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ABSTRACT

The report presents data on student enrollment at accredited colleges taken from the "Fall Enrollment" survey, part of the Integrated Postsecondary Education Data System (IPEDS). The first section reviews trends in higher education enrollment from 1970 through 1987. The second section presents data on higher education enrollment for the fall of 1987 by: control and level of institution; level of education; attendance status; and sex and age of student. Enrollment trends identified between 1970 and 1987 are as follows: most of the dramatic increase (about 45%) in higher education enrollment occurred between 1970 and 1983; part-time enrollment increased about 70% from 1970 to 1987; and the enrollment of women increased 93% since 1970. Highlights of the 1987 data include the following: higher education enrollment increased 2.1% from 1986; most students in institutions of higher education were enrolled in public institutions; there was no increase in number of students enrolled in private institutions; over half of all students in higher education were 24 years of age or younger, though 27% of all students were 30 years old or older; and most younger students were enrolled full time and most older students were enrolled part time. Appendixes provide tables, technical information on the data collection procedures related to this survey, and a listing of IPEDS state coordinators. (DB)

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Survey Report

November 1989

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## Fall Enrollment in Institutions of Higher Education, 1987

Nancy B. Schantz  
Postsecondary Education Statistics Division

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Office of Educational Research and Improvement  
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**November 1989**

## Highlights

### Enrollment Trends in Institutions of Higher Education, 1970-87

- o Most of the dramatic increase in higher education enrollment since the early 1970s occurred between 1970 and 1983 when enrollment increased from 8.6 million to 12.5 million, or about 45 percent. After dropping slightly in the mid-1980s, enrollment rose about 4 percent between 1985 and 1987.
- o From 1970 to 1987, part-time enrollment in higher education increased approximately 2.8 million, or about 70 percent. Full-time enrollment increased at a slower pace, increasing 19 percent from 1970 to 1987.
- o The enrollment of women has increased fairly dramatically and steadily over the years, increasing 93 percent since 1970. The enrollment of men peaked in 1975, after increasing 22 percent from 1970 to 1975. However, since 1975, the enrollment of men has been generally stable.

### Enrollment in Institutions of Higher Education, Fall 1987

- o About 12.8 million students were enrolled in the Nation's more than 3,500 institutions of higher education in the fall of 1987; representing a 2.1 percent increase in higher education enrollment from 1986.
- o Approximately 10 million students, or over three-fourths of the students in institutions of higher education (2.7 percent more than in 1986), were enrolled in public institutions in 1987.
- o About 2.8 million students were enrolled in private institutions of higher education in the fall of 1987, representing no change in total private school enrollment from the previous year.
- o Over one-half of all students in higher education were 24 years old or younger. However, 3.4 million students, or 27 percent of all students in higher education were 30 years old or older.
- o Younger students were more likely to attend school full time, while older students were more likely to attend school part time. About 82 percent of the students 21 years old or younger, and 62 percent of the students 22 to 24 years old were enrolled full time in 1987. However, 76 percent of the students 30 years old or older and 60 percent of the students 25 to 29 years old were enrolled part time in the fall of 1987.

- o Part-time undergraduate students were more likely to be older (30 years old or older) than full-time undergraduates. That is, while 44 percent of the part-time undergraduates were 30 years old or older; only 8 percent of the full-time undergraduates were "older" students (30 years old or older).

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In acknowledging contributions to this report, it must be noted that without the support of the postsecondary community, and in particular, without the support and assistance of the IPEDS State coordinators, the "Fall Enrollment" survey would not be possible. (See listing of IPEDS State coordinators in appendix C.)

## Introduction

This report presents findings from the "Fall Enrollment" survey which is part of the Integrated Postsecondary Education Data System (IPEDS) administered by the National Center for Education Statistics (NCES). IPEDS provides comprehensive and consistent data representing colleges and universities, as well as all postsecondary institutions in the United States and the Trust Territories.

While the "Fall Enrollment" survey collects data from all postsecondary institutions, this report provides descriptive data on student enrollment in HEGIS institutions only (i.e., institutions accredited at the college level by an agency recognized by the Secretary of Education). Enrollment data for non-HEGIS institutions are not shown, because the response rates for these institutions did not satisfy NCES standards. (See pages 14-15 and appendix B, for a further discussion of response rates for non-HEGIS institutions.)

The data in this report is presented in two sections. The first section reviews trends in higher education enrollment from 1970 through 1987. The second section presents data on higher education enrollment for the fall of 1987, by control and level of institution, level of education, attendance status, and sex and age of student. This is the first IPEDS report to provide enrollment data by age of student. <sup>1</sup>

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<sup>1</sup>See technical appendix B for an explanation of the data collection process for 1987.

## Enrollment Trends In Institutions of Higher Education, 1970-87

Since the early 1970s, enrollment in higher education has increased dramatically. Most of this increase occurred between 1970 and 1983, with higher education enrollment increasing nearly 4 million, or 45 percent during this time. After dropping slightly in the mid 1980s, enrollment rose about 4 percent between 1985 and 1987 (figure 1 and appendix table A-1).

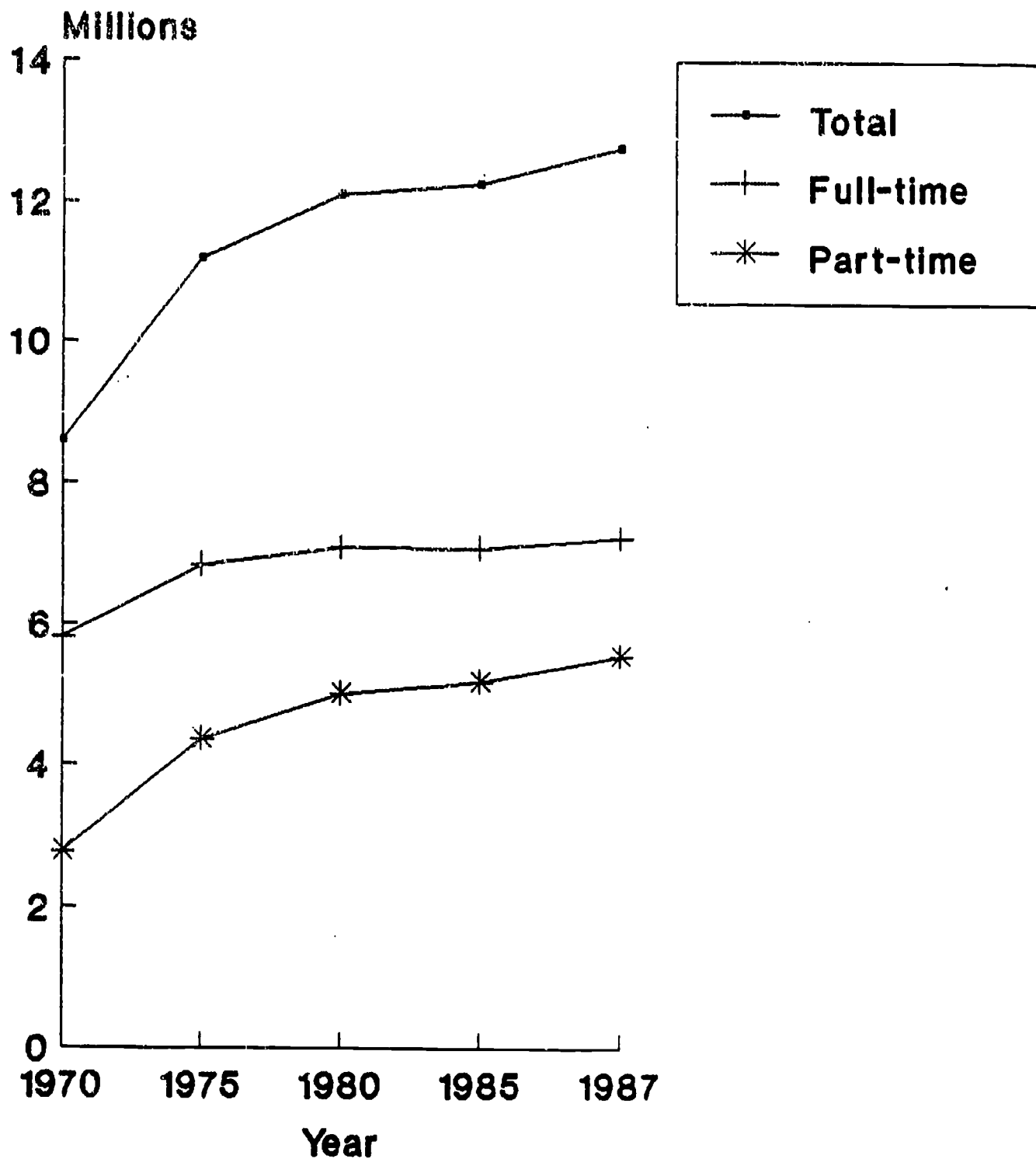
Changes in student attendance status have been even more striking than changes in overall enrollment. From 1970 to 1975, part-time enrollment in colleges and universities increased from 2.8 million to 4.3 million, representing close to a 60 percent increase. By 1980, part-time enrollment in institutions of higher education increased another 15 percent. While the rate of increase in part-time enrollment slowed during the mid-1980s, from 1980 to 1987 part-time enrollment increased 10 percent.

While full-time enrollment in colleges and universities increased during the 1970s, the rate of increase was less dramatic than the rate of increase in part-time enrollment. From 1970 to 1975, full-time enrollment in institutions of higher education increased 17 percent; by 1980, full-time enrollment had increased another 4 percent. During the early 1980s, full-time enrollment continued to increase, though at a slower rate than any other period since 1970. By the mid-1980s, the percent of full-time students began to drop slightly. Between 1980 and 1987, full-time enrollment increased only 2 percent.

While the proportion of full-time students enrolled in colleges and universities has always been greater than the proportion of part-time students, it is interesting to note that since 1970, the proportion of students enrolled full time has steadily decreased. In 1970, about 68 percent of the students were enrolled full time; by 1980, this proportion had dropped to 59 percent. In 1987, only 57 percent of all students enrolled in institutions of higher education were full-time students.

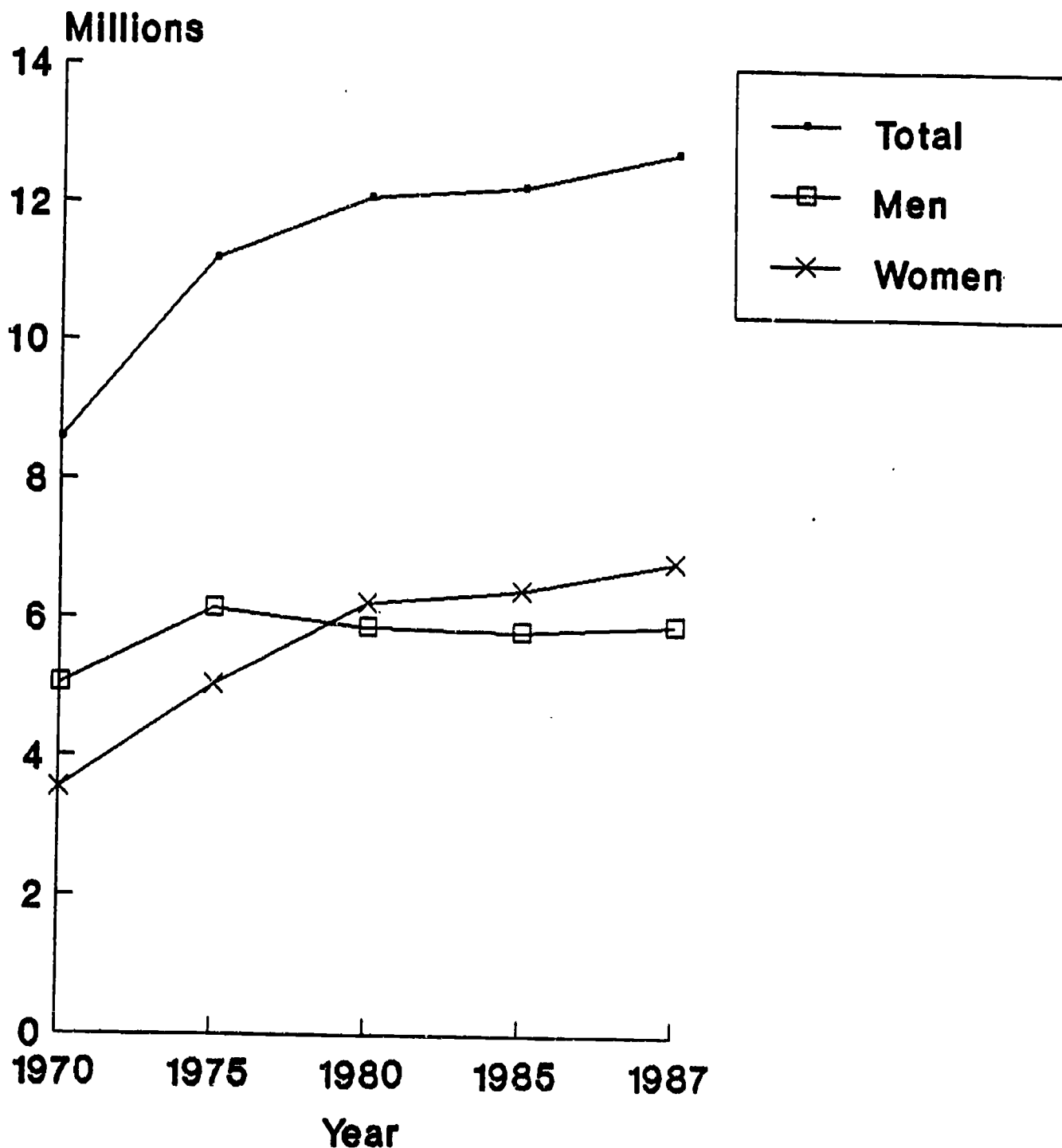
Since 1970, there also have been interesting changes in the percentage of men and women enrolled in institutions of higher education. That is, while the number of both men and women enrolled in colleges and universities has grown over the years, the enrollment of women has increased at a faster rate than the enrollment of men (figure 2 and appendix table A-1). From 1970 to 1975, the number of women enrolled in institutions of higher education increased 42 percent. During that time, the enrollment of men increased at about one-half that rate (21.9 percent). By 1980, enrollment of women in colleges and universities had increased another 24 percent; however, enrollment of men had dropped about 4 percent during this time. Throughout the early 1980s, the enrollment of both men and women increased at similar rates; however by the mid-1980s, enrollment of men started to drop slightly, while enrollment of women remained relatively stable. While enrollment of men has stabilized since 1984, enrollment of women has continued to increase at a slow, but steady pace (increasing about 7 percent between 1984 and 1987) (figure 2 and appendix table A-1).

**Figure 1.--Enrollment in institutions of higher education, by total enrollment and attendance status, Fall 1970-1987**



**Source: U.S. Department of Education,  
National Center for Education Statistics,  
'Fall Enrollment' survey, 1970-1987.**

**Figure 2.--Enrollment in institutions of higher education, by total enrollment and sex of student, Fall 1970-1987**



**Source: U.S. Department of Education,  
National Center for Education Statistics,  
'Fall Enrollment' survey, 1970-1987.**

The proportions of men and women enrolled in colleges and universities also has changed over time. In 1970, more men (58.8 percent) than women (41.2 percent) were enrolled in colleges and universities; by 1980, this pattern had begun to reverse, with proportionally more women enrolled (51.4 percent) than men (48.6 percent). By 1987, the proportion of men in higher education had dropped further, to about 46 percent of all students enrolled.

## Enrollment in Institutions of Higher Education, Fall 1987

### Enrollment, by Control of Institution

Table 1 indicates the distribution of students enrolled in institutions of higher education, by control of institution and selected institutional and student characteristics. As shown, about 12.8 million students were enrolled in institutions of higher education in the fall of 1987. This represents a 2.1 percent increase in higher education enrollment from the previous year (appendix table A-2). In 1987, approximately 10 million (or over three-fourths) of the students enrolled in institutions of higher education were enrolled in public institutions. Of the 2.8 million students enrolled in private schools, 2.6 million (93.2 percent) attended private nonprofit institutions (table 1). While enrollment in public institutions of higher education was up 2.7 percent from the fall of 1986, enrollment in private schools remained stable during this time (appendix table A-2).

Close to 8 million students were enrolled in 4-year institutions of higher education in the fall of 1987. Over two-thirds of these students (68.0 percent) attended public institutions. Of the 4.8 million students enrolled in 2-year higher education institutions, only 5 percent attended private institutions in 1987 (table 1).<sup>2</sup>

While 81 percent of the 11 million undergraduate students and 65 percent of the 1.5 million graduate students attended public institutions, 59 percent of the approximately 270,000 first-professional students attended private schools in the fall of 1987 (table 1 and figure 3).<sup>3</sup>

About 6.8 million women were enrolled in institutions of higher education in the fall of 1987; approximately 900,000 more than the total number of men

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<sup>2</sup>Enrollment in institutions of higher education, by control of institution and State for the fall of 1986 and 1987 is displayed in appendix table A-3.

<sup>3</sup>In the fall of 1987, less than 30 percent (27.4) of the institutions offering first-professional programs were public institutions. See Glossary for definition of "first-professional".

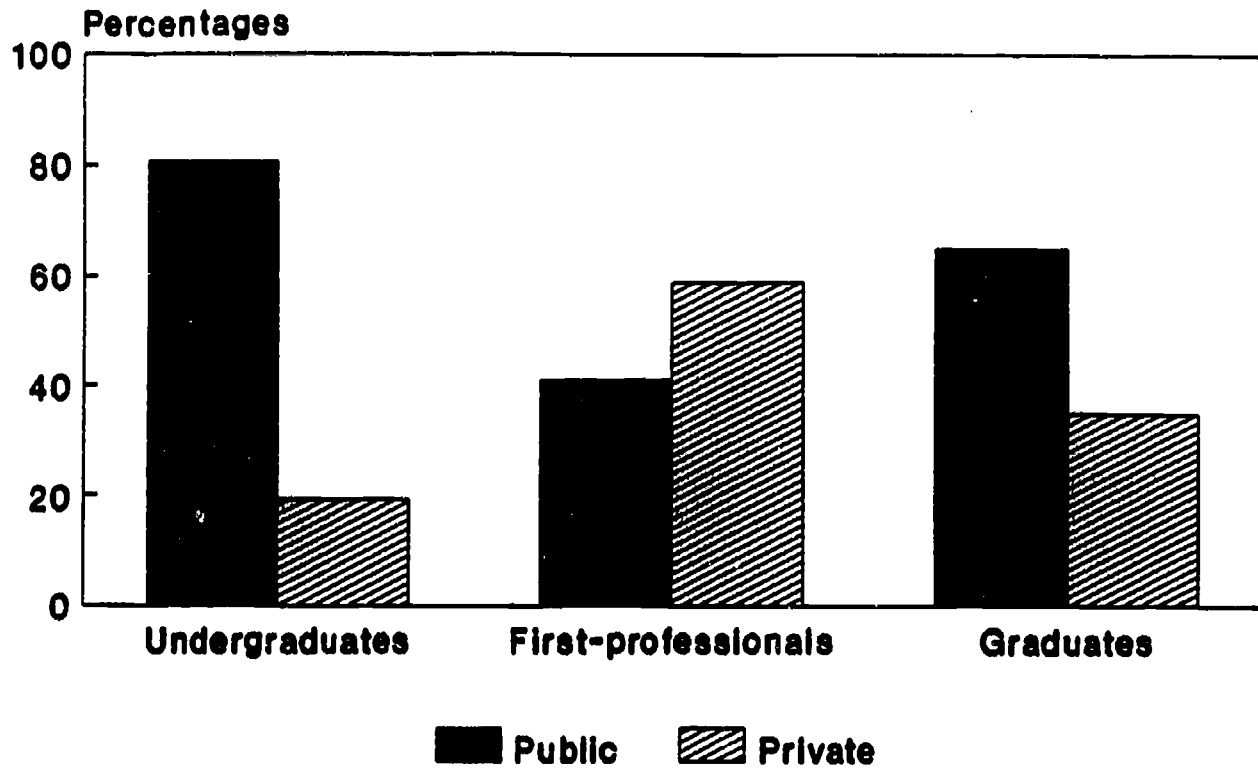
Table 1.--Distribution of students in institutions of higher education, by control of institution and selected institutional and student characteristics: 50 States and D.C., fall 1987  
(In thousands)

Selected institutional and student characteristics	Total		Public		Private					
	Number	Percent	Number	Percent	Total		Nonprofit		For-profit	
					Number	Percent	Number	Percent	Number	Percent
All students	12,768	100.0	9,975	78.1	2,793	21.9	2,602	20.4	191	1.5
<b>Level of institution</b>										
4-year	7,992	100.0	5,434	68.0	2,558	32.0	2,512	31.4	46	0.6
2-year	4,776	100.0	4,541	95.1	235	4.9	90	1.9	145	3.0
<b>Level of student</b>										
Undergraduate	11,048	100.0	8,920	80.7	2,128	19.3	1,940	17.6	188	1.7
First-professional	268	100.0	110	41.1	158	58.9	157	58.4	1	0.5
Graduate	1,452	100.0	944	65.0	508	35.0	505	34.8	2	0.1
<b>Sex</b>										
Men	5,932	100.0	4,574	77.1	1,359	22.9	1,258	21.2	100	1.7
Women	6,836	100.0	5,401	79.0	1,435	21.0	1,344	19.7	91	1.3
<b>Attendance Status</b>										
Full-time	7,232	100.0	5,267	72.8	1,964	27.2	1,815	25.1	149	2.1
Part-time	5,537	100.0	4,708	85.0	829	15.0	787	14.2	42	0.8
<b>Age</b>										
21 or younger	5,296	100.0	4,029	76.1	1,267	23.9	1,189	22.5	78	1.5
22-24	2,026	100.0	1,609	79.4	417	20.6	383	18.9	34	1.7
25-29	1,840	100.0	1,440	78.2	400	21.7	368	20.0	33	1.8
30 or older	3,392	100.0	2,751	81.1	641	18.9	600	17.7	41	1.2
Unknown	215	100.0	147	68.3	68	31.6	61	28.5	6	2.6

NOTE: Totals are calculated from unrounded numbers. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

Figure 3.--Enrollment in institutions of higher education, by level of study and control of institution, Fall 1987



Source: U.S. Department of Education,  
National Center for Education Statistics,  
'Fall Enrollment' survey, 1970-1987.



enrolled in 1987. While women outnumbered men in both public and private institutions, they attended public and private institutions in similar proportions (table 1).

Approximately 7.2 million students were enrolled full time in the fall of 1987. However, about 5.5 million students, or 43 percent of all students enrolled in institutions of higher education were enrolled part time in 1987. Full-time and part-time student enrollment rates varied by control of institution. That is, part-time students were more likely than full-time students to attend public institutions (85.0 percent and 72.8 percent, respectively); and conversely, full-time students were more likely than part-time students to attend private institutions (27.2 percent and 15.0 percent, respectively).

In the fall of 1987, about 7.3 million students, or over one-half (57.3 percent) of all students in institutions of higher education were 24 years old or younger. However, 3.4 million students, or 27 percent of all students in institutions of higher education were older students (30 years old or older). At all age levels, students attended public and private institutions in similar proportions.

## Enrollment, by Attendance Status

As discussed previously, while most students in institutions of higher education attended school full time in the fall of 1987, a high proportion of students attended school part-time. However, as shown in table 2, this attendance pattern varies somewhat by selected institutional and student characteristics. For instance, while 69 percent of the students in 4-year institutions attended school full time in 1987, only 36 percent of the students in 2-year institutions attended school full time during this period. In addition, although students in public and private institutions were more likely to attend school full time, proportionally more students in private institutions were full-time students than students in public institutions (70.3 percent and 52.8 percent, respectively).

While both men and women were more likely to attend school full time than part time, higher proportions of women were part-time students. That is, while 39 percent of the men attended school part time, close to one-half (47.0 percent) of the women attended school part time in 1987.

Younger students were more likely to attend school full time, while older students were more likely to attend school part time. For instance, 82 percent of the students 21 years old or younger, and 62 percent of the students 22-24 years old were enrolled full time in 1987. However, 76 percent of the students 30 years old or older and 60 percent of the students 25 to 29 years old were enrolled part time in the fall of 1987.

**Table 2.--Distribution of students in institutions of higher education, by attendance status and selected institutional and student characteristics: 50 States and D.C., fall 1987**

(In thousands)

Selected student and institutional characteristics	Total		Full-time		Part-time	
	Number	Percent	Number	Percent	Number	Percent
All students	12,768	100.0	7,232	56.6	5,537	43.4
<b>Type of institution</b>						
4-year	7,992	100.0	5,523	69.1	2,469	30.9
2-year	4,776	100.0	1,709	35.8	3,068	64.2
<b>Control of institution</b>						
Public	9,975	100.0	5,267	52.8	4,708	47.2
Private	2,793	100.0	1,964	70.3	829	29.7
Nonprofit	2,602	100.0	1,815	69.8	787	30.2
For-profit	191	100.0	149	78.0	42	22.0
<b>Level of student</b>						
Undergraduate	11,048	100.0	6,463	58.5	4,585	41.5
First-professional	268	100.0	242	90.1	27	9.9
Graduate	1,452	100.0	527	36.3	925	63.7
<b>Sex of student</b>						
Men	5,932	100.0	3,611	60.9	2,321	39.1
Women	6,836	100.0	3,621	53.0	3,216	47.0
<b>Age</b>						
21 or younger	5,296	100.0	4,364	82.4	931	17.6
22-24	2,026	100.0	1,252	61.8	774	38.2
25-29	1,840	100.0	727	39.5	1,113	60.5
30 or older	3,392	100.0	807	23.8	2,585	76.2
Unknown	215	100.0	82	38.1	134	62.3

NOTE: Totals are calculated from unrounded numbers. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

## Enrollment, by Level of Education, Sex, and Age

College administrators and public policymakers had been concerned that the 1980s would bring a period of declining enrollments in institutions of higher education. Population projections for the 1980s indicated decreases in the population of 18- to 24-year-olds. Many analysts saw this as resulting in future declines in higher education enrollment. However, while the population of 18- to 24-year-olds declined by 8.1 percent between 1981 and 1986, their college participation rate<sup>4</sup> rose slightly (almost 2 percent) during that time, resulting in stable enrollment figures for this age cohort overall.<sup>5</sup> Also, earlier predictions of enrollment trends did not take into account the fact that greater numbers of older students--particularly older women--would be attending institutions of higher education in the 1980s.

Table 3 shows the age distribution of students in institutions of higher education, by level of education, sex, and attendance status.<sup>6</sup> As indicated previously, about 7.3 million students, or over one-half (57.4 percent) of all students in institutions of higher education were 24 years old or younger in the fall of 1987. In contrast, about 3.4 million students, or 27 percent were older students (30 years or older).

Of the students in institutions of higher education, women tended to be older than men and part-time students tended to be older than full-time students (table 3 and figure 4). That is, while 30 percent of the women were 30 years old or older, proportionally fewer men (22 percent) were older students. Furthermore, while close to one-half (46.7 percent) of the part-time students were 30 years old or older, proportionally fewer full-time students (11.2 percent) were 30 years old or older.

Of the undergraduate students enrolled in institutions of higher education, most (63.4 percent) were 24 years old or younger (figure 5). However, 23 percent of all undergraduates were 30 years old or older. Undergraduate women tended to be older than undergraduate men. About 27 percent of the undergraduate women were 30 years old or older; only 19 percent of the undergraduate men were 30 years old or older (table 3).

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<sup>4</sup>"College participation rate" of 18- to 24-year-olds refers to the proportion of the population 18 to 24 years old that attends college.

<sup>5</sup>U.S. Department of Commerce, Bureau of the Census, Current Population Reports, "School Enrollment--Social and Economic Characteristics of Students: October 1986," Series P-20, No.429, and "United States Population Estimates by Age, Sex, and Race: 1980-1987," Series P-25, No. 1022.

<sup>6</sup>See appendix table A-4 for numbers of students enrolled, by level of education, sex, attendance status, and age.

Table 3.--Enrollment in institutions of higher education, by level of education, sex, attendance status, and age: 50 States and D.C., fall 1987 1/

Attendance status and Age 2/	All students			Level of education and sex of student								
				Undergraduate			First-professional			Graduate		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total	12,768	5,932	6,836	11,048	5,069	5,979	268	170	98	1,452	693	759
						All students (in thousands) 5,979						
						Percent						
Age	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	21 or younger	41.5	42.3	40.8	47.8	49.3	46.4	2.8	2.5	3.3	0.7	0.7
	22-24	15.9	18.2	13.9	15.6	18.1	13.5	37.2	37.1	37.1	13.9	14.4
	25-29	14.4	15.6	13.4	12.0	12.6	11.5	35.6	37.4	32.2	28.7	32.2
	30 or older	26.6	22.3	30.3	23.1	18.6	27.0	22.9	21.3	25.6	53.3	49.6
	Unknown	1.7	1.6	1.7	1.5	1.4	1.5	1.5	1.6	1.8	3.3	3.0
	Total	7,232	3,611	3,621	6,463	3,164	3,299	242	154	88	527	294
							Full-time (in thousands) 3,299					
							Percent					
Age	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	21 or younger	60.3	57.8	62.9	67.3	65.7	68.9	3.1	2.7	3.7	1.3	1.2
	22-24	17.3	19.8	14.8	16.0	19.7	13.5	40.0	40.0	40.2	22.9	22.0
	25-29	10.1	11.4	8.7	7.2	7.8	6.5	35.7	37.6	32.4	33.9	36.8
	30 or older	11.2	9.8	12.5	8.5	6.8	10.1	19.5	18.1	22.0	39.9	38.0
	Unknown	1.1	1.1	1.1	1.0	1.0	1.0	1.7	1.7	1.7	2.1	2.2
	Total	5,537	2,321	3,216	4,585	1,905	2,680	27	16	10	925	400
							Part-time (in thousands) 2,680					
							Percent					
Age	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	21 or younger	16.8	18.3	15.8	20.2	22.2	18.8	0.4	0.4	0.3	0.4	0.4
	22-24	14.0	15.6	12.8	15.1	17.1	13.6	10.2	10.5	10.0	8.7	8.9
	25-29	20.1	22.2	18.6	18.9	20.6	17.6	33.3	35.8	30.4	25.7	28.9
	30 or older	46.7	41.6	50.3	43.7	38.0	47.8	53.2	51.9	57.1	61.0	58.1
	Unknown	2.4	2.5	2.4	2.1	2.1	2.1	1.5	1.3	1.8	4.1	3.6

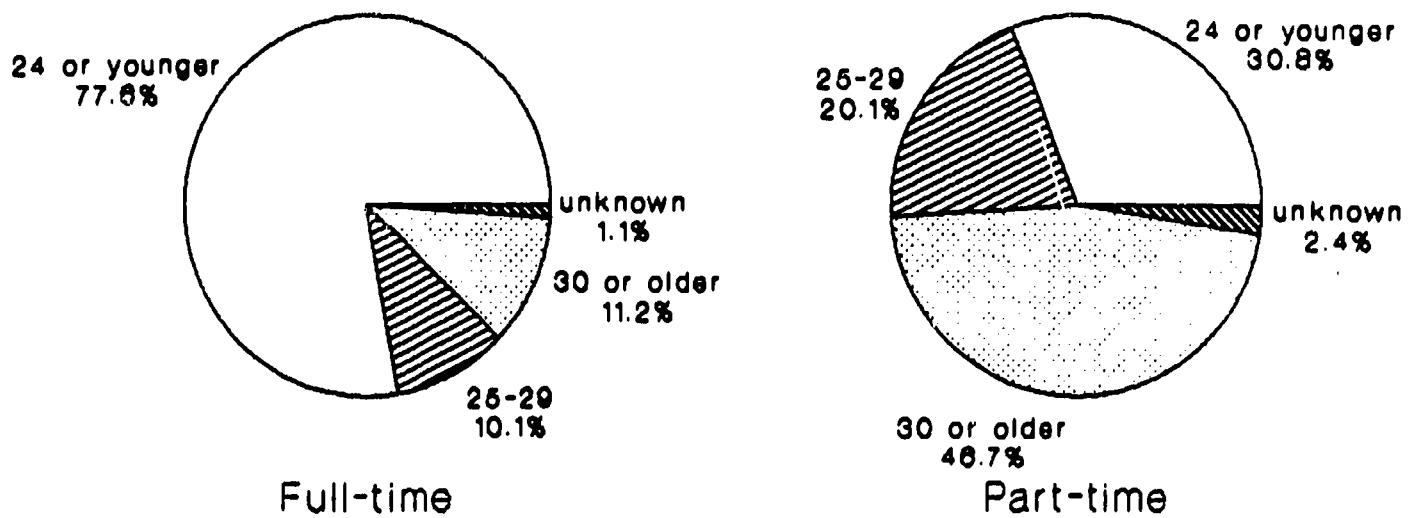
1/ See appendix table A-4 for number of students enrolled by level of education, sex, attendance status, and age.

2/ Approximately 10 percent of the age data has been imputed.

NOTE: Totals are calculated from unrounded numbers. Details may not add to totals due to rounding.

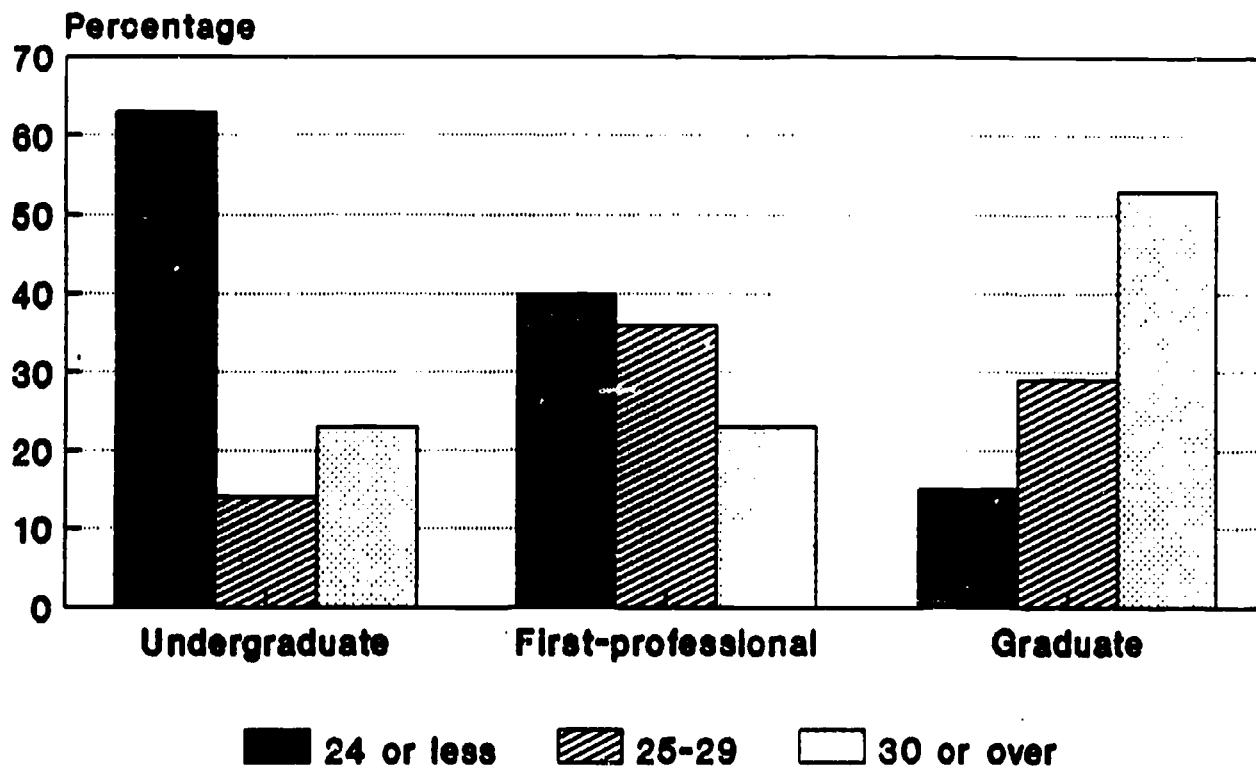
SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

**Figure 4.--Enrollment in institutions of higher education, by attendance status and age, Fall 1987**



**Source: U.S. Department of Education,  
National Center for Education Statistics,  
'Fall Enrollment' survey, 1970-1987.**

**Figure 5.--Enrollment in institutions of higher education, by level of study and age, Fall 1987**



Source: U.S. Department of Education,  
National Center for Education Statistics,  
"Fall Enrollment" survey, 1970-1987.

Part-time undergraduate students were more likely to be older (30 years old or older) than full-time undergraduates. That is, while 44 percent of the part-time undergraduates were 30 years old or older; only 8 percent of the full-time students were older students. This attendance pattern was particularly true for part-time undergraduate women. While 49 percent of the part-time undergraduate women were 30 years old or older, only 10 percent of the full-time undergraduate women were older students.

While most undergraduates were 24 years old or younger, about 73 percent of the first-professional students were between 22 and 29 years old. While the age distributions of male and female undergraduates varied somewhat, the age distributions of male and female first-professional students were similar; most were between the ages 22 and 29. However, like part-time undergraduate students, part-time first-professional students tended to be older (30 years old or older) than full-time first-professional students (53.2 percent and 19.5 percent, respectively).

Most graduate students (53 percent) were 30 years old or older (figure 5). This was true for both males and females, though proportionally more female than male graduate students were older students (56.7 percent and 49.6 percent, respectively) (table 3). Similar to undergraduates and first-professional students, part-time graduate students were older than full-time graduate students. For instance, 61 percent of the part-time graduate students were 30 years old or older; 40 percent of the full-time graduate students were 30 years old or older.<sup>7</sup>

## Enrollment In Non-HEGIS Institutions

While this report focuses only on enrollment in the traditional higher education institutions (i.e., HEGIS institutions), IPEDS also collects data from non-HEGIS institutions (i.e., institutions not accredited at the college level by an agency recognized by the Secretary of Education). Enrollment data for these institutions were not presented in this report, because the response rates for non-HEGIS institutions were below NCES standards. Furthermore, data were not available to evaluate the representativeness of the responding non-HEGIS institutions. (Response rates for non-HEGIS institutions are shown in appendix tables B-1 and B-3.)

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<sup>7</sup>While the Bureau of the Census collects enrollment data, by age of student, the Census's estimates may differ somewhat from the estimates presented in this report. This is due to different approaches to data collection. For the purposes of this report, the primary distinction in data collection methodologies is that the IPEDS "Fall Enrollment" survey surveys institutions to determine an estimate of students enrolled in the fall of a given year, while the Census surveys households to determine an estimate of college enrollment at any point during the current school year.

NCES plans to conduct a separate analysis and evaluation of the data provided by non-HEGIS institutions. The results of this analysis, including any necessary caveats, will be published in a future IPEDS technical report. It is hoped that this report will help readers obtain a clear understanding of the enrollment characteristics and the resources of this important sector of postsecondary education.



**Appendix A: Tables**

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**Table A-1.--Total enrollment in institutions of higher education,  
by attendance status and sex of student:  
Fall 1970 to fall 1987**

Year	Total enrollment	Attendance status		Sex of student	
		Full-time	Part-time	Men	Women
1970 ....	8,580,887	5,915,290	2,765,597	5,043,642	3,537,245
1971 ....	8,948,644	6,077,232	2,871,412	5,207,004	3,741,640
1972 ....	9,214,860	6,072,389	3,142,471	5,238,757	3,976,103
1973 ....	9,602,123	6,189,493	3,412,630	5,371,052	4,231,071
1974 ....	10,223,729	6,370,273	3,853,456	5,622,429	4,601,300
1975 ....	11,184,859	6,841,334	4,343,525	6,148,997	5,035,862
1976 ....	11,012,137	6,717,058	4,295,079	5,810,828	5,201,309
1977 ....	11,285,787	6,792,925	4,492,862	5,789,016	5,496,771
1978 ....	11,260,092	6,667,657	4,592,435	5,640,998	5,619,094
1979 ....	11,569,899	6,794,039	4,775,860	5,682,877	5,887,022
1980 ....	12,096,895	7,097,958	4,998,937	5,874,374	6,222,521
1981 ....	12,371,672	7,181,250	5,190,422	5,975,056	6,396,616
1982 ....	12,425,780	7,220,618	5,205,162	6,031,384	6,394,396
1983 ....	12,464,661	7,261,050	5,203,611	6,023,725	6,440,936
1984 ....	12,241,940	7,098,388	5,143,552	5,863,574	6,378,366
1985 ....	12,247,055	7,075,221	5,171,834	5,818,450	6,428,605
1986* ...	12,504,501	7,120,076	5,384,425	5,884,976	6,619,525
1987 ....	12,768,307	7,231,506	5,536,801	5,932,131	6,836,176

Note: Revised from previous NCES publications.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities" surveys.

Table A-2.--Enrollment in institutions of higher education, by control of institution, level of education, and sex: 50 States and D.C., Fall 1984-1987

Control of institution, level of education, and sex	Fall				Percent change		
	1984	1985	1986	1987	1984-85	1985-86	1986-87
Total.....	12,241,940	12,247,055	12,504,501	12,768,307	0.0	2.1	2.1
Undergraduate.....	10,618,071	10,596,674	10,798,800	11,047,902	-0.2	1.9	2.3
Men.....	5,006,813	4,962,080	5,017,876	5,068,684	-0.9	1.1	1.0
Women.....	5,611,258	5,634,594	5,780,924	5,979,218	0.4	2.6	3.4
First-professional.....	278,598	274,200	270,413	268,467	-1.6	-1.4	-0.7
Men.....	184,949	179,792	173,862	170,133	-2.8	-3.3	-2.1
Women.....	93,649	94,408	96,551	98,334	0.8	2.3	1.8
Graduate.....	1,345,271	1,376,181	1,435,288	1,451,938	2.3	4.3	1.2
Men.....	671,812	676,578	693,238	693,314	0.7	2.5	0.0
Women.....	673,459	699,603	742,050	758,624	3.9	6.1	2.2
Public.....	9,459,592	9,479,273	9,714,709	9,975,064	0.2	2.5	2.7
Undergraduate.....	8,475,713	8,477,125	8,661,416	8,920,364	0.0	2.2	3.0
Men.....	3,981,063	3,952,548	4,002,782	4,076,623	-0.7	1.3	1.8
Women.....	4,494,650	4,524,577	4,658,634	4,843,741	0.7	3.0	4.0
First-professional.....	113,908	111,808	112,026	110,291	-1.8	0.2	-1.5
Men.....	73,722	71,373	70,331	68,155	-3.2	-1.5	-3.1
Women.....	40,186	40,435	41,695	42,136	0.6	3.1	1.1
Graduate.....	869,971	890,340	941,267	944,409	2.3	5.7	0.3
Men.....	411,241	413,567	432,835	428,846	0.6	4.7	-0.9
Women.....	458,730	476,773	508,432	515,563	3.9	6.6	1.4
Private.....	2,782,348	2,767,782	2,789,792	2,793,243	-0.5	0.8	0.1
Undergraduate.....	2,142,358	2,119,549	2,137,384	2,127,538	-1.1	0.8	-0.5
Men.....	1,025,750	1,009,532	1,015,094	992,061	-1.6	0.6	-2.3
Women.....	1,116,608	1,110,017	1,122,290	1,135,477	-0.6	1.1	1.2
First-professional.....	164,690	162,392	158,387	158,176	-1.4	-2.5	-0.1
Men.....	111,227	108,419	103,531	101,978	-2.5	-4.5	-1.5
Women.....	53,463	53,973	54,856	56,198	1.0	1.6	2.4
Graduate.....	475,300	485,841	494,021	507,529	2.2	1.7	2.7
Men.....	260,571	263,011	260,403	264,468	0.9	-1.0	1.6
Women.....	214,729	222,830	233,618	243,061	3.8	4.8	4.0

Note: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.



Table A-3.--Enrollment in institutions of higher education, by control of institution and State: Fall 1986 to fall 1987

State	Total			Public			Private		
	Fall 1986 1/	Fall 1987 2/	Percent change, 1986 to 1987	Fall 1986 1/	Fall 1987 2/	Percent change, 1986 to 1987	Fall 1986 1/	Fall 1987 2/	Percent change, 1986 to 1987
United States ....	12,504,501	12,768,307	2.1	9,714,709	9,975,064	2.7	2,789,792	2,793,243	0.1
Alabama .....	216,060	223,858	3.5	195,049	202,588	3.9	21,011	21,070	0.3
Alaska .....	27,492	26,937	-2.0	26,369	25,991	-1.4	1,123	946	-15.8
Arizona .....	226,597	237,233	4.7	213,570	228,552	7.0	13,027	8,681	-33.4
Arkansas .....	79,182	79,273	0.1	68,760	68,313	-0.7	10,422	10,960	5.2
California .....	1,729,476	1,788,833	3.4	1,523,852	1,581,353	3.8	205,624	207,480	0.9
Colorado .....	181,907	188,035	3.4	162,035	166,046	2.5	19,872	21,989	10.7
Connecticut .....	159,040	163,238	2.6	99,590	103,417	3.8	59,450	59,821	0.6
Delaware .....	33,895	36,650	8.1	28,894	29,647	2.6	5,001	7,003	40.0
District of Columbia .....	77,652	77,546	-0.1	11,800	10,851	-8.0	65,852	66,715	1.3
Florida ..3/.....	483,964	489,964	1.2	385,438	405,292	5.2	98,526	84,672	-14.1
Georgia ..4/.....	195,123	224,066	14.8	147,269	174,355	18.4	47,854	49,711	3.9
Hawaii .....	51,696	52,291	1.2	42,593	42,746	0.4	9,103	9,545	4.9
Idaho .....	45,260	45,567	0.7	35,532	34,791	-2.1	9,728	10,776	10.8
Illinois .....	692,092	686,954	-0.7	530,565	521,117	-1.8	161,527	165,837	2.7
Indiana.....	250,185	256,264	2.4	194,139	201,457	3.8	56,046	54,807	-2.2
Iowa .....	155,369	158,230	1.8	110,439	112,007	1.4	44,930	46,223	2.9
Kansas .....	143,311	148,997	4.0	129,947	135,941	4.6	13,364	13,056	-2.3
Kentucky .....	144,562	153,351	6.1	115,058	122,019	6.0	29,504	31,332	6.2
Louisiana .....	171,344	173,229	1.1	146,297	148,492	1.5	25,047	24,737	-1.2
Maine .....	46,230	47,554	2.9	34,460	35,159	2.0	11,770	12,395	5.3
Maryland .....	238,880	244,750	2.5	204,821	209,099	2.1	34,059	35,651	4.7
Massachusetts .....	417,562	423,916	1.5	178,615	187,091	4.7	238,947	236,825	-0.9
Michigan .....	520,428	535,486	2.9	445,767	459,313	3.0	74,661	76,173	2.0
Minnesota .....	226,558	237,212	4.7	178,790	186,096	4.1	47,768	51,116	7.0
Mississippi .....	101,104	105,510	4.4	89,925	93,284	3.7	11,179	12,226	9.4
Missouri.....	246,185	251,778	2.3	168,883	171,246	1.4	77,302	80,532	4.2
Montana .....	35,238	35,882	1.8	31,192	31,858	2.1	4,046	4,024	-0.5
Nebraska .....	100,401	100,800	0.4	84,262	84,901	0.8	16,139	15,927	-1.3
Nevada .....	46,796	48,063	2.7	46,490	47,791	2.8	306	272	-11.1
New Hampshire .....	63,886	66,163	4.2	28,733	30,899	7.5	25,153	25,264	0.4
New Jersey .....	295,353	294,433	-0.3	235,793	235,408	-0.2	59,560	59,025	-0.9
New Mexico .....	80,271	83,074	3.5	78,566	81,298	3.5	1,705	1,776	4.2
New York .....	1,006,289	997,780	-0.8	570,644	572,282	0.3	435,645	425,498	-2.3
North Carolina .....	322,979	321,251	-0.5	262,638	258,930	-1.4	60,341	62,321	3.3
North Dakota .....	37,309	37,052	-0.7	34,898	34,348	-1.6	2,411	2,704	12.2
Ohio .....	521,318	518,979	-0.4	385,614	392,346	1.7	135,704	126,633	-6.7
Oklahoma .....	170,840	172,730	1.1	149,043	148,906	-0.1	21,797	23,824	9.3
Oregon .....	144,801	152,657	5.4	125,879	133,458	6.0	18,922	19,199	1.5
Pennsylvania .....	545,924	554,370	1.5	304,190	311,210	2.3	241,734	243,160	0.6
Rhode Island .....	69,572	71,708	3.1	35,511	36,317	2.3	34,061	35,391	3.9
South Carolina .....	134,115	140,841	5.0	108,191	113,352	4.8	25,924	27,489	6.0
South Dakota .....	30,936	31,755	2.7	24,036	24,147	0.5	6,899	7,608	10.3
Tennessee .....	197,069	202,006	2.5	149,443	154,104	3.1	47,626	47,902	0.6
Texas .....	776,019	802,226	3.4	685,542	709,710	3.5	90,477	92,516	2.3
Utah .....	106,213	106,792	0.5	73,067	74,453	1.9	33,146	32,339	-2.4
Vermont .....	32,460	33,242	2.4	18,734	19,360	3.3	13,726	13,882	1.1
Virginia .....	308,318	319,026	3.5	265,687	275,583	3.7	42,631	43,443	1.9
Washington .....	242,450	245,872	1.4	212,338	214,207	0.9	30,112	31,665	5.2
West Virginia.....	76,781	77,256	0.6	67,078	67,959	1.3	9,703	9,297	-4.2
Wisconsin .....	283,653	281,717	-0.7	244,948	240,533	-1.8	38,705	41,184	6.4
Wyoming .....	24,357	26,082	7.0	23,735	25,441	7.2	622	621	5/)

1/Revised from previously published data.

2/Preliminary data.

3/Because of imputation techniques, data are not consistent with figures for other years.

4/Part of the 1987 increase is due to the inclusion of additional public 2-year institutions in the survey.

5/Percentage not shown because of introduction of a new institution in 1986.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1986 and 1987.

Table A-4.--Number of students enrolled in institutions of higher education, by level of education, sex, attendance status, and age: 50 States and D.C., fall 1987  
(In thousands)

Attendance status and Age *	All students			Level of education and sex of student								
				Undergraduate			First-professional			Graduate		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
	All students											
Total	12,768	5,932	6,836	11,048	5,069	5,979	268	170	98	1,452	693	759
Age												
21 or younger	5,296	2,510	2,786	5,278	2,501	2,777	8	4	3	11	5	6
22-24	2,026	1,078	948	1,725	915	810	100	63	36	202	100	101
25-29	1,840	927	913	1,328	640	688	95	64	32	417	223	193
30 or older	3,392	1,321	2,070	2,556	941	1,615	61	36	25	774	344	430
Unknown	215	96	119	162	73	90	4	3	2	48	21	27
	Full-time											
Total	7,232	3,611	3,621	6,463	3,164	3,299	242	154	88	527	294	233
Age												
21 or younger	4,364	2,086	2,278	4,350	2,078	2,272	7	4	3	7	4	3
22-24	1,252	716	536	1,034	590	444	97	61	35	121	65	56
25-29	727	412	315	462	246	216	86	58	29	179	108	71
30 or older	807	355	452	550	216	334	47	28	19	210	111	99
Unknown	82	42	40	66	33	34	4	3	2	11	7	4
	Part-time											
Total	5,537	2,321	3,216	4,585	1,905	2,680	27	16	10	925	400	525
Age												
21 or younger	931	424	507	927	422	505	0	0	0	4	2	2
22-24	774	362	412	690	325	365	3	2	1	81	35	45
25-29	1,113	515	598	865	393	472	9	6	3	238	116	123
30 or older	2,585	966	1,619	2,006	724	1,281	14	9	6	564	233	332
Unknown	134	54	80	96	40	56	0	0	0	38	14	23

\* Approximately 10 percent of the age data has been imputed.

NOTE: Totals are calculated from unrounded numbers. Numbers may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

**Appendix B: Technical Appendix and Glossary**

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# Technical Appendix B--1987 Data<sup>8</sup>

## Methodology

The 1987 fall enrollment data are from the "Fall Enrollment" survey which is conducted annually by the National Center for Education Statistics as part of the new Integrated Postsecondary Education Data System (IPEDS). The IPEDS enrollment survey (first implemented in 1986) replaced the Fall Enrollment in Institutions of Higher Education Survey, an annual survey conducted under the Higher Education General Information Survey (HEGIS).

The "Fall Enrollment" survey was mailed to 6,762 postsecondary institutions in the United States and District of Columbia. The 6,762 institutions consisted of all 3,553 HEGIS institutions and a sample of 3,209 other postsecondary institutions, which represent the universe of 11,843 IPEDS institutions in operation in the fall of 1987 (tables B-1 and B-2).<sup>9</sup> The 1987 IPEDS universe was determined by the IPEDS "Institutional Characteristics" (IC) survey, an annual survey of all postsecondary institutions.

While IPEDS collects data from all postsecondary institutions, the data presented in this report represent the universe of 3,564 higher education institutions in operation in the United States and the District of Columbia in the fall of 1987. Data for non-HEGIS institutions are not presented, because survey response rates for these institutions did not satisfy NCES standards. (See pages 14-15 of the text and page 25 of the technical appendix for a more detailed discussion of response rates.)

## 9 of Data Collected

There were three fall enrollment forms used for the 1987 data collection. The most extensive form was sent to postsecondary education institutions that grant baccalaureate and higher degrees, while less detailed questionnaires were sent to 2-year and less-than-2-year institutions. Enrollment data were collected from all 4- and 2-year schools by level of enrollment, attendance and

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<sup>8</sup>This report presents data on HEGIS institutions only. However, the technical appendix addresses data collection procedures related to the "Fall Enrollment" survey, 1987 (i.e., HEGIS and non-HEGIS schools).

<sup>9</sup>The number of institutions of higher education in table B-1 (3,553) is the number at the time of mail-out and differs from the universe number in table B-2 (3,564), which was established subsequently to the survey mail-out. The difference results from the misclassification at the time of survey mail-out of 11 institutions of higher education as other postsecondary institutions.

Table B-1.--Unweighted number and response rates of postsecondary institutions receiving the "Fall Enrollment" survey, by control and level of institution: 50 States and D.C., fall 1987

Level of institution	Total	Public	Private		
			Total	Nonprofit	For-profit
<b>Number of institutions receiving</b>					
All postsecondary.....	6,762	2,216	4,546	2,772	1,774
4-year-and-above.....	2,611	625	1,986	1,877	109
2-but-less-than-4-year.....	2,768	1,233	1,535	807	728
Less-than-2-year.....	1,383	358	1,025	88	937
Higher education.....	3,553	1,588	1,965	1,664	301
4-year-and-above.....	2,128	599	1,529	1,481	48
2-but-less-than-4-year.....	1,410	989	421	182	239
Less-than-2-year.....	15	--	15	1	14
Other postsecondary.....	3,209	628	2,581	1,108	1,473
4-year-and-above.....	483	26	457	396	61
2-but-less-than-4-year.....	1,358	244	1,114	625	489
Less-than-2-year.....	1,368	358	1,010	87	923
-----					
<b>Number of institutions responding</b>					
All postsecondary.....	4,874	1,851	3,023	1,933	1,090
4-year-and-above.....	2,097	590	1,507	1,455	52
2-but-less-than-4-year.....	1,823	1,089	734	413	321
Less-than-2-year.....	954	172	782	65	717
Higher education.....	3,225	1,529	1,696	1,493	203
4-year-and-above.....	1,964	583	1,381	1,343	38
2-but-less-than-4-year.....	1,251	946	305	150	155
Less-than-2-year.....	10	--	10	--	10
Other postsecondary.....	1,649	322	1,327	440	887
4-year-and-above.....	133	7	126	112	14
2-but-less-than-4-year.....	572	143	429	263	166
Less-than-2-year.....	944	172	772	65	707
-----					
<b>Response rate</b>					
All postsecondary.....	72.1	83.5	66.5	69.7	61.4
4-year-and-above.....	80.3	94.4	75.9	77.5	47.7
2-but-less-than-4-year.....	65.9	88.3	47.8	51.2	44.1
Less-than-2-year.....	69.0	48.0	76.3	73.9	76.5
Higher education.....	90.8	96.3	86.3	89.7	67.4
4-year-and-above.....	92.3	97.3	90.3	90.7	79.2
2-but-less-than-4-year.....	88.7	95.7	72.4	82.4	64.9
Less-than-2-year.....	66.7	--	66.7	--	71.4
Other postsecondary.....	51.4	51.3	51.4	39.7	60.2
4-year-and-above.....	27.5	26.9	27.6	28.3	23.0
2-but-less-than-4-year.....	42.1	58.6	38.5	42.1	33.9
Less-than-2-year.....	69.0	48.0	76.4	74.7	76.6
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SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.



Table B-2.--Number of postsecondary institutions in the "Fall Enrollment" survey universe, by control and level of institution: 50 States and D.C., fall 1987

Level of institution	Total	Public	Private		
			Total	Nonprofit	For-profit
All postsecondary.....	11,843	2,216	9,627	3,186	6,441
4-year-and-above.....	2,611	625	1,986	1,877	109
2-but-less-than-4-year.....	2,768	1,233	1,535	807	728
Less-than-2-year.....	6,464	358	6,106	502	5,604
Higher education.....	3,564	1,588	1,976	1,665	311
4-year-and-above.....	2,128	599	1,529	1,481	48
2-but-less-than-4-year.....	1,410	989	421	182	239
Less-than-2-year.....	26	--	26	2	24
Other postsecondary.....	8,279	628	7,651	1,521	6,130
4-year-and-above.....	463	26	457	396	61
2-but-less-than-4-year.....	1,358	244	1,114	625	489
Less-than-2-year.....	6,438	358	6,080	500	5,580

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 Includes institutions in sectors 8 and 9 that are not included in the sample.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

degree seeking status, age, and sex. The less-than-2-year schools were asked to furnish total enrollment data, as well as enrollment summaries by age and sex. The 1987 data collection marks the first time that IPEDS (or HEGIS) has collected fall enrollment data by age of student; these data will be collected biennially in the future.

## Status of Data

Using the 1987 IC list of institutions, in September 1987 the "Fall Enrollment" survey was mailed to all 4-year-and-above, 2-but-less-than 4-year, and public less-than-2-year institutions; and a sample of private less-than-2-year institutions. After deleting institutions that had closed, that did not offer postsecondary programs, or that were duplicates on the file, the survey consisted of: (1) the fall enrollment universe of 5,737 4-year, 2-year and public less-than-2-year institutions, and (2) a sample of 1,025 private less-than-2-year institutions. (In 1987, 6,106 institutions made up the IPEDS universe of private less-than-2-year institutions).

## Response Rates

The overall response rate for institutions of higher education was 90.8 percent. This is based on the ratio of the number of completed questionnaires divided by the number of in-scope institutions receiving the survey. Detailed response rates by postsecondary status are found in appendix tables B-1 and B-3. Response rates for institutions of higher education by State and control of institution are shown in appendix tables B-4 and B-5.

As indicated in appendix table B-1, the institutional response rate for higher education institutions (90.8 percent) is much higher than that of other postsecondary institutions (51.4 percent). Appendix table B-3 shows the percentage of weighted enrollment that is represented by the responding institutions. As presented, responding institutions accounted for 96.0 percent of the fall 1987 enrollment across all postsecondary education institutions, 98.6 percent of enrollment among higher education institutions, and 67.4 percent of enrollment among other postsecondary institutions.

## Imputation

Data were imputed for total nonrespondents (i.e., 9.2 percent of the HEGIS institutions did not respond to the "Fall Enrollment" survey) and for institutions that did not respond to specific items. Among institutions that did not respond to specific items, imputed data for items shown in tables 1 and 2 of this report account for about 5 percent of the HEGIS

Table B-3.--Number and response rates weighted by enrollment for postsecondary institutions receiving the "Fall Enrollment" survey, by control and level of institution: 50 States and D.C., fall 1987

Level of institution	Total	Public	Private		
			Total	Nonprofit	For-profit
<b>Total fall enrollment in institutions receiving</b>					
All postsecondary.....	13,964,079	10,331,628	3,632,451	2,772,344	860,107
4-year-and-above.....	8,121,877	5,460,122	2,661,755	2,600,923	60,832
2-but-less-than-4-year.....	5,038,049	4,694,963	343,089	129,611	213,478
Less-than-2-year.....	804,153	176,544	627,607	41,810	585,797
Higher education.....	12,771,645	9,975,064	2,796,581	2,602,205	194,376
4-year-and-above.....	7,992,085	5,434,010	2,559,075	2,512,103	45,972
2-but-less-than-4-year.....	4,771,589	4,541,054	230,535	89,922	140,613
Less-than-2-year.....	7,971	--	7,971	180	7,791
Other postsecondary.....	1,192,434	356,564	835,870	170,139	665,731
4-year-and-above.....	129,792	26,112	103,680	88,820	14,860
2-but-less-than-4-year.....	266,460	153,906	112,554	39,689	72,865
Less-than-2-year.....	796,182	176,546	619,636	41,630	578,006
<hr/>					
<b>Total fall enrollment in institutions responding</b>					
All postsecondary.....	13,398,788	10,107,806	3,290,982	2,636,089	654,893
4-year-and-above.....	7,933,509	5,390,747	2,542,762	2,495,629	47,133
2-but-less-than-4-year.....	4,853,207	4,590,678	262,529	106,569	155,960
Less-than-2-year.....	612,072	126,381	485,691	33,891	451,800
Higher education.....	12,594,966	9,889,364	2,705,602	2,539,446	166,156
4-year-and-above.....	7,885,011	5,388,717	2,496,294	2,452,909	43,385
2-but-less-than-4-year.....	4,704,820	4,500,647	204,173	86,537	117,636
Less-than-2-year.....	5,135	--	5,135	--	5,135
Other postsecondary.....	803,822	218,442	585,380	96,643	488,737
4-year-and-above.....	48,498	2,030	46,468	42,720	3,748
2-but-less-than-4-year.....	148,387	90,031	58,356	20,032	38,324
Less-than-2-year.....	606,937	126,381	480,556	33,891	446,665
<hr/>					
<b>Response rate</b>					
All postsecondary.....	96.0	97.8	90.6	95.1	76.1
4-year-and-above.....	97.7	98.7	95.5	96.0	77.5
2-but-less-than-4-year.....	96.3	97.8	76.5	82.2	73.1
Less-than-2-year.....	76.1	71.6	77.4	81.1	77.1
Higher education.....	98.6	99.1	96.7	97.6	85.5
4-year-and-above.....	98.7	99.2	97.6	97.6	94.4
2-but-less-than-4-year.....	98.6	99.1	88.6	96.2	83.7
Less-than-2-year.....	64.4	--	64.4	--	65.9
Other postsecondary.....	67.4	61.3	70.0	56.8	73.4
4-year-and-above.....	37.4	7.8	44.8	48.1	25.2
2-but-less-than-4-year.....	55.7	58.5	51.8	50.5	52.6
Less-than-2-year.....	76.2	71.6	77.6	81.4	77.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

Table B-4.--Survey response rates of institutions of higher education, by control and State or other area: Fall 1987

State or other area	All institutions			Public institutions			Private institutions		
	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing
50 States and D.C.....	3,553	3,225	90.8	1,588	1,529	96.3	1,965	1,696	86.3
Alabama.....	90	78	86.7	60	53	88.3	30	25	83.3
Alaska.....	15	15	100.0	12	12	100.0	3	3	100.0
Arizona.....	35	25	71.4	19	18	94.7	16	7	43.8
Arkansas.....	37	33	89.2	20	20	100.0	17	13	76.5
California.....	311	271	87.1	139	136	97.8	172	135	78.5
Colorado.....	54	48	88.9	29	29	100.0	25	19	76.0
Connecticut.....	50	48	96.0	25	25	100.0	25	23	92.0
Delaware.....	10	10	100.0	5	5	100.0	5	5	100.0
District of Columbia.....	18	18	100.0	2	2	100.0	16	16	100.0
Florida.....	94	76	80.9	38	37	97.4	56	39	69.6
Georgia.....	93	82	88.2	48	43	89.6	45	39	86.7
Hawaii.....	14	14	100.0	9	9	100.0	5	5	100.0
Idaho.....	11	10	90.9	6	6	100.0	5	4	80.0
Illinois.....	165	163	98.8	59	59	100.0	106	104	98.1
Indiana.....	77	68	88.3	29	29	100.0	48	39	81.3
Iowa.....	65	56	86.2	23	19	82.6	42	37	88.1
Kansas.....	54	49	90.7	30	28	93.3	24	21	87.5
Kentucky.....	60	51	85.0	22	22	100.0	38	29	76.3
Louisiana.....	33	31	93.9	20	19	95.0	13	12	92.3
Maine.....	31	30	96.8	13	12	92.3	18	18	100.0
Maryland.....	58	56	96.6	34	32	94.1	24	24	100.0
Massachusetts.....	120	117	97.5	31	31	100.0	89	86	96.6
Michigan.....	102	96	94.1	46	44	95.7	56	52	92.9
Minnesota.....	75	70	93.3	33	32	97.0	42	38	90.5
Mississippi.....	47	41	87.2	29	24	82.8	18	17	94.4
Missouri.....	92	84	91.3	27	27	100.0	65	57	87.7
Montana.....	17	13	76.5	11	10	90.9	6	3	50.0
Nebraska.....	35	35	100.0	20	20	100.0	15	15	100.0
Nevada.....	9	8	88.9	6	6	100.0	3	2	66.7
New Hampshire.....	33	31	93.9	12	12	100.0	21	19	90.5
New Jersey.....	63	59	93.7	32	31	96.9	31	28	90.3
New Mexico.....	25	24	96.0	22	21	95.5	3	3	100.0
New York.....	333	274	82.3	99	93	93.9	234	181	77.4
North Carolina.....	127	122	96.1	75	75	100.0	52	47	90.4
North Dakota.....	18	18	100.0	14	14	100.0	4	4	100.0
Ohio.....	154	138	89.6	62	61	98.4	92	77	83.7
Oklahoma.....	46	45	97.8	28	28	100.0	18	17	94.4
Oregon.....	45	45	97.8	21	21	100.0	25	24	96.0
Pennsylvania.....	217	202	93.1	64	58	90.6	153	144	94.1
Rhode Island.....	12	12	100.0	3	3	100.0	9	9	100.0
South Carolina.....	64	61	95.3	33	33	100.0	31	28	90.3
South Dakota.....	19	17	89.5	7	6	85.7	12	11	91.7
Tennessee.....	85	78	91.8	24	24	100.0	61	54	88.5

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Table B-4.--Survey response rates of institutions of higher education, by control and State or other area: Fall 1987--Continued

State or other area	All institutions			Public institutions			Private institutions		
	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing
Texas.....	169	156	92.3	105	101	96.2	64	55	85.9
Utah.....	14	12	85.7	9	9	100.0	5	3	60.0
Vermont.....	23	20	87.0	6	6	100.0	17	14	82.4
Virginia.....	77	70	90.9	39	39	100.0	38	31	81.6
Washington.....	54	52	96.3	33	33	100.0	21	19	90.5
West Virginia.....	29	27	93.1	16	16	100.0	13	11	84.6
Wisconsin.....	64	57	89.1	31	28	90.3	33	29	87.9
Wyoming.....	9	9	100.0	8	8	100.0	1	1	100.0
Outlying areas.....	56	51	91.1	21	18	85.7	35	33	94.3
American Samoa.....	1	1	100.0	1	1	100.0	--	--	--
Guam.....	2	2	100.0	2	2	100.0	--	--	--
Northern Marianas.....	1	1	100.0	1	1	100.0	--	--	--
Puerto Rico.....	48	45	93.8	13	12	92.3	35	33	94.3
Trust Terr., Pac. Is.....	2	1	50.0	2	1	50.0	--	--	--
Virgin Islands.....	2	1	50.0	2	1	50.0	--	--	--

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

Table B-5.--Survey response rates of institutions of higher education weighted by total fall enrollment, by control and State or other area: Fall 1987

State or other area	All institutions			Public institutions			Private institutions		
	Total	Respon- dents	Percent respon- ding	Total	Respon- dents	Percent respon- ding	Total	Respon- dents	Percent respon- ding
50 States and D.C.....	12,771,645	12,594,966	98.6	9,975,064	9,889,364	99.1	2,796,581	2,705,602	96.7
Alabama.....	223,658	201,217	90.0	202,588	180,933	89.3	21,070	20,284	96.3
Alaska.....	26,937	26,437	100.0	25,991	25,991	100.0	946	946	100.0
Arizona.....	237,233	232,285	97.9	228,552	226,921	99.3	8,681	5,364	61.8
Arkansas.....	79,273	75,584	95.3	68,313	68,313	100.0	10,960	7,271	66.3
California.....	1,788,833	1,778,456	99.4	1,581,353	1,579,121	99.9	207,480	199,335	96.1
Colorado.....	188,035	185,457	98.6	166,046	166,046	100.0	21,989	19,411	88.3
Connecticut.....	163,238	163,064	99.9	103,417	103,417	100.0	59,821	59,647	99.7
Delaware.....	36,650	36,650	100.0	29,647	29,647	100.0	7,003	7,003	100.0
District of Columbia.....	77,566	77,566	100.0	10,851	10,851	100.0	66,715	66,715	100.0
Florida.....	489,964	484,756	98.9	405,292	405,292	100.0	84,672	79,464	93.8
Georgia.....	224,066	212,738	94.9	174,355	167,509	96.1	49,711	45,229	91.0
Hawaii.....	52,291	52,291	100.0	42,746	42,746	100.0	9,545	9,545	100.0
Idaho.....	45,567	44,312	97.2	34,791	34,791	100.0	10,776	9,521	88.4
Illinois.....	688,401	687,651	99.9	521,117	521,117	100.0	167,284	166,534	99.6
Indiana.....	256,264	249,252	97.3	201,457	201,457	100.0	54,807	47,795	87.2
Iowa.....	158,230	157,550	99.6	112,007	112,007	100.0	46,223	45,543	98.5
Kansas.....	148,997	144,558	97.0	135,941	132,584	97.5	13,056	11,974	91.7
Kentucky.....	153,351	149,468	97.5	122,019	122,019	100.0	31,332	27,449	87.6
Louisiana.....	173,221	171,267	98.9	148,492	146,549	98.7	24,737	24,718	99.9
Maine.....	47,554	46,829	98.5	35,159	34,434	97.9	12,395	12,395	100.0
Maryland.....	244,750	239,362	97.8	209,099	203,711	97.4	35,651	35,651	100.0
Massachusetts.....	423,916	423,640	99.9	187,091	187,091	100.0	236,825	236,549	99.9
Michigan.....	535,486	535,017	99.9	459,313	459,313	100.0	76,173	75,704	99.4
Minnesota.....	237,555	234,352	98.7	186,096	185,587	99.7	51,459	48,765	94.8
Mississippi.....	105,510	100,877	95.6	93,284	91,576	98.2	12,226	9,301	76.1
Missouri.....	251,778	250,022	99.3	171,246	171,246	100.0	80,532	78,776	97.8
Montana.....	35,882	34,006	94.8	31,858	30,694	96.3	4,024	3,312	82.3
Nebaska.....	100,828	100,828	100.0	84,901	84,901	100.0	15,927	15,927	100.0
Nevada.....	48,063	47,995	99.9	47,791	47,791	100.0	272	204	75.0
New Hampshire.....	56,163	55,913	99.6	30,899	30,899	100.0	25,264	25,014	99.0
New Jersey.....	294,433	293,352	99.6	235,408	234,778	99.7	59,025	58,574	99.2
New Mexico.....	83,074	69,957	84.2	81,298	68,181	83.9	1,776	1,776	100.0
New York.....	997,780	991,299	99.4	572,282	572,282	100.0	425,498	419,017	98.5
North Carolina.....	321,251	320,014	99.6	258,930	258,930	100.0	62,321	61,084	98.0
North Dakota.....	37,052	37,052	100.0	34,348	34,348	100.0	2,704	2,704	100.0
Ohio.....	519,765	513,825	98.9	392,346	389,672	99.3	127,419	124,153	97.4
Oklahoma.....	172,730	169,936	98.4	148,906	148,906	100.0	23,824	21,030	88.3
Oregon.....	152,657	152,588	100.0	133,458	133,458	100.0	19,199	19,130	99.6
Pennsylvania.....	554,370	551,009	99.4	311,210	311,210	100.0	243,160	239,799	98.6
Rhode Island.....	71,708	71,708	100.0	36,317	36,317	100.0	35,391	35,391	100.0
South Carolina.....	141,603	140,247	99.0	113,352	113,352	100.0	28,251	26,895	95.2
South Dakota.....	31,755	24,080	75.8	24,147	16,497	68.3	7,608	7,583	99.7

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Table B-5.--Survey response rates of institutions of higher education weighted by total fall enrollment, by control and State or other area: Fall 1987--Continued

State or other area	All institutions			Public institutions			Private institutions		
	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing	Total	Respon- dents	Percent respond- ing
Tennessee.....	202,006	200,544	99.3	154,104	154,104	100.0	47,902	46,440	96.9
Texas.....	802,226	791,026	98.6	709,710	701,993	98.9	92,516	89,033	96.2
Utah.....	106,792	105,872	99.1	74,453	74,453	100.0	32,339	31,419	97.2
Vermont.....	33,242	32,050	96.4	19,360	19,360	100.0	13,882	12,690	91.4
Virginia.....	319,026	309,134	96.9	275,583	275,583	100.0	43,443	33,551	77.2
Washington.....	245,872	244,892	99.6	214,207	214,207	100.0	31,665	30,685	96.9
West Virginia.....	77,256	76,455	99.0	67,959	67,959	100.0	9,297	8,496	91.4
Wisconsin.....	281,717	273,964	97.2	240,533	233,779	97.2	41,184	40,185	97.6
Wyoming.....	26,062	26,062	100.0	25,441	25,441	100.0	621	621	100.0
Outlying areas.....	156,809	151,422	96.6	66,785	62,505	93.6	90,024	88,917	98.8
American Samoa.....	897	897	100.0	897	897	100.0	--	--	--
Guam.....	4,072	4,072	100.0	4,072	4,072	100.0	--	--	--
Northern Marianas.....	366	366	100.0	366	366	100.0	--	--	--
Puerto Rico.....	147,706	143,187	96.9	57,682	54,270	94.1	90,024	88,917	98.8
Trust Terr., Pac. Is.....	1,223	355	29.0	1,223	355	29.0	--	--	--
Virgin Islands.....	2,545	2,545	100.0	2,545	2,545	100.0	--	--	--

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment" survey, 1987.

enrollment, on average, while imputed data for items shown in table 3 of this report account for about 10 percent of the HEGIS enrollment, on average.

For institutions with a valid response to the survey in 1986, but not in 1987, imputations for form and/or item nonresponse were based on that institution's 1986 response, except for age imputations which were based on "hot deck matching"<sup>10</sup> to 1987 survey respondents having valid responses. For institutions with no prior-year survey response, imputations for all items were based on hot deck matching to 1987 survey respondents having valid responses.

## Data Editing

All survey data were edited for addition errors and for consistency with the prior year's response. Total lines were computer generated and compared to the reported totals. If the generated total was within  $\pm 5$  percent of the reported total, the generated total replaced the reported total (imputation code = 1); otherwise, institutions were contacted to resolve these discrepancies.

## Students Included In This Report:

- . Students enrolled in colleges and universities which are accredited by an agency recognized by the Secretary of Education;
- . students enrolled in courses creditable toward a degree or other formal award;
- . students enrolled in courses that are part of a vocational or occupational program, including those enrolled in off-campus centers; and
- . high school students taking regular college courses for credit.

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<sup>10</sup>Hot deck matching involves inserting individual values drawn from similar responding units. Imputations for schools with no prior response were based on hot deck matching to similar institutions that provided valid reports. These matches were selected from stratifications of institutions by enrollment size and sector. Sector is determined by institutional control (public, private nonprofit, private for-profit) and highest level of offering (4-year-and-above, 2-but-less-than 4-year, and less-than-2-year).



## **Students Excluded from This Report:**

- . students enrolled exclusively in courses not creditable toward a formal award or vocational program;
- . students exclusively auditing classes;
- . students studying abroad (e.g., at a foreign university) if their enrollment at the U.S. institution is only an administrative record and the fee is only nominal; and
- . students in any branch campus of a U.S. postsecondary institution located in a foreign country.

## **Using The Fall Enrollment Data Tape**

The definitions and instructions for compiling IPEDS data have been designed to minimize problems encountered in institutional data comparisons. Nevertheless, postsecondary institutions differ widely from each other. As a result of these differences, comparisons of data provided by individual institutions may be misleading.

In addition, while caution should always be exercised in comparing institutions that have imputed data in the file, the imputation process for hot deck matching of institutions needs more refinement, thus making comparisons potentially more misleading.

## Glossary

**First-professional student.** A student enrolled in any of the following degree programs:

Chiropractic (D.C. or D.C.M.)	Pharmacy (D. Phar.)
Dentistry (D.D.S. or D.M.D.)	Podiatry (Pod. D. or D.P.)
Medicine (M.D.)	Theology (M. Div., M.H.L., or B.D.)
Law (L.L.B. or J.D.)	Veterinary Medicine (D.V.M.)
Optometry (O.D.)	
Osteopathic Medicine (D.O.)	

**Graduate student.** A student who holds a bachelor's or first-professional degree, or equivalent, and is taking courses at the postbaccalaureate level. These students may or may not be enrolled in graduate programs.

### **Level of institution.**

- (1) **Four-year institution.** Institutions with a primary purpose of providing postsecondary education and which award at least a baccalaureate or higher degree in one or more programs.
- (2) **Two-year institution.** Institutions with a primary purpose of providing postsecondary education and confer at least a 2-year formal award (certificate or associate degree), or have a 2-year program that is creditable toward a baccalaureate or higher degree in one or more programs, but do not award a baccalaureate degree.
- (3) **Less-than-2-year institution.** Institutions with a primary purpose of providing postsecondary education, and its programs are less-than-2-years in duration and result in a terminal occupational award, or are creditable toward a formal 2-year or higher award.

**Unclassified student.** A student taking courses creditable toward a degree or other formal award who cannot be classified by academic level. For example, this could include a transfer student whose earned credits have not been determined at the time of the fall report.

**Undergraduate student.** A student enrolled in a 4- or 5-year bachelor's degree program, in an associate degree program, or in a vocational or technical program below the baccalaureate.

**Appendix C: Listing of IPEDS State Coordinators**

**IPEDS COORDINATORS****STATE**

Edward Rutledge  
Diane Barrans  
Thomas Gaylord  
Karen Spann  
Doris Stewart  
Edward Crowe

Marc Irish  
Sharon Samson  
Zelda Lessne  
John Corrozi  
Sheila Drews  
Lewis Wagar

Haskins Pounds  
Fred Kiehle  
Patrick Stanley  
Drue McGinnis  
Teresa Nocettini  
Jerry Jstrom

Carolyn Woodruff  
Stacey Valentine  
Robert Barak  
Ned Johnson  
Julian Ebird  
Sue McDade

Don Wood  
Larry Tremblay  
Charles Benil  
Robert Silberzweig  
Ronald Biron  
Catherine Smith

Julie Schoenecker  
Maryann Ruddock  
Tela Sipe  
Phillip D. Brooks

Alabama  
Alaska  
Alaska  
Arizona  
Arkansas  
Arkansas

California  
Colorado  
Connecticut  
Delaware  
District of Columbia  
Florida

Georgia  
Georgia  
Hawaii  
Hawaii  
Idaho  
Idaho

Illinois  
Indiana  
Iowa  
Iowa  
Kansas  
Kentucky

Louisiana  
Louisiana  
Maryland  
Massachusetts  
Massachusetts  
Michigan

Minnesota  
Mississippi  
Missouri  
Montana

**IPEDS COORDINATORS****STATE**

Sue Gorden-Gessner  
Karen Steinberg  
John Griffin  
James Busselle  
Greg Schuler  
Linda O'Connor

Frank Carrasco  
James Brady  
Linda Balfour  
Nancy MacCormac  
Russell Poulin  
Mark Schaff

Leon Gust  
John Westine  
Gerald Hottinger  
Ramon Burgos-Diaz  
Lucia Feltosa  
Michael Brown

Roxie Thielen  
Becky Raines  
Vernon Stewart  
Linda Collette  
Susanne Villanti  
James Alessio

Hugh Walkup  
James Preston  
Brenda Kirsch  
Elwin Cammack  
Robert Millard  
E. Carol Smith

Nebraska  
Nevada  
Nevada  
New Hampshire  
New Jersey  
New Jersey

New Mexico  
New York  
North Carolina  
North Carolina  
North Dakota  
Ohio

Oklahoma  
Oregon  
Pennsylvania  
Puerto Rico  
Rhode Island  
South Carolina

South Dakota  
Tennessee  
Texas  
Utah  
Vermont  
Virginia

Washington  
West Virginia  
Wisconsin  
Wisconsin  
Wisconsin  
Wyoming