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ABSTRACT

Estimated statistics on enrollment, high school graduates, teaching staff, and finances are summarized for public and private elementary schools and secondary schools in the United States. Data are shown for the 1990-91 school year, with annual trend data covering various years from 1986 through 1990. The data are generated by the Early Estimates System of the National Center for Education Statistics (NCES). The source of statistical information about public schools is the Common Core of Data collected annually from state education agencies. These data are collected in March, undergo NCES and state editing, and are available for publication in September. The source of statistical information about private schools is the Private School Survey. Data are presented in 13 tables showing enrollment, numbers of teachers, student/teacher ratios, high school graduates, and revenues and expenditures, by school level, religious orientation, and/or state. Over 41 million students attended public schools and 5.2 million students attended private schools in the 1990-91 school year. Private school membership in grades K-12 has remained fairly constant in recent years. The following statistics are noted for the 1990-91 school year: since 1987, student enrollment in public education increased by over 1 million; there were an estimated 2.7 million teachers in public and private schools; student-to-teacher ratios for kindergarten through grade 12 were 17.2/1 for public and 14.7/1 for private schools; and, an estimated 2.5 million students expected to graduate from high school. Technical notes, including a table showing selected standard errors for private school early estimates, are included. (TJH)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Survey Report

December 1990

Early Estimates

**Key Statistics for
Public and Private
Elementary and
Secondary Education:
School Year 1990-91**

ED328617

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Elementary and Secondary Education Statistics Division

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December 1990

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The estimates in this publication are key statistics reported early in the 1990-91 school year and include the number of students in membership, teachers, and high school graduates for public and private elementary and secondary schools, and total revenues and expenditures for the operation of public elementary and secondary schools. The public school estimates consist of three kinds of data: preliminary actual counts for individual states; estimates derived by the states for the National Center for Education Statistics (NCES); and imputed values developed by NCES using a combination of state-specific and national data. Private school early estimates are based on a national probability sample of private schools surveyed in the fall of 1990.

Highlights

- Total student membership in all the Nation's elementary and secondary schools (both public and private) is estimated to be 46.2 million students for the 1990-91 school year. Some 41.0 million of these students attend public schools, compared with 5.2 million students who attend private schools (table 1).
- There were approximately 41.0 million students in the Nation's public elementary and secondary schools in fall 1990 compared with 40.5 million in fall 1989. Student membership has increased by over a million since fall 1987 (table 6).
- Private school membership in grades kindergarten through 12 has remained fairly constant in recent years from 4.9 million students reported in the 1988-89 school year, to 5.0 million students in 1989-90, and to 4.9 million again in 1990-91 (table 2).
- It is estimated that there are 2.7 million teachers in the public and private schools in this school year (1990-91); 2.4 million of these educators teach public school students, while 353,000 teach private school students (table 1).
- The student membership and teacher count data yield pupil-to-teacher ratios for grade levels prekindergarten through 12 of 17.2 for public schools and 14.7 for private schools (computed from data in table 1).
- An estimated 2.6 million students graduated from high school in the 1989-90 school year; 2.3 million of these graduates were from public schools and 268,000 from private schools. An additional 2.5 million students are expected to graduate from high school in the 1990-91 school year; there are 2.3 million public school students, compared with 233,000 private school students (table 1).

- Revenues for public elementary and secondary education in fiscal year 1990 are estimated to be \$203.5 billion (table 11), and they are expected to rise to approximately \$217.8 billion in fiscal year 1991. The cost of public education is estimated to be \$4,847 per student in membership for the 1990-91 school year (table 12).

The Early Estimates System

The early estimates system is designed to allow NCES to report selected key statistics early in the school year. This is accomplished through contact with public school state education agencies and a sample of private schools. Details of the two systems follow.

The source of universe statistical information about public elementary and secondary education is the Common Core of Data (CCD)--data collected annually by NCES from state education agencies. These data are reported to NCES in March, undergo NCES and state editing, and are available for publication in September--a full year after the beginning of the school year. High school graduate and fiscal data are reported a year later than student and teacher data. In contrast, the estimates of this report are made in December of the school year to which they apply.

Forty-nine States, the District of Columbia, and four outlying areas participated in the public school early estimates survey. Estimates reported here were provided by state education agencies and represent the best information on public elementary and secondary schools available to states at this early stage of the school year. They are, however, subject to revision.

The source of universe statistical information on private schools in the United States is the Private School Survey. The private school universe consists of a diverse population of schools including those with a religious orientation (for example Catholic, Lutheran, and Assembly of God) as well as nonsectarian schools that include programs ranging from regular to special emphasis and special education. The private school early estimates is one reporting component of this universe. The basic statistical information included in this data system is collected from all private schools in the NCES universe, and the early estimates are based on a subsample of that universe.

NCES is continuing to examine and evaluate various methodologies to obtain better estimates and improve the data collection system for public and private elementary and secondary education.

Table 1.--Early estimates of key statistics for public and private elementary and secondary schools for grades prekindergarten through 12: United States, school year 1990-91

	Students	Teachers	Graduates	
			1989-90	1990-91
All schools	46,222,124	2,743,277	2,591,651	2,485,703
Public schools	41,026,499	2,390,441	2,324,035	2,253,043
Private schools	5,195,625	352,866	267,616	232,660

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, and Private School Early Estimates System.

Table 2.--Early estimates of membership in private elementary and secondary schools, by religious orientation and school level for grades K through 12: Fall 1988 through fall 1990

Characteristic	Fall 1988	Fall 1989	Fall 1990
Total	4,873,431	4,955,771	*4,852,779
Religious orientation			
Catholic	2,785,769	2,579,884	2,603,980
Other religious	1,467,350	1,663,310	1,554,857
Nonsectarian	620,312	712,577	693,942
School level			
Elementary	2,827,753	2,713,939	2,675,671
Secondary	868,297	817,302	836,801
Combined	1,177,381	1,424,530	1,340,306

* For comparability with student membership in public schools and with previous NCES estimates of student membership in private schools, the 343,000 students in private prekindergarten and nursery schools that have a first grade or higher were included in the early estimate of 5.2 million private school students. In order to estimate the number of private school students in elementary and secondary schools in grades kindergarten through 12, these 343,000 students were removed from the estimate to yield an estimate of 4.9 million.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Early Estimates System.

Table 3.--Early estimates of number of teachers in private elementary and secondary education, by religious orientation and school level for grades K through 12: United States, fall 1988 through fall 1990

Characteristic	Fall 1988	Fall 1989	Fall 1990
Total	344,659	342,284	325,344
Religious orientation			
Catholic	154,714	142,492	137,420
Other religious	119,130	123,253	114,285
Nonsectarian	70,815	76,539	73,639
School level			
Elementary	171,115	155,692	154,227
Secondary	63,270	63,281	59,202
Combined	110,273	123,311	111,915

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Early Estimates System.

Table 4.--Early estimates of private school pupil/teacher ratio, by religious orientation and school level for grades K through 12: Fall 1988 through fall 1990

Characteristic	Fall 1988	Fall 1989	Fall 1990
Total	14.1	14.5	14.9
Religious orientation			
Catholic	18.0	18.1	18.9
Other religious	12.3	13.5	13.6
Nonsectarian	8.8	9.3	9.4
School level			
Elementary	16.5	17.4	17.3
Secondary	13.7	12.9	14.1
Combined	10.7	11.6	12.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Early Estimates System.

Table 5.--Early estimates of number of private high school graduates, by religious orientation and school level: School year 1987-88 through 1990-91

Characteristic	1987-1988	1988-1989	1989-1990	Projected 1990-1991
Total	299,946	323,968	267,616	232,660
Religious orientation				
Catholic	186,138	181,976	162,583	140,702
Other religious	65,438	87,855	57,087	50,837
Nonsectarian	48,371	54,137	47,946	41,121
School level				
Secondary	219,298	213,203	200,944	175,368
Combined	80,648	110,685	66,672	57,292

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Early Estimates System.

Table 6.--Membership in public elementary and secondary schools, by state for grades prekindergarten through 12: Fall 1986 to fall 1990

State	Actual fall 1986	Actual fall 1987	Actual fall 1988	Actual fall 1989	Estimated fall 1990
Total	39,837,459	40,007,207	40,188,690	40,526,372	*41,026,499
Alabama	733,735	729,934	724,751	723,343	**727,815
Alaska	107,973	105,678	106,481	109,280	*112,153
Arizona	534,538	572,421	574,890	607,615	589,504
Arkansas	437,438	437,036	436,387	434,960	**434,960
California	4,377,989	4,489,322	4,618,120	4,771,978	4,963,383
Colorado	558,415	560,236	560,081	562,755	**568,673
Connecticut	468,847	465,465	460,637	461,560	**468,900
Delaware	94,410	95,659	96,678	97,808	**99,658
District of Columbia	85,612	86,435	84,792	81,301	80,500
Florida	1,607,320	1,664,774	1,720,930	1,772,349	**1,861,538
Georgia	1,096,425	1,110,947	1,107,994	1,126,535	**1,151,687
Hawaii	164,640	166,160	167,488	169,493	**171,056
Idaho	208,391	212,444	214,615	214,932	**220,840
Illinois	1,825,185	1,811,446	1,794,916	1,797,355	1,803,000
Indiana	966,780	964,129	960,994	954,165	956,487
Iowa	481,286	480,826	478,200	478,486	**484,116
Kansas	416,091	421,112	426,596	430,864	436,250
Kentucky	642,778	642,696	637,627	630,688	**630,091
Louisiana	795,188	793,093	786,683	783,025	**779,161
Maine	211,752	211,817	212,902	213,775	**215,516
Maryland	675,747	683,797	688,947	698,806	**715,152
Massachusetts	833,918	825,320	823,428	825,588	829,119
Michigan	1,681,880	1,582,287	1,582,785	1,576,785	1,577,000
Minnesota	711,134	721,481	726,950	739,553	751,913
Mississippi	498,639	505,550	503,326	502,020	**500,122
Missouri	800,606	802,060	806,639	807,934	810,450
Montana	153,327	152,207	152,191	151,265	151,670
Nebraska	267,139	268,100	269,434	270,920	**274,141
Nevada	161,239	168,353	176,474	186,834	196,736
New Hampshire	163,717	166,045	169,413	171,696	**170,642
New Jersey	1,107,467	1,092,932	1,080,871	1,076,005	1,082,561
New Mexico	281,943	287,229	292,425	296,057	*299,734
New York	2,607,719	2,594,070	2,573,715	2,565,841	2,563,000
North Carolina	1,085,248	1,085,976	1,083,156	1,080,744	**1,082,558
North Dakota	118,703	119,004	118,809	117,816	**117,134
Ohio	1,793,508	1,793,431	1,778,544	1,767,159	**1,770,000
Oklahoma	593,183	584,212	580,426	578,580	**578,600
Oregon	449,307	455,895	461,752	472,394	**484,950
Pennsylvania	1,674,161	1,668,542	1,659,714	1,655,279	1,667,630
Rhode Island	134,126	134,061	133,585	135,729	**137,946
South Carolina	611,629	614,921	615,774	616,177	**621,776
South Dakota	125,458	126,817	126,910	127,329	**129,164
Tennessee	818,073	823,783	821,580	819,660	822,200
Texas	3,209,515	3,236,787	3,283,707	3,328,514	3,353,270
Utah	415,994	423,386	431,119	437,446	**444,732
Vermont	92,112	92,755	93,381	94,779	*96,198
Virginia	975,135	979,417	982,393	985,346	**998,463
Washington	761,428	775,755	790,918	810,232	**832,218
West Virginia	351,837	344,236	335,912	327,540	**323,021
Wisconsin	767,819	772,363	774,857	782,905	790,901
Wyoming	100,955	98,455	97,793	97,172	**98,210

Outlying Areas					
American Samoa	11,055	11,248	12,258	11,764	**12,443
Guam	25,676	25,942	26,493	26,041	**25,941
Northern Marianas	--	5,819	6,101	6,079	*6,123
Puerto Rico	679,489	672,837	651,225	661,693	**644,958
Virgin Islands	24,435	24,020	21,193	23,492	**21,675

--Data missing or not available.

*Imputed by the National Center for Education Statistics (NCES).

**Actual fall 1990 count.

NOTE: All fall 1990 numbers are state estimates unless otherwise indicated by single or double asterisks. Estimates are reported as of December 1990.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 7.--Number of teachers in public elementary and secondary schools, by state for grades prekindergarten through 12: School years 1986-87 to 1990-91

State	Actual 1986-87	Actual 1987-88	Actual 1988-89	Actual 1989-90	Estimated 1990-91
Total	*2,243,370	*2,278,813	2,323,213	*2,356,788	*2,390,411
Alabama	36,971	37,716	38,845	39,928	40,100
Alaska	6,448	6,113	6,272	6,492	*6,727
Arizona	29,104	30,707	31,617	32,134	31,799
Arkansas	24,944	25,572	27,730	25,585	*25,632
California	190,484	195,864	203,342	212,687	215,799
Colorado	30,704	31,168	31,398	31,954	32,600
Connecticut	34,252	35,050	35,502	35,308	**35,260
Delaware	5,883	5,951	5,898	5,968	**5,951
District of Columbia	5,984	6,232	5,936	6,055	6,646
Florida	91,969	95,857	100,370	104,127	**108,422
Georgia	57,881	62,280	59,916	61,487	65,067
Hawaii	7,291	7,684	8,737	8,866	8,956
Idaho	10,234	10,258	10,425	10,715	11,042
Illinois	104,609	105,217	105,097	106,183	106,320
Indiana	52,896	53,749	54,029	54,486	54,443
Iowa	30,958	30,873	30,327	30,423	**31,843
Kansas	27,064	27,317	28,122	28,727	29,086
Kentucky	34,507	35,239	35,788	35,731	**36,847
Louisiana	42,929	42,920	43,203	--	43,609
Maine	13,685	14,204	14,593	15,206	*15,358
Maryland	39,491	40,093	40,899	41,646	44,373
Massachusetts	58,066	59,517	60,068	57,040	56,678
Michigan	83,130	80,081	79,847	80,150	*80,307
Minnesota	40,957	42,132	42,750	43,101	43,771
Mississippi	26,219	--	27,283	27,591	**27,691
Missouri	48,902	49,632	50,693	51,227	51,226
Montana	9,818	9,659	9,626	9,627	9,540
Nebraska	17,748	17,713	18,003	18,464	**18,694
Nevada	7,908	8,348	8,699	9,175	9,642
New Hampshire	10,300	10,363	10,442	10,572	10,665
New Jersey	75,558	78,335	79,698	79,597	81,934
New Mexico	14,876	15,175	15,770	16,150	16,280
New York	168,940	170,236	172,807	174,610	174,500
North Carolina	58,103	59,771	61,933	63,160	64,331
North Dakota	7,779	7,632	7,731	7,809	**6,593
Ohio	98,894	99,641	101,021	101,627	**101,032
Oklahoma	35,041	34,515	35,116	35,631	36,600
Oregon	24,615	24,911	25,147	25,630	25,800
Pennsylvania	102,993	103,307	104,379	105,415	104,800
Rhode Island	8,916	8,934	9,216	9,369	**9,450
South Carolina	35,349	35,701	35,877	36,337	36,670
South Dakota	8,031	8,172	8,260	8,191	**8,333
Tennessee	41,103	42,082	42,657	42,824	44,491
Texas	185,310	187,159	196,616	199,397	206,399
Utah	17,752	17,124	17,602	17,611	18,300
Vermont	--	6,938	6,852	6,852	*6,967
Virginia	58,141	59,928	60,883	62,138	62,796
Washington	37,065	38,344	38,780	40,279	41,219
West Virginia	22,931	22,702	22,177	21,653	21,251
Wisconsin	47,039	47,721	48,541	49,329	52,378
Wyoming	7,201	6,798	6,693	6,697	**6,553

Outlying Areas					
American Samoa	--	656	674	659	679
Guam	1,430	1,407	1,403	1,622	1,501
Northern Marianas	--	305	334	358	*360
Puerto Rico	32,361	33,069	33,357	33,427	33,670
Virgin Islands	1,631	1,590	1,597	1,595	1,610

--Data missing or not available. National total includes imputation for missing data.

*Imputed by the National Center for Education Statistics (NCES).

**Actual fall 1990 count.

NOTE: All 1990-91 numbers are state estimates unless otherwise indicated by single or double asterisks. Estimates are reported as of December 1990.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 8.--Number of public high school graduates, by state: School years 1986-87 to 1990-91

State	Actual 1986-87	Actual 1987-88	Actual 1988-89	Estimated 1989-90	Estimated 1990-91
Total	*2,433,778	2,500,020	*2,449,852	*2,324,035	*2,253,043
Alabama	42,463	43,799	43,437	**36,555	38,663
Alaska	5,692	5,907	5,631	*5,437	*5,389
Arizona	29,549	29,777	31,638	32,103	32,100
Arkansas	27,101	27,776	28,162	**27,343	26,587
California	237,414	249,617	244,629	229,353	228,319
Colorado	34,200	35,977	35,520	**32,967	31,800
Connecticut	31,141	32,383	30,862	30,000	29,830
Delaware	5,895	5,963	6,104	**6,111	6,230
District of Columbia	3,842	3,882	3,565	**3,626	3,200
Florida	82,184	89,206	90,759	**89,000	89,276
Georgia	60,018	61,765	61,937	**56,605	60,426
Hawaii	10,371	10,575	10,404	*9,905	*9,578
Idaho	12,243	12,425	12,520	**11,642	11,594
Illinois	116,075	119,090	116,660	**108,119	102,353
Indiana	60,364	64,037	63,571	**59,415	56,520
Iowa	34,580	35,218	34,294	**31,780	29,085
Kansas	26,933	27,036	26,848	**25,108	24,094
Kentucky	36,948	39,484	38,883	**38,693	36,200
Louisiana	39,084	39,058	37,198	**35,899	38,803
Maine	13,692	13,808	13,857	**13,323	12,754
Maryland	46,107	47,175	45,791	**41,566	39,110
Massachusetts	61,010	59,515	--	54,954	50,866
Michigan	107,725	106,151	101,784	93,000	*89,122
Minnesota	53,533	54,645	53,122	48,502	45,980
Mississippi	26,201	27,896	24,241	**25,039	22,535
Missouri	50,840	51,316	51,968	48,457	46,297
Montana	10,073	10,311	10,490	**9,375	9,000
Nebraska	18,129	18,300	18,690	**18,556	*17,664
Nevada	--	9,404	9,464	**9,462	9,622
New Hampshire	10,796	11,685	11,340	**10,357	10,191
New Jersey	79,376	80,863	76,263	68,445	64,460
New Mexico	15,701	15,868	15,481	**14,884	14,304
New York	163,765	165,379	154,580	142,400	133,800
North Carolina	65,421	67,836	69,300	**64,521	62,005
North Dakota	7,821	8,432	8,077	**7,690	7,960
Ohio	121,121	124,503	125,036	**114,513	106,921
Oklahoma	35,514	36,145	36,773	**35,606	36,000
Oregon	27,165	28,058	26,903	**25,564	25,100
Pennsylvania	121,219	124,376	118,921	109,630	103,200
Rhode Island	8,627	8,684	8,554	**7,708	7,523
South Carolina	36,000	36,113	37,020	34,600	33,000
South Dakota	8,074	8,415	8,181	**7,650	6,649
Tennessee	44,731	47,904	42,266	47,500	*44,824
Texas	168,430	171,436	176,951	**182,057	184,060
Utah	20,930	22,226	22,934	**22,511	23,676
Vermont	5,968	6,177	5,963	*5,694	*5,436
Virginia	65,008	65,688	65,004	**61,268	58,154
Washington	49,873	51,754	49,425	46,872	45,086
West Virginia	22,401	22,406	22,886	**21,854	21,256
Wisconsin	56,872	58,428	54,994	**54,994	50,700
Wyoming	5,933	6,148	6,079	**5,823	5,741

Outlying Areas					
American Samoa	647	633	569	**560	*535
Guam	898	898	936	**1,033	1,112
Northern Marianas	289	285	232	*219	*207
Puerto Rico	30,137	31,832	31,617	*29,049	27,877
Virgin Islands	1,170	1,026	1,025	**958	1,026

--Data missing or not available. National total includes imputation for missing data.

*Imputed by the National Center for Education Statistics (NCES).

**Actual count.

NOTE: All 1989-90 and 1990-91 numbers are state estimates unless otherwise indicated by single or double asterisks. Estimates are reported as of December 1990.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 9.--Revenues for public elementary and secondary education, by state for grades
prekindergarten through 12: Fiscal years 1987 to 1991
(In thousands of dollars)

State	Actual FY 87	Actual FY 88	Actual FY 89	Estimated FY 90	Estimated FY 91
Total	*\$158,827,473	\$169,555,933	\$191,210,310	**\$203,473,721	**\$217,789,669
Alabama	2,070,639	2,171,704	2,552,053	2,358,169	2,604,619
Alaska	731,150	777,086	864,292	*936,074	*1,015,678
Arizona	2,106,564	2,361,006	2,589,909	2,810,611	2,929,000
Arkansas	1,111,619	1,211,164	1,473,751	*1,550,182	*1,638,930
California	17,219,479	17,886,769	22,208,938	*24,218,225	*26,631,719
Colorado	2,395,723	2,443,132	2,477,978	2,533,600	2,533,600
Connecticut	2,606,381	2,890,957	3,116,060	3,290,000	3,350,000
Delaware	429,392	464,318	500,642	584,325	623,857
District of Columbia	439,795	484,717	521,094	**558,683	558,364
Florida	6,610,567	7,466,975	8,396,809	**9,560,363	10,298,447
Georgia	3,708,383	3,715,388	4,693,011	5,154,952	5,960,680
Hawaii	592,815	623,136	682,202	720,678	761,325
Idaho	544,525	580,432	651,165	**706,939	781,830
Illinois	6,025,415	6,452,386	8,023,607	8,923,607	9,000,000
Indiana	3,563,524	3,825,865	4,372,707	4,678,796	5,006,312
Iowa	1,846,332	1,958,184	2,072,991	2,176,640	2,285,472
Kansas	1,681,665	1,773,743	1,920,927	2,064,997	2,159,987
Kentucky	1,656,267	1,819,222	2,071,522	2,158,526	2,590,231
Louisiana	2,416,437	2,541,690	2,787,869	2,778,810	2,883,610
Maine	779,817	886,378	1,027,134	1,136,010	1,249,611
Maryland	3,223,020	3,464,182	3,804,336	4,257,050	4,588,028
Massachusetts	4,103,291	4,485,247	4,847,275	4,993,294	4,993,000
Michigan	7,242,874	7,650,004	7,700,991	8,163,051	8,489,573
Minnesota	3,101,661	3,298,933	3,665,226	**3,997,625	4,253,414
Mississippi	1,076,279	1,135,053	1,440,070	**1,547,264	1,624,627
Missouri	2,749,630	3,069,758	3,442,018	3,527,916	3,808,164
Montana	632,958	636,045	662,104	685,000	717,000
Nebraska	1,005,585	1,034,017	1,214,451	*1,288,695	*1,378,671
Nevada	595,821	660,290	757,861	**843,345	890,779
New Hampshire	647,069	748,214	803,925	1,103,285	1,277,935
New Jersey	6,592,990	7,250,514	7,992,886	*8,397,023	*8,931,840
New Mexico	1,008,277	1,028,708	1,142,068	*1,220,209	*1,306,088
New York	15,757,034	17,094,990	18,764,256	18,900,000	20,500,000
North Carolina	3,473,998	3,789,548	4,279,584	4,969,607	5,602,642
North Dakota	421,752	433,358	466,586	489,915	509,512
Ohio	6,293,631	6,611,187	8,222,796	**8,652,001	9,084,601
Oklahoma	1,727,848	1,750,530	2,127,862	2,203,000	2,428,000
Oregon	1,863,501	1,942,303	2,315,476	2,304,000	2,480,000
Pennsylvania	8,259,284	8,781,585	9,154,167	9,703,000	10,286,000
Rhode Island	630,222	682,486	753,042	**818,537	892,206
South Carolina	1,987,657	2,175,842	2,453,008	*2,590,386	*2,763,570
South Dakota	417,550	434,761	468,658	**471,966	495,564
Tennessee	2,063,971	2,233,442	2,731,861	2,680,081	2,843,968
Texas	11,900,931	12,612,869	13,110,312	14,192,632	15,108,911
Utah	1,153,356	1,183,399	1,203,017	1,240,000	1,280,000
Vermont	388,013	493,874	507,918	*544,037	*583,794
Virginia	--	3,934,323	4,636,663	5,169,879	5,428,373
Washington	3,118,233	3,218,732	3,775,985	**3,616,311	4,048,543
West Virginia	1,237,866	1,268,654	1,290,156	1,408,053	1,451,261
Wisconsin	3,303,237	3,552,430	3,904,897	4,014,653	4,290,232
Wyoming	609,195	568,402	566,196	581,700	590,100
Outlying Areas					
American Samoa	20,479	21,047	24,385	**22,129	24,982
Guam	92,078	88,106	104,724	**88,177	88,177
Northern Marianas	14,908	17,876	--	--	--
Puerto Rico	936,115	942,179	1,096,135	1,165,466	1,160,449
Virgin Islands	100,194	106,533	132,329	129,673	143,024

--Data missing or not available. National total includes imputation for missing data.

*Imputed by the National Center for Education Statistics (NCES).

**Actual count.

NOTE: All FY90 and FY91 numbers are state estimates unless otherwise indicated by single or double asterisks. Estimates are reported as of December 1990. The fiscal survey was revised in FY89.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 10.--Current expenditures for public elementary and secondary education, by state for grades prekindergarten through 12: Fiscal years 1987 to 1991
(In thousands of dollars)

State	Actual FY 87	Actual FY 88	Actual FY 89	Estimated FY 90	Estimated FY 91
Total	\$146,589,146	\$157,097,951	\$172,932,385	*\$185,249,661	*\$198,864,363
Alabama	1,775,997	1,873,390	2,188,020	2,234,432	2,452,406
Alaska	789,015	756,577	739,020	*805,828	*877,038
Arizona	1,836,908	2,002,395	2,143,148	2,416,350	2,518,000
Arkansas	1,118,904	1,211,156	1,319,370	*1,397,212	*1,481,732
California	16,512,868	17,402,063	19,370,242	*21,266,023	*23,457,031
Colorado	2,129,964	2,172,563	2,266,667	2,380,000	2,449,200
Connecticut	2,416,708	2,748,567	2,984,542	3,110,000	3,290,000
Delaware	418,116	440,631	479,327	562,136	593,317
District of Columbia	441,135	489,357	584,035	546,248	570,265
Florida	5,650,083	6,288,977	7,245,515	**8,287,905	8,897,191
Georgia	3,451,882	3,549,038	4,006,069	4,261,718	4,657,999
Hawaii	576,749	608,264	643,319	680,182	719,156
Idaho	513,011	532,274	571,159	**646,021	731,870
Illinois	6,463,564	6,923,298	7,655,153	8,664,858	8,968,128
Indiana	3,106,616	3,330,525	3,779,468	4,044,031	4,327,113
Iowa	1,725,428	1,859,173	1,925,623	2,002,648	2,102,780
Kansas	1,486,814	1,568,041	1,712,260	1,840,680	1,925,351
Kentucky	1,583,158	1,741,799	1,918,741	1,999,328	2,399,194
Louisiana	2,260,393	2,289,241	2,468,307	2,654,471	2,759,271
Maine	760,446	839,860	921,931	1,019,656	1,121,621
Maryland	2,845,404	3,128,165	3,505,018	3,722,830	4,059,187
Massachusetts	3,744,131	4,098,062	4,522,119	4,554,406	4,554,000
Michigan	6,427,556	6,913,261	7,493,266	7,942,861	8,340,005
Minnesota	2,818,390	2,981,209	3,282,296	3,465,711	3,774,159
Mississippi	1,112,535	1,221,560	1,372,290	**1,457,123	1,529,979
Missouri	2,515,846	2,747,234	3,096,666	3,066,000	3,271,116
Montana	583,861	590,226	592,454	635,000	679,000
Nebraska	948,149	995,235	1,105,009	*1,180,517	*1,266,813
Nevada	513,014	555,272	615,161	**830,859	879,445
New Hampshire	589,850	677,507	733,230	932,181	1,059,890
New Jersey	6,099,473	6,621,860	7,309,147	*7,730,812	*8,248,418
New Mexico	865,789	916,305	975,552	*1,049,372	*1,126,672
New York	14,724,687	16,073,392	17,127,584	17,900,000	19,600,000
North Carolina	3,193,337	3,424,194	3,892,971	4,021,104	4,099,566
North Dakota	374,941	385,427	431,814	483,631	502,977
Ohio	6,111,461	6,446,903	7,425,194	**8,067,933	8,519,737
Oklahoma	1,707,396	1,692,283	1,833,743	1,819,000	2,044,000
Oregon	1,747,125	1,944,657	2,123,241	2,174,000	2,389,000
Pennsylvania	7,176,886	7,679,986	8,597,355	9,199,000	9,843,000
Rhode Island	608,318	663,800	736,942	**809,345	882,186
South Carolina	1,827,266	1,932,502	2,118,732	*2,252,570	*2,410,539
South Dakota	368,266	389,436	427,522	**452,611	475,241
Tennessee	2,167,026	2,352,183	2,668,341	2,443,076	2,597,356
Texas	10,152,521	10,791,854	11,761,447	12,505,272	13,480,942
Utah	932,740	974,666	1,040,104	1,070,000	1,110,000
Vermont	378,264	456,992	485,226	*523,258	*563,218
Virginia	3,444,952	3,793,475	4,151,050	4,498,761	4,723,699
Washington	2,808,636	3,005,980	3,204,265	**3,677,921	4,111,028
West Virginia	1,229,089	1,231,966	1,202,486	1,365,420	1,410,000
Wisconsin	3,086,878	3,318,247	3,688,311	4,119,609	4,508,826
Wyoming	489,825	466,921	491,930	499,700	509,700
Outlying Areas					
American Samoa	19,497	20,186	22,314	**22,273	*23,977
Guam	78,278	76,359	94,368	**86,325	86,325
Northern Marianas	15,714	19,694	--	--	--
Puerto Rico	872,050	935,392	1,030,387	1,091,714	*1,146,612
Virgin Islands	97,585	89,217	111,750	115,409	127,291

--Data missing or not available.

*Imputed by the National Center for Education Statistics (NCES).

**Actual count.

NOTE: All FY90 and FY91 numbers are state estimates unless otherwise indicated by single or double asterisks. Estimates are reported as of December 1990. The fiscal survey was revised in FY89.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 11.--Student membership and number of teachers, and estimates of revenues, expenditures, and pupil/teacher ratio, for public elementary and secondary schools, by state for grades prekindergarten through 12: School year 1989-90/Fiscal year 1990

State	Actual		Estimated				
	Membership	Number of teachers	Revenues (in thousands)	Current expenditures (in thousands)	Pupil/teacher ratio	Per pupil revenue	Per pupil expenditure
Total	40,526,372	*2,356,788	*\$203,473,721	*\$185,249,661	*17.2	*\$5,020	*\$4,571
Alabama	723,343	39,928	2,358,169	2,234,432	18.1	3,260	3,089
Alaska	109,280	6,492	*936,074	*805,828	16.8	*8,565	*7,373
Arizona	607,615	32,134	2,810,611	2,416,350	18.9	4,626	3,977
Arkansas	434,960	25,585	*1,550,182	*1,397,212	17.0	*3,563	*3,212
California	4,771,978	212,687	*24,218,225	*21,266,023	22.4	*5,075	*4,456
Colorado	562,755	31,954	2,533,600	2,380,000	17.6	4,502	4,229
Connecticut	461,560	35,308	3,290,000	3,110,000	13.1	7,128	6,738
Delaware	97,808	5,968	584,325	562,136	16.4	5,974	5,747
District of Columbia	81,301	6,055	**558,683	546,248	13.4	6,872	6,719
Florida	1,772,349	104,127	**9,560,363	**8,287,905	17.0	5,394	4,676
Georgia	1,126,535	61,487	5,154,952	4,241,718	18.3	4,576	3,765
Hawaii	169,493	8,866	720,678	680,182	19.1	4,252	4,013
Idaho	214,932	10,715	**706,959	**646,021	20.1	3,289	3,006
Illinois	1,797,355	106,183	8,923,607	8,664,858	16.9	4,965	4,821
Indiana	954,165	54,486	4,678,796	4,044,031	17.5	4,904	4,238
Iowa	478,486	30,423	2,176,640	2,002,648	15.7	4,549	4,185
Kansas	430,864	28,727	2,064,997	1,840,680	15.0	4,793	4,272
Kentucky	630,688	35,731	2,158,526	1,999,328	17.7	3,422	3,170
Louisiana	783,025	--	2,778,810	2,654,471	17.9	3,549	3,390
Maine	213,775	15,206	1,156,010	1,019,656	14.1	5,314	4,770
Maryland	698,806	41,646	4,257,050	3,722,880	16.8	6,092	5,327
Massachusetts	825,588	59,040	4,993,294	4,554,406	14.0	6,048	5,517
Michigan	1,576,785	80,150	8,163,051	7,942,861	19.7	5,177	5,037
Minnesota	739,553	43,101	**3,997,625	3,465,711	17.2	5,405	4,686
Mississippi	502,020	27,591	**1,547,264	**1,457,123	18.2	3,082	2,903
Missouri	807,934	51,227	3,527,916	3,066,000	15.8	4,367	3,795
Montana	151,265	9,627	685,000	635,000	15.7	4,528	4,198
Nebraska	270,920	18,464	*1,288,695	*1,180,517	14.7	*4,756	*4,357
Nevada	186,834	9,175	**843,345	**830,859	20.4	4,514	4,447
New Hampshire	171,696	10,572	1,103,285	932,181	16.2	6,426	5,429
New Jersey	1,076,005	79,597	*8,397,023	*7,730,812	13.5	*7,803	*7,184
New Mexico	296,057	16,150	*1,220,209	*1,049,372	18.3	*4,122	*3,544
New York	2,565,841	174,610	18,900,000	17,900,000	14.7	7,366	6,976
North Carolina	1,080,744	63,160	4,969,607	4,021,104	17.1	4,598	3,721
North Dakota	117,816	7,809	489,915	483,631	15.1	4,158	4,105
Ohio	1,767,159	101,627	**8,652,001	**8,067,933	17.4	4,896	4,565
Oklahoma	578,580	35,631	2,203,000	1,819,000	16.2	3,808	3,144
Oregon	472,394	25,630	2,304,000	2,174,000	18.4	4,877	4,602
Pennsylvania	1,655,279	105,415	9,703,000	9,199,000	15.7	5,862	5,557
Rhode Island	135,729	9,369	**818,537	**809,345	14.5	6,031	5,963
South Carolina	616,177	36,337	*2,590,386	*2,252,570	17.0	*4,203	*3,655
South Dakota	127,329	8,191	**471,966	**452,611	15.5	3,707	3,555
Tennessee	819,660	42,824	2,680,081	2,443,076	19.1	3,270	2,981
Texas	3,328,514	199,397	14,192,632	12,505,272	16.7	4,264	3,757
Utah	437,446	17,611	1,240,000	1,070,000	24.8	2,835	2,446
Vermont	94,779	6,852	*544,037	*523,258	13.8	*5,740	*5,520
Virginia	985,344	62,138	5,169,879	4,498,761	15.9	5,247	4,566
Washington	810,232	40,279	**3,616,311	**3,677,921	20.1	4,463	4,539
West Virginia	327,540	21,653	1,408,053	1,365,420	15.1	4,299	4,169
Wisconsin	782,905	49,329	4,014,653	4,119,609	15.9	5,128	5,262
Wyoming	97,172	6,697	581,700	499,700	14.5	5,986	5,142
Outlying Areas							
American Samoa	12,258	659	**22,129	**22,273	18.6	1,805	1,817
Guam	26,493	1,622	**88,177	**86,325	16.3	3,328	3,258
Northern Marianas	6,101	358	--	--	17.0	--	--
Puerto Rico	651,225	33,427	1,165,466	1,091,714	19.5	1,790	1,676
Virgin Islands	21,193	1,595	129,673	115,409	13.3	6,119	5,446

--Data missing or not available. National total includes imputation for missing data.

*Imputed by the National Center for Education Statistics (NCES).

**Actual count.

NOTE: All numbers for revenues and expenditures are state estimates unless otherwise indicated by single or double asterisks. All numbers for membership and teachers are actual counts unless otherwise noted. Estimates for revenues and expenditures are reported as of December 1990.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

Table 12.--Estimated membership, number of teachers, revenues, expenditures, and pupil/teacher ratio, for public elementary and secondary schools, by state for grades prekindergarten through 12: School year 1990-91/ Fiscal year 1991

State	Membership	Number of teachers	Revenues (in thousands)	Current expenditures (in thousands)	Pupil/teacher ratio	Per pupil revenue	Per pupil expenditure
Total	*41,026,499	*2,390,411	*\$217,789,669	*\$198,864,363	*17.2	*\$5,309	*\$4,847
Alabama	**727,815	40,100	2,604,619	2,452,406	18.2	3,579	3,370
Alaska	*112,153	*6,727	*1,015,678	*877,038	*16.7	*9,056	*7,820
Arizona	589,504	31,799	2,929,000	2,518,000	18.5	4,969	4,271
Arkansas	**434,960	*25,632	*1,638,930	*1,481,732	*17.0	*3,768	*3,407
California	4,963,383	215,799	*26,631,719	*23,457,031	23.0	*5,366	*4,726
Colorado	**568,673	32,600	2,533,600	2,449,200	17.4	4,455	4,307
Connecticut	**468,900	**35,260	3,350,000	3,290,000	13.3	7,144	7,016
Delaware	**99,658	**5,951	623,857	593,317	16.7	6,260	5,954
District of Columbia	80,500	6,646	558,364	570,265	12.1	6,936	7,084
Florida	**1,861,538	**108,422	10,298,647	8,897,191	17.2	5,532	4,779
Georgia	**1,151,687	65,067	5,960,680	4,657,999	17.7	5,176	4,045
Hawaii	**171,056	8,956	761,325	719,156	19.1	4,451	4,204
Idaho	**220,840	11,042	781,830	731,870	20.0	3,540	3,314
Illinois	1,803,000	106,320	9,000,000	8,968,128	17.0	4,992	4,974
Indiana	956,487	54,443	5,006,312	4,327,113	17.6	5,234	4,524
Iowa	**484,116	**31,843	2,285,472	2,102,780	15.2	4,721	4,344
Kansas	436,250	29,086	2,159,987	1,925,351	15.0	4,951	4,413
Kentucky	**630,091	**36,847	2,590,231	2,399,194	17.3	4,111	3,808
Louisiana	**779,161	43,609	2,883,610	2,759,271	17.9	3,701	3,541
Maine	**215,516	*15,358	1,249,611	1,121,621	*14.0	5,798	5,204
Maryland	**715,152	44,373	4,588,028	4,059,187	16.1	6,415	5,676
Massachusetts	329,119	56,678	4,993,000	4,554,000	14.6	6,022	5,493
Michigan	1,577,000	*80,307	8,489,573	8,340,005	*19.6	5,383	5,289
Minnesota	751,913	43,771	4,253,414	3,776,159	17.2	5,657	5,019
Mississippi	**500,122	**27,691	1,624,627	1,529,979	18.1	3,248	3,059
Missouri	810,450	51,226	3,808,164	3,271,116	15.8	4,699	4,036
Montana	151,470	9,540	717,000	679,000	15.9	4,727	4,477
Nebraska	**274,141	**18,694	*1,378,671	*1,266,813	14.7	*5,029	*4,621
Nevada	196,746	9,642	890,779	879,445	20.4	4,528	4,470
New Hampshire	**170,642	10,665	1,277,935	1,059,890	16.0	7,489	6,211
New Jersey	1,082,561	81,934	*8,931,840	*8,248,418	13.2	*8,251	*7,619
New Mexico	*299,734	16,280	*1,306,088	*1,126,672	*18.4	*4,357	*3,759
New York	2,563,000	174,500	20,500,000	19,600,000	14.7	7,998	7,647
North Carolina	**1,082,558	64,331	5,602,642	4,099,566	16.8	5,175	3,787
North Dakota	**117,134	**6,593	509,512	502,977	17.8	4,350	4,294
Ohio	**1,770,000	**101,032	9,084,601	8,519,737	17.5	5,133	4,813
Oklahoma	**578,600	36,600	2,428,000	2,044,000	15.8	4,196	3,533
Oregon	**484,950	25,800	2,480,000	2,385,000	18.8	5,114	4,918
Pennsylvania	1,667,630	104,800	10,286,000	9,843,000	15.9	6,168	5,902
Rhode Island	**137,946	**9,450	892,206	882,186	14.6	6,468	6,395
South Carolina	**621,776	36,670	*2,763,570	*2,410,539	17.0	*4,445	*3,877
South Dakota	**129,164	**8,333	495,564	475,241	15.5	3,837	3,679
Tennessee	822,200	44,491	2,843,968	2,597,356	18.5	3,459	3,159
Texas	3,353,270	206,399	15,108,911	13,480,942	16.2	4,506	4,020
Utah	**444,732	18,300	1,280,000	1,110,000	24.3	2,878	2,496
Vermont	*96,198	*6,967	*583,794	*563,218	*13.8	*6,069	*5,855
Virginia	**998,463	62,796	5,428,373	4,723,699	15.9	5,437	4,731
Washington	**832,218	41,219	4,048,543	4,111,028	20.2	4,865	4,940
West Virginia	**323,021	21,251	1,451,261	1,410,000	15.2	4,493	4,365
Wisconsin	790,901	52,378	4,290,232	4,508,826	15.1	5,424	5,701
Wyoming	**98,210	**6,553	590,100	509,700	15.0	6,009	5,190

Outlying Areas							
American Samoa	**12,443	679	24,982	*23,977	18.3	2,008	*1,927
Guam	**25,941	1,501	88,177	86,325	17.3	3,399	3,328
Northern Marianas	*6,123	*360	--	--	*17.0	--	--
Puerto Rico	**644,958	33,670	1,160,449	*1,146,612	19.2	1,799	*1,778
Virgin Islands	**21,675	1,610	143,024	127,291	13.5	6,599	5,873

--Data missing or not available.

*Imputed by the National Center for Education Statistics (NCES).

**Actual count.

NOTE: All numbers are state estimates unless otherwise indicated by single or double asterisks.

SOURCE: U.S. Department of Education, NCES, Common Core of Data.

TECHNICAL NOTES

Public School Early Estimates Methodology

In mid-November 1990, survey forms were sent out to each state education agency. States were asked to either mail or fax the completed form. Those which had not responded by December were contacted by telephone. All data were checked for reasonableness against prior years' reports, and followup calls were made to resolve any questions.

Missing values for student membership were imputed by multiplying membership data from the 1989-90 school year by one plus the rate of growth experienced in student membership from 1988-89 to 1989-90.

Missing values for other data elements were imputed by state, using ratios of the missing quantity to the student membership value, and then adjusting this number by the national average percent change from the previous year for this element. For example, the procedure for imputing the number of teachers in the 1990-91 school year involved: (1) calculating the teacher-to-student ratio in the given state in 1989-90; (2) calculating the total growth rate in teacher-to-student ratios for reporting states from 1989-90 to 1990-91; and (3) multiplying the state student membership for the 1990-91 school year by the ratio calculated in step 1, and then multiplying this product by the growth rate calculated in step 2. Equivalent procedures were used for imputing numbers of high school graduates, revenues, and current expenditures. When a national total is imputed as state values, that national total is reported as an imputed number.

The "Fiscal Survey" instrument was revised for fiscal year 1989. The difference between the revised form and the version it replaced accounts for some of the differences between figures reported before fiscal year 1989 and figures for fiscal year 1989 and subsequent years.

Accuracy of Estimates

Past years' data provide an indication of the differences between early estimates and final data. The early estimate of public school membership for fall 1989 was 40,608,342, which represented an increase of 1.04 percent from the fall 1988 value. The actual increase, based on the final count of 40,526,372 was 0.84 percent. Last year's estimate indicated that there were 2,359,941 public school teachers for 1989-90, implying an increase of 1.58 percent over the previous year. Actual increase of public school teachers over that year was 1.45 percent. For number of public school graduates, the estimated decrease from

1987-88 to 1988-89 was 0.16 percent, while the actual decrease was 2.01 percent. Revenues were estimated to increase 7.20 percent from 1987-88 to 1988-89, while the actual increase was 12.77 percent. The estimated increase in current expenditures, from 1987-88 to 1988-89, was 7.29 percent, as compared with an actual increase of 10.08 percent. The same methodology used for estimating these data last year was used to generate the estimates for this report.

Private School Early Estimates Methodology

Early in September 1990, questionnaires were mailed to a national probability sample of 1,167 private elementary and secondary schools. Telephone collection of the data began in early October, and was completed in mid-October. The overall response rate was 98 percent: 1,098 of the 1,119 eligible schools. Some 48 of the original 1,167 schools in the sample were determined to be out-of-scope¹. After adjusting for out-of-scope-schools the weighted estimate of private schools is 24,553.

The sampling frame used for the survey was composed of two non-overlapping frames: the NCES Private School Survey list frame of approximately 20,584 eligible schools (the universe list), and an area frame developed by the Census Bureau, consisting of 923 schools identified in 123 sampled geographic areas (Primary Sampling Units or PSUs). The list frame was stratified by level of school (elementary, secondary, combined, other, and unknown) and religious orientation (Catholic, other religious, and nonsectarian); within strata, schools were further sorted by Census region and by student membership size within region. Each school in the sorted frame was assigned a sampling measure of size equal to the square root of student membership.

The area frame is constructed from a sample survey designed to capture those schools not included in the universe list. The 923 schools identified in the sampled areas are weighted to a national estimate of the number of private schools not included in the universe list. This weighted number is then added to the universe count to produce an estimate of the total number of private schools in the United States. For the early estimate, the area frame was stratified by level of school (elementary, secondary, and other) and religious orientation (Catholic, other religious, and nonsectarian). Within strata, schools were further sorted by FIPS (Federal Information Processing Standards) state code, by FIPS county code within states, and by student membership within counties. Samples were selected with

¹An out-of-scope school is one that does not serve any of grades 1 through 12 or is located in a private home that is used as a family residence.

probabilities proportionate to size from each stratum. The measure of size used for this purpose was the square root of student membership multiplied by the inverse of the probability of selection of the PSU in which the school is located.

A new estimation procedure was used to produce the 1990 private school early estimates. This procedure used the estimates obtained from the entire universe of private schools in the Private School Survey of 1989 and adjusted those estimates for the change reflected in the 1990 early estimates data collections. The steps of this procedure were: 1) obtain Private School Survey (PSS) universe estimates for the data elements desired; 2) adjust PSS estimates for partial and total nonresponse; 3) collect 1990 early estimates data for the data elements; 4) weight the early estimate sample to reflect the sampling rates (probability of selection) and to adjust for total nonresponse separately by the sampling strata and by enrollment; 5) measure the change for these data elements between the PSS and the early estimates data collection for those schools that were in the early estimates sample and had the appropriate data for both 1989 and 1990; and, 6) apply the change calculated in step 5 to the data from all of the schools in the PSS universe. Numbers in the tables and text have been rounded. Ratios have been calculated on the actual estimates rather than the rounded values. The 1990 early estimates were adjusted to account for both total and partial nonresponse.

Sample survey data, such as the private school estimates data, are subject to error due to variations in sampling. The standard error is a measure of the variability due to sampling when estimating a statistic. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, for the ratio of private school pupils to private school teachers in 1990-91, the estimate for all private schools is 14.9 and the standard error is 0.14. The 95 percent confidence interval for this statistic extends from $14.9 - (0.14 \text{ times } 1.96)$ to $14.9 + (0.14 \text{ times } 1.96)$ or from 14.6 to 15.2. The standard error for the 5,195,625 students in private schools is 108,023.6. The 95 percent confidence interval for this statistic extends from 4,983,899 to 5,407,351.

Estimates of standard errors were computed using a variance estimation procedure for complex sample survey data known as balanced repeated replication. Table 13 presents standard errors for some key statistics for private schools.

Survey estimates are also subject to errors of reporting and errors made in the collection and processing of the data. These errors, called nonsampling errors, can sometimes bias the data. While general sampling theory can be used to estimate the sampling variability of an estimate, nonsampling errors are not easy to measure and usually require either an experiment to be conducted as part of the data collection procedure or use of data external to the study.

Nonsampling errors may include such things as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. The survey instrument used in the 1990-91 private school early estimates data collection was revised as a result of the experiences of the 1989-90 private school early estimates data collection. The content of the survey was developed in consultation with representatives of private school associations attending NCES meetings for users of private school data. The questionnaire and instructions were reviewed extensively by NCES staff. Manual and machine editing of the questionnaires was conducted to check the data for accuracy and consistency. Data were keyed with 100 percent verification.

Undercoverage in the list and area frames is another possible source of nonsampling error. The area frame was used to complement the list frame through the identification of schools missing from the list frame. As the private school early estimates system and the Private School Survey (the universe data collection) system develop, both the list and area frames will be updated periodically.

Reliability of Estimates

Comparisons of the NCES private school estimates from 1990-91 with those from 1989-90 show similarities in the estimates for the number of private school students, teachers, and graduates (from the previous school year) in the aggregate, as well as within each school level and religious orientation group. For example, the confidence interval on the 1989-90 estimate of 4,955,771 private school students ranged from 4,724,823 to 5,186,720 and the confidence interval of the 1990-91 estimate of 5,195,625 ranges from 4,983,899 to 5,407,351. Similarly, the confidence interval on the 1989-90 estimate of 342,284 private school teachers ranged from 325,357 to 359,211 and the confidence interval on the 1990-91 estimate of 325,344 ranges from 310,955 to 339,733.

The NCES early estimate for the total number of students in private schools was compared with the most recent Census sample survey estimate of total enrollment (from the October Supplement

of the Current Population Survey (CPS), "School Enrollment-- Social and Economic Characteristics of students: October 1989," Current Population Reports, Series P-20, U.S. Department of Commerce, forthcoming). This comparison showed that the two estimates are different. In particular, the CPS estimate of the number of private school students in grades kindergarten through 12 in the 1989-90 school year is 4.1 million, compared with the 5.0 million students reported in the NCES 1989-90 early estimates. (The confidence interval on the CPS estimates ranges from 3.9 to 4.3 million and the confidence interval of the early estimates private school membership count ranges from 4.8 to 5.2 million.)

Comparisons of NCES early estimates for Catholic schools with the National Catholic Educational Association (NCEA) universe data for the 1989-90 school year show similarities in these two independent data sources ("United States Catholic Elementary and Secondary Schools, 1989-90," National Catholic Educational Association, 1990). The NCEA teacher count of 136,900 is based solely on full-time teachers, while the estimate reported here (137,420) includes part-time teachers in the computation of full-time equivalents. Despite this definitional difference, the two values are similar (the confidence interval of the NCES estimate ranges from 131,967 to 142,873). The NCEA estimate of 141,775 high school graduates in 1989-90 is comparable to the NCES estimate of 162,583. (The confidence interval for the NCES estimate is 135,147 to 190,019.)

The number of students reported in membership in Catholic schools is different in the two reports, with a membership count of 2,498,870 from NCEA and an NCES early estimates membership count of 2,603,980. The confidence interval on the NCES early estimate of Catholic school student membership ranges from 2,515,497 to 2,692,462.

The definitional difference in the number of teachers and the difference in the reported number of students may affect the pupil-to-teacher ratio. In fact, the pupil-to-teacher ratio is different in the two reports. The NCEA 1989-90 school year pupil-to-teacher ratio of 18.3 is different from the NCES 1990-91 early estimate of 18.9 for Catholic schools (the confidence interval on the NCES pupil-to-teacher ratio in Catholic schools ranges from 18.5 to 19.3).

Definitions

Membership is the unduplicated count of students on the roll of the school or local education agency on the school day closest to October 1; students who withdrew from school have been removed from the count. Unless otherwise specified, membership includes all students in prekindergarten through grade 12.

Teachers are professional staff who provide instruction to students and maintain daily student attendance figures for a group or class at any of the levels from prekindergarten through grade 12. Numbers of private school teachers include those for kindergarten through grade 12 only. Teacher numbers are reported in full-time equivalents (FTE). FTE are computed by dividing the amount of time employed in instruction by the time normally required of a full-time position.

Pupil-to-teacher ratio is the number of students divided by the number of teachers. The pupil-to-teacher ratio for public schools reported here represents an average across all levels. There is, however, variability across elementary and secondary grade levels and across programs such as special education, and gifted and talented.

Graduates are defined as students receiving a regular high school diploma during the school year, including summer graduates. Early estimates are provided for the recent graduates from the 1989-90 school year, with projections for the 1990-91 school year.

Elementary schools enroll students in at least one of grades 1 through 6, and have no students in grades 9 through 12.

Secondary schools enroll students in at least one of grades 7 through 12, and have no students in grades 1 through 6.

Combined schools enroll students in at least one of grades 1 through 6 and at least one of grades 9 through 12, or are ungraded.

Revenues are defined as additions to assets which do not incur an obligation that must be met at some future date, do not represent exchanges of fixed assets, and are available for expenditure by the local education agencies in the state. Revenues include funds from local, intermediate, state, and federal sources.

Current expenditures are funds spent for operating local public schools and include such items as salaries for school personnel, fixed charges, student transportation, school books and materials, and energy costs, but exclude capital outlay and interest on school debt.

Per pupil expenditure (or per pupil revenue) is the total current expenditure (or revenue) for public elementary and secondary education in a state divided by the student membership. The numbers reported here, based on membership, can be expected to be smaller than per pupil expenditures (and per pupil revenues) based on average daily attendance, because the membership counts are generally larger than average daily attendance.

For More Information

For information about the Public School Early Estimates System or the Common Core of Data, contact Frank Johnson, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue NW, Washington, DC 20208-5651, telephone (202) 219-1618.

For information about the Private School Early Estimates System or the Private School Universe data collection system, contact Elizabeth Gerald, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue NW, Washington, DC 20208-5651, telephone (202) 219-1334.

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Table 13.--Selected standard errors for private school early estimates for grades K through 12, United States, school year 1990-91

Characteristic	Religious Orientation			School level			
	Total	Catholic	Other religious	Non sectarian	Elementary	Secondary	Combined
Students							
Fall 1988	96,779.9	63,087.0	65,974.6	36,800.1	82,816.9	29,378.6	57,862.8
Fall 1989	117,830.9	58,569.5	88,321.4	51,507.8	75,128.0	35,790.6	114,972.5
Fall 1990	96,270.9	45,144.0	52,851.6	37,928.0	72,597.2	68,753.4	53,330.6
Teachers							
Fall 1988	7,624.7	4,166.7	5,452.3	4,359.3	5,707.4	1,545.0	5,116.1
Fall 1989	8,636.1	3,656.6	5,035.6	5,987.8	5,183.5	2,858.5	7,865.2
Fall 1990	7,341.5	2,782.2	4,168.2	4,143.6	5,041.8	4,216.2	4,203.8
Pupil/teacher ratio							
Fall 1988	0.2	0.4	0.3	0.2	0.3	0.4	0.3
Fall 1989	0.1	0.1	0.3	0.1	0.1	0.1	0.1
Fall 1990	0.1	0.2	0.3	0.3	0.3	0.3	0.3
Graduates							
1987-88	9,605.4	8,993.4	3,863.2	4,419.8	--	9,237.6	4,809.1
1988-89	13,305.6	9,956.0	8,449.2	6,839.1	--	9,069.0	12,302.2
1989-90	15,850.2	13,997.8	4,847.2	5,129.2	--	14,831.0	4,691.0
1990-91	9,968.8	8,561.3	3,204.0	3,924.3	--	8,850.5	3,529.0

--Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Early Estimates System.