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ABSTRACT

As part of the redesign of the Common Core of Data of the National Center for Education Statistics (NCES), and in response to the growing concern about the comparability of average daily attendance (ADA) in a national database, the NCES initiated a study in 1987 to describe the methods used by the states to collect, aggregate, and report state total ADA. Five research questions were addressed: (1) whether or not ADA is defined by state law; (2) the number of days in the school year used in the ADA calculation; (3) how attendance is counted and how state aggregate data are calculated; (4) whether or not other variations in state ADA affect comparability; and (5) how summer school figures are handled. Data for the study were derived from state-provided documentation. Seven states reported legislation prescribing data collection methods for the 1985-86 school year. A variety of prescribed school days (ranging from 170 to 180) were identified. Five distinct patterns for state data collection and aggregation ADAs were apparent. Other variations in procedures did affect comparability. However, it was not possible to estimate the effects of summer school attendance reporting, with only 13 states reporting summer school data. Four tables contain study data. (SLD)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Comparison of State Methods for Collecting, Aggregating, and Reporting State Average Daily Attendance (ADA) Totals to the National Center for Education Statistics

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NCES 91-049

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"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

April 1991

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INTRODUCTION

Average Daily Attendance

Average daily attendance (ADA) is a generally recognized and commonly used measure of student population in public elementary and secondary schools. It represents the number of students attending school on a daily basis; that is, ADA is the average number of students who report to school on a single day in a school year to receive instruction. Often explicitly defined by state statute or in state Board of Education policy, ADA is regularly used for allocating state funds to school districts and schools.

At the federal level, state ADA counts have been collected by the National Center for Education Statistics (NCES) in its Common Core of Data survey for many years. The data are used for reporting on the general condition of education in the states as well as for specific analytic purposes such as measuring the ability of schools to attract and retain students over time. In addition, ADA counts are used in calculating allocations for certain federal programs. ADA is used in calculating state per pupil expenditures (SPPE) that are used, in part, in determining federal allocations for Education Consolidation and Improvement Act (ECIA) Chapter 1, Indian Education Aid, Handicapped Education Aid, and Impact Aid. Both the Chapter 1 and Impact Aid statutes specify that ADA is to be determined in accordance with state law if such exists.

Because state definitions may vary, the use of ADA has been called into question as a comparable statistic across states. A commonly cited example of variation from a standard definition is the California practice of including excused absences in ADA counts. A 1988 study by the Council of Chief State School Officers' Education Data Improvement Project¹ suggested there were differences in definitions and in calculation processes across states, and that the problems with state ADA counts were more pervasive than originally thought. The Council does not include state ADA counts in its annual report on education in the states, because of the Council's limited confidence in this statistic's comparability across states. As a result of audits of 1984-85 and 1985-86 Chapter 1 allocations in five states, the U.S. Department of Education Office of Inspector General² recommended legislative change from the use of ADA to calculate SPPE, in order to provide for greater comparability.

Purpose of This Study

As an integral part of NCES' redesign of the Common Core of Data, and in response to

¹Council of Chief State School Officers, no date. Developing a Meaningful Expenditure Figure for Public Education. Education Data Improvement Project, Washington, D.C.

²U. S Department of Education, Office of Inspector General, June 1989. Changes are Needed in the State Per Pupil Expenditure Data Collection Process, Washington, D.C.

growing concern about the comparability of ADA in a national database, NCES initiated in 1987 a study to describe the methods used by States to collect, aggregate, and report state total ADA to NCES.

This report summarizes the findings of that study, and contributes them to the ongoing discussion of ADA's utility as a national statistic. It should be stressed that the intent of the study was to examine the effects of varying ADA definitions, not to determine whether these definitions were applied correctly. The report is divided into five sections. The first section, the Introduction, describes the context of and need for the study. The second section presents background information including relevant NCES definitions and data collection procedures, while the methods for this study are described in the third. Section 4 presents the findings of the study. The final section identifies conclusions reached from the study and questions raised by the findings.

BACKGROUND

NCES has collected data on average daily attendance using substantially the same definition since the 1930s. In the 1974 NCES Glossary of Terms³ this definition of ADA is given as:

"the aggregate days of attendance of a given school during a given reporting period divided by the number of days school is in session during this period. Only days in which the students are under the guidance and direction of teachers should be considered to be days in session.... The average daily attendance for a group of schools having varying lengths of terms is the sum of the average daily attendances for the individual schools.... Kindergarten and prekindergarten students attending half day sessions are computed as though these students are in attendance for a half day" (p.17).

The glossary explicitly defines a day of attendance as being the "nearest half day," (p.39) if a student is present for only part of the day's session. "Excused absence" is specifically noted as not to be counted as being in attendance (p.39).

ADA is collected by the U.S. Department of Education annually from the administrative records of state education agencies through the NCES Common Core of Data survey, "Revenues and Current Expenditures for Public Elementary and Secondary Education." The survey collects state aggregate fiscal data for the prior fiscal year; for example, the 1986-87 survey, due to NCES on March 15, 1987, collected FY86 fiscal data. The survey collected "regular term ADA" until 1982, at which time "summer school ADA" was added as a separate data element to account for the total attendance in states. Summer school

³U.S. Department of Health, Education, and Welfare, Education Division, 1974. Combined Glossary: Terms and Definitions from the Handbooks of the State Education Records and Reports Series. Washington, D.C. U.S. Government Printing Office. Note that while the CCD surveys instruct respondents to use these definitions, NCES definitions are not mandated by law or regulation. States are requested to use the NCES definition of ADA only when ADA is not defined by state law.

ADA, if applicable, is a factor in the calculation of per pupil expenditure. If summer school expenditures are included in state current expenditure reports without adjusting for summer school attendance, per pupil expenditure will be inflated. However, the argument can be made that this is acceptable because the costs are for the same children served during the regular school year, and reflect truly a higher education expenditure per pupil.

The survey remained unchanged until the March 1987 Common Core of Data survey collection, when the survey was expanded to obtain detailed data from each state to use in computing ADA for FY86. The specific items on the March 1987 CCD survey were:

ITEM	DAYS OF ATTENDANCE
A. NUMBER OF DAYS IN REGULAR SCHOOL YEAR	
B. NUMBER OF DAYS IN FREE SUMMER SCHOOL	
C. AGGREGATE NUMBER OF DAYS OF STUDENT ATTENDANCE DURING REGULAR SCHOOL YEAR	
D. AGGREGATE NUMBER OF DAYS OF STUDENT ATTENDANCE DURING FREE SUMMER SCHOOL	

Inquiries from states concerning completion of the expanded items on the 1986-87 CCD survey revealed considerable disparity across states in either their definition of ADA or their collection strategies. As noted, several federal programs require the use of the state mandated ADA definition if such exists. The findings of this study present a summary of the differences across states based on the 1986-87 collection of FY86 data. These are the data upon which allocations were based, and may differ from later, revised data in other reports.

METHOD

The purpose of the study was to describe state methods for collecting, aggregating, and reporting ADA. The study was designed around five questions:

- ADA defined in state law?⁴
- What is the number of days in the school year used in ADA calculations?
- How is the attendance count taken and how is the state aggregate ADA calculated?
- Are there other variations in the state ADA that affect comparability?
- How is summer school treated by states in calculating ADA?

Information to address these questions was derived wherever possible from the

⁴Respondents were asked if their state defined ADA in law or formally promulgated regulation. "State law" is used throughout this report to refer to both conditions.

documentation made available to NCES by states. As part of the NCES instructions for completing the Common Core of Data survey, states are requested to submit quality-of-data reports explaining exceptions to NCES data specifications. This was one source of information about departure from the NCES definition of ADA that states were requested to use in the absence of a state mandated definition. Because states without a statutory definition of ADA were asked to use the NCES definition, this provided a "benchmark" for estimating the amount of variation across states. Additionally, for the "Revenues and Expenditures" survey, states were requested to "include your definition of school year and school day in the quality-of-data submissions." A special request was made to states in the summer of 1987 to provide copies of state laws defining ADA and to provide details of their ADA calculation procedures. Available information from states provided the basis for examining state methods; this included voluntarily supplied state collection instruments, definitions, calculation procedures, and laws, as well as the 1986-87 ADA data submitted by states in the spring of 1987. The base year for the study was the 1986-87 collection year for FY86 fiscal data.

When state documentation was unclear on an issue (or was unavailable), state Common Core of Data fiscal contact persons were interviewed by telephone. Findings were reviewed with staff of the Council of Chief State School Officers who were conducting an independent review of state definitions. Discrepancies with Council findings were verified by telephone inquiries of state education agency staff. Finally, each state Common Core of Data contact person was mailed a copy of the draft report and asked to confirm or amend the information concerning his or her state. These comments are reflected in this final version.

FINDINGS

The findings of the study are presented under each question posed in the design.

Is ADA Defined in State Law?

For 1985-86, Arizona, California, Colorado, Florida, Missouri, New York, and Texas reported legislation prescribing the methods by which data were collected and aggregated for ADA calculations. The information concerning ADA for these seven states that is presented in the remaining sections of this report reflects the provisions of the individual state laws.

What Is the Number of Days in the School Year Used in the State ADA Calculation?

NCES calculates ADA in the following manner: Average daily attendance is the sum of the number of days in the school year actually attended by individual students (aggregate

days of attendance) divided by the number of days in the school year when "the school is open and under the guidance and direction of teachers" (Glossary of Terms, p. 39).

Aggregate days of attendance

Days in session = Average daily attendance

The specification of "days in session" appears relatively straightforward in the definition: A day in session is a day when school is open, teachers are there, and students are expected. Operationally, the definition has been applied differently over the years. Some states counted the actual days schools were open; the number of school days counted vary among school districts within a given state because of local school board policies, weather conditions, or other unforeseen circumstances. Other states used the minimum number of school days allowed in the state and assumed all school districts complied. Another area of potential ambiguity is in the definition of "days in session." States may count "teacher work days" when teachers are at school but students are not. The intent of the definition is to count only days when teachers and students are expected to be present.

Table 1 presents the "minimum days in the school year" and the "actual days in the school year" as reported on the NCES "Revenues and Expenditures" survey for 1985-86. Every state specified a minimum number of school days students were expected to attend; this minimum ranged from 170 days in Minnesota to 180 in 30 states. Fourteen states reported an "actual days in the school year." In Hawaii, actual and minimum days were the same. In Maryland, Oklahoma, and Wyoming, the number of actual days was greater than the number of minimum days but by less than 1.50 days. In Wisconsin, the number of actual days was greater by 2.97 days. In Indiana, Kentucky, Louisiana, Montana, Nevada, Ohio, Oregon, California, and West Virginia, the actual days were less than the minimum days. In Ohio, the difference was 3.96 days; in Oregon the difference was 3.73 days; in Nevada, 1.43 days; in Montana, 1.91 days, and in West Virginia, it was 3.42 days.

To estimate the effect of the use of these 2 different counts, ADA was calculated for each of these 14 states using minimum days in the school year and actual days in session. Table 2 compares the 2 methods and shows both absolute and relative changes for each of the 14 states. The 2 computed ADAs differed in absolute size from a gain of 11,616 students in ADA in Wisconsin to a loss of 36,134 students in ADA in Ohio.

Using minimum days as the metric reduced ADA by as much as 2.2 percent in Oregon and Ohio, and increased ADA by as much as 1.7 percent in Wisconsin. In general, basing ADA on minimum days rather than actual days in session reduced the size of the statistic.

How Is the Attendance Count Taken and How Is the State Aggregate ADA Calculated?

There are five distinct patterns for state data collection and calculation of state aggregate

Table 1.--Minimum and actual number of days in school year, aggregate days of student attendance, average daily attendance (ADA) computed using both minimum and actual days in school year, and the difference between the two computations, by state: 1985-86

State	Minimum days in school year reported to NCES	Actual days in school year reported to NCES	Aggregate days of student attendance	ADA		
				Computed using minimum days in school year	Computed using actual days in school year	Difference in ADA using minimum and actual days
United States	--	--	6,497,306,062	--	--	--
Alabama	175	--	120,175,218	686,716	--	--
Alaska	180	--	17,736,308	98,535	--	--
Arizona	175	--	86,538,112	494,503	--	--
Arkansas	175	--	71,456,767	408,324	--	--
California	180	179.88	762,034,814	4,233,527	4,236,351	-2,824
Colorado	180	--	91,417,680	507,876	--	--
Connecticut	180	--	81,281,772	451,565	--	--
Delaware	179	--	15,203,544	84,936	--	--
District of Columbia	180	--	13,723,441	76,241	--	--
Florida	180	--	259,725,780	1,442,921	--	--
Georgia	180	--	180,863,843	1,004,799	--	--
Hawaii	176	176.00	26,606,583	151,174	151,174	0
Idaho	180	--	35,665,416	198,141	--	--
Illinois	176	--	282,350,585	1,604,265	--	--
Indiana	175	174.78	151,167,453	863,814	864,901	-1,087
Iowa	180	--	81,705,960	453,922	--	--
Kansas	180	--	65,905,565	366,142	--	--
Kentucky	175	174.94	100,973,619	576,992	577,190	-198
Louisiana	180	179.24	130,331,185	724,062	727,132	-3,070
Maine	175	--	34,712,609	198,358	--	--
Maryland	180	180.20	106,747,446	593,041	592,383	658
Massachusetts	179	--	133,532,443	745,991	--	--
Michigan	180	--	266,524,380	1,480,691	--	--
Minnesota	170	--	112,664,610	662,733	--	--
Mississippi	175	--	78,420,475	448,117	--	--
Missouri	174	--	123,933,246	712,260	--	--
Montana	180	178.09	24,724,405	137,358	138,831	-1,473
Nebraska	(*)	(*)	45,175,500	--	--	--
Nevada	180	178.57	25,847,655	143,598	144,748	-1,150
New Hampshire	180	--	26,550,952	147,505	--	--
New Jersey	180	--	185,650,000	1,031,389	--	--
New Mexico	180	--	45,520,560	252,892	--	--
New York	180	--	409,831,560	2,276,842	--	--
North Carolina	180	--	182,663,100	1,014,795	--	--
North Dakota	180	--	19,532,081	108,512	--	--
Ohio**	182	178.04	295,674,259	1,624,584	1,660,718	-36,134
Oklahoma	175	175.10	96,895,011	553,486	553,370	316
Oregon	175	171.27	68,760,716	392,918	401,476	-8,557
Pennsylvania	180	--	279,291,240	1,551,618	--	--
Rhode Island	180	--	21,979,620	122,109	--	--
South Carolina	180	--	100,568,889	558,716	--	--
South Dakota	175	--	20,729,140	118,452	--	--
Tennessee	180	--	137,200,500	762,225	--	--
Texas	175	--	511,671,650	2,923,838	--	--
Utah	180	--	68,264,820	379,249	--	--
Vermont	175	--	14,967,433	85,528	--	--
Virginia	180	--	162,782,460	904,347	--	--
Washington	180	--	125,346,960	696,372	--	--
West Virginia	180	176.56	57,622,062	320,123	326,323	-6,200
Wisconsin	175	177.97	121,809,787	696,056	684,440	11,616
Wyoming	175	176.32	16,846,848	96,268	95,547	721

-- Not reported

* Nebraska does not specify minimum days in school year; 180 days used to compute ADA.

** Ohio districts reported to usually include 2 days for professional meetings; almost all elementary schools schedule some parent-teacher conference days.

SOURCE: U.S. Department of Education, National Center for Education Statistics, the Common Core of Data survey, Venues and Current Expenditures for Public Elementary and Secondary Education, Fiscal Year 1986."

Table 2.--Absolute and relative changes in average daily attendance (ADA) for 14 states reporting both minimum and actual days in school year, by comparing the two reported counts: 1986

State	ADA		Absolute change with minimum days	Percent relative change with minimum days
	Computed using minimum days in school year	Computed using actual days in school year		
California	4,233,527	4,236,351	-2,824	-0.07
Hawaii	151,174	151,174	0	0.00
Indiana	863,814	864,901	-1,087	-0.13
Kentucky	576,992	577,190	-198	-0.03
Louisiana	724,062	727,132	-3,070	-0.42
Maryland	593,041	592,383	658	0.11
Montana	137,358	138,831	-1,473	-1.07
Nevada	143,598	144,748	-1,150	-0.80
Ohio	1,624,584	1,660,718	-36,134	-2.22
Oklahoma	553,686	553,370	316	0.06
Oregon	392,918	401,476	-8,558	-2.18
West Virginia	320,123	326,323	-6,200	-1.94
Wisconsin	696,056	684,440	11,616	1.67
Wyoming	96,268	95,547	721	0.75
Mean relative change				-0.45

SOURCE: U.S. Department of Education, National Center for Education Statistics, the Common Core of Data survey, "Revenues and Current Expenditures for Public Elementary and Secondary Education, Fiscal Year 1986."

**Table 3.--Patterns for state average daily attendance (ADA)
statistics collection: 1985-86**

<p>9 states collect student attendance and days in school session from each school</p> <p>Georgia Indiana Kentucky Louisiana New York North Carolina Vermont West Virginia Wyoming</p>	<p>22 states collect a summary ADA statistic directly from school districts</p> <table> <tr> <td>Arizona</td><td>Nebraska</td></tr> <tr> <td>California</td><td>Nevada</td></tr> <tr> <td>Delaware</td><td>New Jersey</td></tr> <tr> <td>Hawaii</td><td>Ohio</td></tr> <tr> <td>Iowa</td><td>Oklahoma</td></tr> <tr> <td>Kansas</td><td>Oregon</td></tr> <tr> <td>Maine</td><td>Rhode Island</td></tr> <tr> <td>Maryland</td><td>South Dakota</td></tr> <tr> <td>Minnesota</td><td>Texas</td></tr> <tr> <td>Mississippi</td><td>Virginia</td></tr> <tr> <td>Montana</td><td>Wisconsin</td></tr> </table>	Arizona	Nebraska	California	Nevada	Delaware	New Jersey	Hawaii	Ohio	Iowa	Oklahoma	Kansas	Oregon	Maine	Rhode Island	Maryland	South Dakota	Minnesota	Texas	Mississippi	Virginia	Montana	Wisconsin
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<p>2 states collect student full-time equivalent (FTE) counts from local schools</p> <p>Missouri North Dakota</p>	<p>8 states collect student attendance days and estimate days in session and ADA for schools</p> <table> <tr> <td>Alabama</td><td>Illinois</td></tr> <tr> <td>Arkansas</td><td>Massachusetts</td></tr> <tr> <td>District of Columbia</td><td>New Hampshire</td></tr> <tr> <td>Idaho</td><td>Tennessee</td></tr> </table>	Alabama	Illinois	Arkansas	Massachusetts	District of Columbia	New Hampshire	Idaho	Tennessee														
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<p>10 states estimate ADA from weighted membership counts</p> <table> <tr> <td>Alaska</td><td>New Mexico</td></tr> <tr> <td>Colorado</td><td>Pennsylvania</td></tr> <tr> <td>Connecticut</td><td>South Carolina</td></tr> <tr> <td>Florida</td><td>Utah</td></tr> <tr> <td>Michigan</td><td>Washington</td></tr> </table>		Alaska	New Mexico	Colorado	Pennsylvania	Connecticut	South Carolina	Florida	Utah	Michigan	Washington												
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NOTE: Arizona, Colorado, New York, South Carolina and Texas calculate ADA for a specified period (or periods) during the school year and annualize total ADA from this time sample. Florida reports a combined regular term and a summer school ADA. Note also that states collecting attendance information from schools are not necessarily those reporting actual days in school year (table 1) to NCES.

SOURCE: Documentation provided by individual states.

ADAs; these patterns are mutually exclusive and exhaustive. They are presented here to illustrate the similarities and differences among states and to permit comparisons among clusters of states using similar procedures. Table 3 presents the states using each of the five patterns.

● States that collect student attendance days, and days in session, from schools and then calculate ADA statistics.

Nine states--Georgia, Indiana, Kentucky, Louisiana, New York, North Carolina, Vermont, West Virginia and Wyoming--collected student attendance days and actual days in session from schools and calculated total state ADA by aggregating the school-level data. All of these states reported "actual days in the school year" to NCES. (See page 5 for a discussion of the effect of this count of actual days on the state ADA counts.) This cluster most closely approximated the NCES model, except for California whose practice of including excused absences is discussed later.

● States that collect student full-time equivalent attendance from schools.

Two States, Missouri and North Dakota, counted attendance on a per class period basis instead of using the requested half-day, resulting in a precise accounting of full-time equivalent attendance (FTE). This was the most rigorous method used by states for calculating and reporting ADA. The Missouri method was prescribed in legislation, monitored by the state, and used by the state for allocating state funds.

● States that collect the ADA statistic from schools and school districts.

Twenty-two states collected the ADA statistic from schools and school districts. Six of these states--Hawaii, Montana, Nevada, Ohio, Oklahoma, and Oregon--counted actual days in session and calculated their ADAs from these counts. (See page 5 for a discussion of the effect of using counts of "actual days in the school year.")

● States that collect student attendance days and estimate "days in session" and ADA.

Eight states--Alabama, Arkansas, the District of Columbia, Idaho, Illinois, Massachusetts, New Hampshire, and Tennessee--used similar techniques of collecting daily attendance data at the school level. The daily attendance figures were generally reported at the school level, summarized at the school district level, and forwarded to the state. The state added the school district attendance counts for total aggregate days in attendance for the school year. These states did not collect the actual number of days in session, but rather used in their calculation the minimum number of days required by state law.

● States that estimate ADA from weighted membership counts.

Ten states did not collect student attendance data; rather they collected membership data from each school and estimated ADA by multiplying the membership counts by some constant. The NCES Glossary of Terms defines membership as "the number of pupils on a current roll...on a given day." Generally these 10 states collected either "average daily membership" (ADM) or "opening fall membership," taken on or around October 1. However, "average daily membership" computed over the course of the school year or for some specified times within the year suggests comparability problems in this

cluster of states similar to the problems of comparability with ADA.

Some States reported or specified a constant to be used to estimate regular term ADA: 0.95 of membership for New Mexico, Utah, and Washington; 0.93 for Alaska and Pennsylvania; and 0.92 for Michigan. Interviews with state staff and the relatively consistent trends of the individual state data over time indicated that the constants had remained unchanged within these states for a number of years. The constants appeared to be adjustment factors derived from sample survey studies conducted in the early 1970s to determine the relationship between ADA annual totals and specific membership counts.

Connecticut collected membership on a daily basis throughout the year and collected attendance data on a single day every year, using the ratio of attendance to membership on that single day. The annual daily membership plan was adjusted to estimate the annualized ADA. Connecticut's factor for 1985-86 was reported as 0.97.

The ADA calculations for South Carolina, Florida, and Colorado, like Connecticut, were unique. Florida used full-time equivalent average daily membership taken over a 20-day period for each of four sessions to estimate ADA. These four measures were then weighted to adjust for regular term and for summer school. Florida did not report summer school ADA separately from the regular term counts. Florida reported weighting the ADM to adjust for attendance rates by a constant of 0.94 for 1985-86.

South Carolina did not weight by a constant but reported average daily membership based on the first 135 days in session and called the resultant count ADA. There was apparently no adjustment made to this count.

Colorado used a combination of ADA and weighted ADM. Every school collected both ADA and ADM for a specified 20-day period and reported both counts to the state. The state then used either 0.96 of ADM or the unweighted ADA, whichever was the highest, for each school. The weighted ADM was used for most schools in Colorado. The individual school counts were summed to the State total ADA.

Are There Other Variations to the State ADA That Affect Comparability?

California collected ADA on a daily basis for the entire regular school year; however, the California attendance law specified that excused absences be counted as present. The procedure used by California yielded an index that was very close to membership totals; thus California's ADA equaled 0.99 of the state's fall membership totals reported to NCES. Counting excused absences was not the only factor that made ADA close to the size of membership in California. Student membership increases by more than 100,000 students in that state each year, many of these enrolling after the fall membership count is reported. Further, some students who were reported once in the membership count for a district, but who are enrolled in some additional program, generate an ADA count for each.

A review of descriptions of how 1986-87 data were reported showed that five states collected ADA, or an approximation such as ADM, on a time sample basis. Arizona, Texas and New York used ADA time sample data to estimate the annual ADA. Colorado and South Carolina used time samples for their average daily membership counts. Arizona based its estimate on the first 100 days of the regular school year, while Texas and New York based their estimates on two reporting periods. Texas used two 4-week periods, one in the fall and one in the spring, to collect ADA data. Texas then took the average ADA over the 4 highest of the 8 weeks collected. New York used a similar approach but allowed the district to take the highest 4 of 8 or the highest 5 of 10 weeks as the ADA.

Part of the NCES definition states "kindergarten and prekindergarten students attending half-day sessions are computed as though these students are in attendance for a half-day." The NCES survey instructions have not, in the past, emphasized this difference. It is apparent that states varied in the way these students were counted. Ohio, for example, provided NCES with an ADA count from the Superintendent's Annual Closing Report, OCCD-5, which counted kindergarten students as full-day students. Thus the ADA reported by Ohio for FY 1986 could be inflated by as much as 50,000-70,000 students. Although the OCCD-5 collected ADA for kindergarten separately, Ohio could not simply divide the kindergarten ADA in half since some districts had all-day, everyday kindergarten. New York, on the other hand, multiplied half day kindergarten ADA by a factor of 0.5 to arrive at the FTE count.

How is Summer School Treated by States in Calculating ADA?

Thirty-seven states and the District of Columbia did not collect data on summer school attendance at all: 5 of these had no summer school and 33 did not collect data. (Summer school was added to the NCES fiscal survey in response to the large increase in per pupil expenditures in the District of Columbia.) Thirteen states reported summer school data, although 8 of those said that the summer school counts were understated. Most states reporting summer school included only fully reimbursed programs, excluding many locally run programs from their counts. Table 4 presents the number of summer school days, aggregate days of summer school attendance, summer school ADA, and percentage of summer school ADA to total ADA by state.

Data providers suggested the summer school expenditure and student count data were especially difficult to provide because many summer school programs were funded and operated at the local level. Some local summer school programs were supplemented by student tuition charges. It is not known if states not reporting summer school ADA also excluded summer school expenditures in their fiscal reports to NCES. Some of the nonreporting states noted that they included summer school expenditures in their Common Core of Data reports.

Several states questioned whether their summer programs met the definition of "free public education" specified in the Common Core of Data instructions, since much of the

Table 4.-- Number of summer school days, aggregate days of summer school attendance, summer school average daily attendance (ADA), and percentage of summer school ADA to total ADA, by states reporting summer school ADA: 1985-86

State	Summer school days reported to NCES	Aggregate days attendance in summer school	Summer school ADA	Percentage summer school ADA to State total ADA*
United States		8,152,429	46,383	0.47
Arkansas	30.00	48,330	277	0.07
California	30.00	1,656,960	9,210	0.22
Connecticut	30.00	88,598	493	0.11
Indiana	27.00	975,899	5,583	0.64
Iowa	20.00	75,335	419	0.09
Kansas	30.00	992,340	5,513	1.48
Louisiana	34.99	913,713	5,098	0.70
Minnesota	30.00	1,130,840	6,652	0.99
Missouri	20.00	342,724	1,970	0.28
New Hampshire	30.00	10,110	56	0.04
North Dakota	30.00	153,720	854	0.78
Vermont	**	**	347	0.40
Wisconsin	30.00	1,763,860	9,911	1.43

* Total ADA equals summer school ADA plus regular term ADA. Summer School ADA calculated as aggregate days attendance in summer school divided by days in regular school year. This adjusts summer school ADA to its regular year equivalent.

** Vermont reported only ADA.

SOURCE: U.S. Department of Education, National Center for Education Statistics, the Common Core of Data survey, "Revenues and Current Expenditures for Public Elementary and Secondary Education, Fiscal Year 1986."

expense of summer school might be borne by the student in the form of tuition.⁵ Others questioned whether comparable summer school data were possible, since the funding of these programs varied according to state policy.

For the 13 states in which summer school ADA information was available, summer school ADA contributed more than one percent in two States: 1.48 percent in Kansas, and 1.43 percent in Wisconsin. In 3 of the states (Arkansas, Iowa, and New Hampshire), the contribution was less than 0.1 percent. The mean value of summer school ADA, in the 13 states, was 0.47 percent of total ADA.

CONCLUSIONS

This NCES study to describe methods used by states to collect, aggregate, and report state total ADA counts to NCES revealed some major variations in procedures and definitions across states. Because ADA collection and reporting procedures varied from state to state, it was difficult to make meaningful state comparisons.

Conclusion 1. There are many forms and sources of state variation.

- Fourteen states used actual days in the school year to calculate their ADA; other states used the minimum days in the school year without adjusting for school district variations from the minimum. In general, use of minimum days rather than actual days reduced ADA.
- Ten states estimated their ADA counts through multiplying membership counts by some constant. These states collected membership data from each school and estimated ADA by adjusting the membership counts. The multiplier used for this adjustment ranged from 0.92 to 0.97 of the state membership count.

Conclusion 2. The effect of summer school attendance reporting practices on ADA could not be determined.

- Since only 13 states reported, and perhaps underreported, summer school ADA, the true impact of summer school could not be estimated from available information.

Conclusion 3. The observed diversity was not necessarily out of keeping with federal program legislation.

- Federal legislative requirements permit diversity. In fact, Chapter 1 and Impact Aid authorizing legislation requires states to provide ADA according to individual state laws, if such laws exist. Seven states reported having such laws.

⁵Several federal program statutes, including Chapter 1 and Impact Aid, mandate definitions of public education to be followed by states when reporting current expenditures. This report did not explore compliance with these definitions.

In summary, two general points are taken from this study as a whole. First, the ADA statistic was not comparable across states. Second, variations across states affect the use of the statistic for comparing states and for making federal fund allocations. It is not within the scope of the study to estimate the extent of the impact for either purpose. However, until further evaluation of the effects can be completed, the ADA statistic should be used cautiously.

The following questions need more thorough examination:

- What is the magnitude of the differences in ADA attributable to different state reporting practices?
- What is the magnitude of the impact these differences have on funding distribution for federal programs, using an ADA-based per pupil expenditure in computing allocations?
- What is the potential reporting burden for local school districts and for states to provide comparable ADA data? Will states have to revise major data collection practices? Will state law permit states to change their practices?
- Are there other statistics that can be used for state comparisons? For calculating federal program allocations?
- Should federal legislation permitting states to use their own definitions of ADA for program allocation purposes be amended?

