397	66,854	68,064	68,040	66,402	67,024	67,646	68,619	66,651	66,693
Grade 12	63,431	65,133	66,632	66,746	67,206	68,422	68,398	66,751	67,376	68,002	68,980	67,002
Total	844,410	847,715	848,439	847,305	845,004	842,678	838,735	834,377	831,119	826,756	821,376	814,513
Grade K-6	444,785	443,125	442,159	440,243	436,758	432,703	430,118	427,052	423,943	421,324	418,633	416,510
Grade 7-12	399,625	404,591	406,280	407,062	408,246	409,975	408,617	407,325	407,176	405,432	402,743	398,003

Bold face indicates number is based on projected births (using 1998 projections for 2003 births but benchmarking to 1996 actual births).

Minnesota grade progression ratios in the 1990s: Averages for grades 1 to 8



Minnesota minority grade progression ratios, in the 1990s, average for grades 1-8



ratios have been highest for Hispanic children, indicating very high in-migration in this group.

Enrollment data suggest Census age/race/sex estimates may be underestimating the number of Hispanic, black, and Asian children.

The further we get from the 1990 census, the more data users want something more up to date. In particular, people want more timely estimates of Minnesota's rapidly growing minority populations. The U.S. Bureau of the Census prepares annual age/race/sex estimates for states and counties. The school enrollment data give us a tool to evaluate this widely used data source.

While the census estimates and school enrollment data both have their imperfections, the ratio between the two numbers normally would be expected to remain fairly stable over time. If the ratio changes dramatically, this hints at reliability problems in one or both data sources.

Overall, the ratio of K-12 enrollment to estimated child population appears to be fairly stable, in the range of .895 to .905. In other words, the enrollment data find about 90 percent of the population ages 5 to 17 estimated by the Census Bureau. Since about 9 percent of Minnesota students are enrolled in private schools, this ratio suggests that the Census estimate of the total 5-to-17-year-old group is quite good.

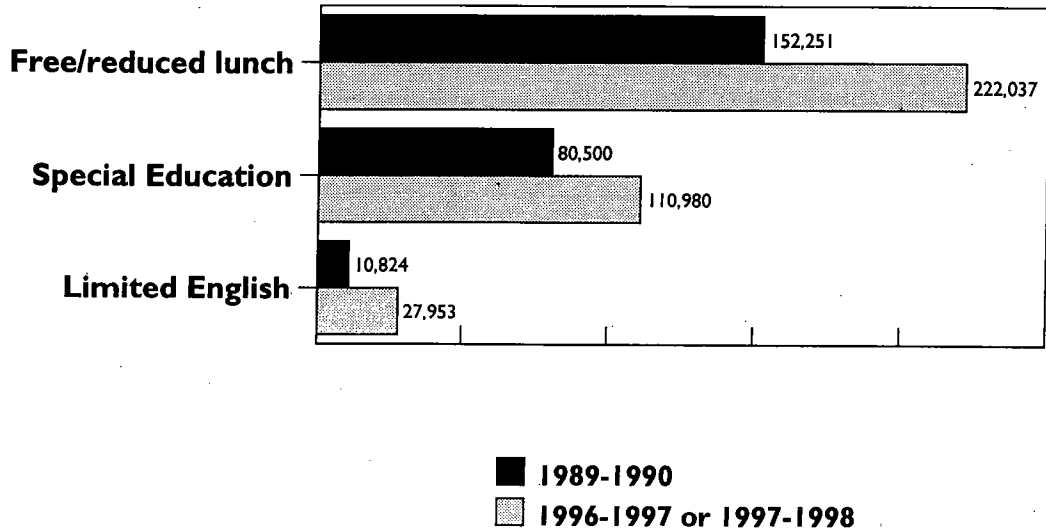
The ratios of elementary and secondary enrollments to comparable age groups show slightly more variation, but still fall in a relatively narrow range of .885 to .915.

Figures for minority groups show much more dramatic variation, and suggest that neither the enrollment data nor the census estimates are as reliable as they are for white children. Data for Hispanic and black children are particularly erratic.

The 1989-1990 school data found considerably fewer Hispanic children in grades K-6 than were counted in comparable age groups in the 1990 census. The size of the discrepancy suggests that as many as one-third of the children who were identified as Hispanic in the Census were not identified this way in the school data. The ratio of enrollment data to census population estimate has risen dramatically for Hispanic children during the 1990s. This may partly reflect the greater salience of Hispanic identity in the school count. However, another reason may be that the Census estimates have increasingly underestimated this population as the decade has progressed. Of course, both these factors could be operative.

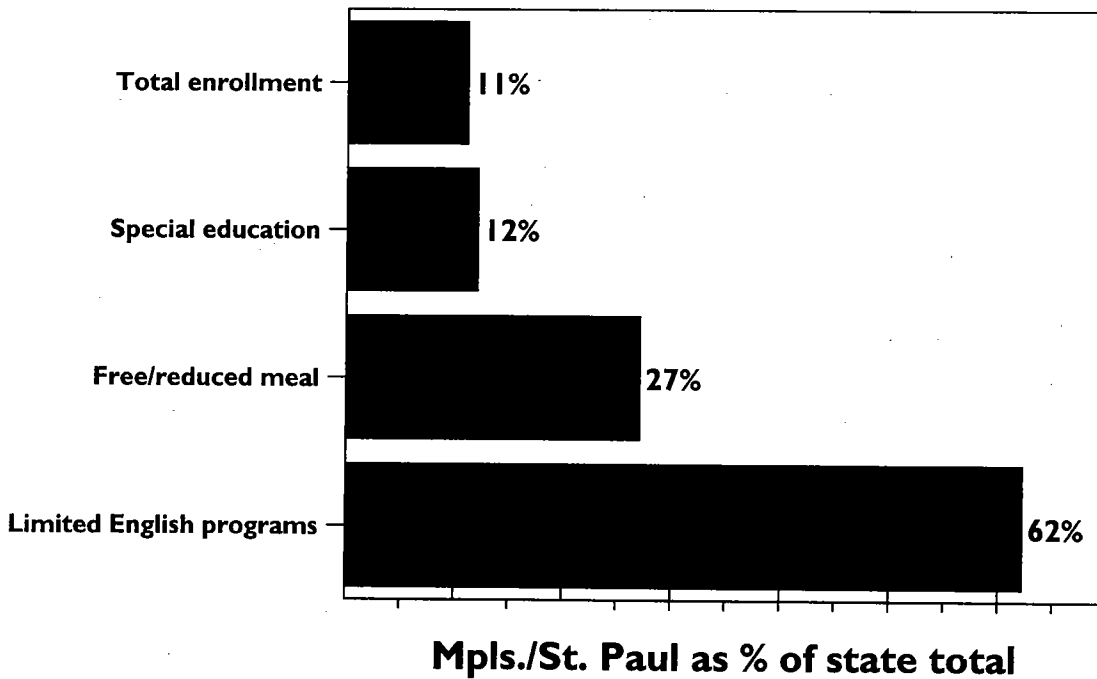
More black children were found in the school data than in the census, the reverse of the pattern for Hispanic children. The higher number in the school data suggests that black children were underenumerated in the census. Since 1990, the trend for blacks is the same as for Hispanics: a sharp rise in the ratio of K-6 enrollments to census estimates for the population ages 5 to 11. By the 1997-1998 school year, the enrollment data found

Number of students in Minnesota special education, free/reduced lunch and limited English proficiency programs is growing



For comparability, 1996-97 data used for LEP and special education; 1997-98 data used for meal program; ECF data

Minneapolis and St. Paul districts have 11% of all students, but 62% of students in limited English programs



Of the three programs, the free or reduced price meal reaches the most students. In the 1997-1998 school year, about 222,000 students, 26 percent of the total, received a free or reduced price meal. This number has grown 46 percent since the 1989-1990 school year, considerably higher than the 15 percent gain in total K-12 public school enrollment. The meal program is not a perfect indicator of low income, because not all eligible students are signed up for the program, but the size of the increase indicates a considerable growth in the number of students from low-income families.

About 1 in 8 students, 111,000 in all, were in special education programs in 1996-1997. Special education enrollments grew 38 percent from 1989-1990. For the special education and limited English programs, the method of collecting the data changed in the 1997-1998 school year, so 1996-1997 data is used to show the trend.

Fewer students take part in limited English proficiency (LEP) programs, but this is the fastest-growing of the three major programs tracked by the Department of Children, Families and Learning. About 3 percent of all Minnesota students are in these programs. In the 1996-1997 school year almost 28,000 students were in LEP programs, a gain of 158 percent since 1989-1990. Rapid growth in the immigrant population is the major factor.

The Minneapolis and St. Paul school districts contain especially high proportions of students in limited English proficiency and free or reduced price meal programs. In the 1997-1998 school year, these two districts had 62 percent of limited English proficiency program participants and 27 percent of reduced or free meal participants. By comparison, only about 11 percent of total state enrollment is in one of the two central city districts.

About 22 percent of St. Paul students and 16 percent of Minneapolis students are in limited English proficiency programs. The percent receiving free or reduced meals is even higher: 66 percent of Minneapolis students and 62 percent of St. Paul students.

Special education students, on the other hand, are more evenly distributed across school districts. Minneapolis and St. Paul together have about 12 percent of students in special education programs, similar to their proportion of all students.

Sources

Minnesota State Demographic Center, unpublished birth projections, 1998.

Minnesota Department of Children, Families and Learning, Student Fall Enrollment by Grade, Civil Rights System Data for 1989-1990 through 1997-1998.

Minnesota Department of Children, Families and Learning, unpublished enrollment projections, 1999.

Minnesota Department of Children, Families and Learning,
<http://cfl.state.mn.us/datactr/datactr2.htm> , data on special populations.

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