

NATIONAL CENTER FOR EDUCATION STATISTICS

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Beginning Postsecondary Students

Persistence and Attainment in Postsecondary Education

for Beginning AY 1989-90 Students as of Spring 1992

Data Series: BPS:90/92

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U.S. Department of Education

Office of Educational Research and Improvement

NCES 94-477

## Highlights

The Beginning Postsecondary Students (BPS) study followed a group of students who began their postsecondary educational careers during academic year 1989-90. The follow-up was conducted in the spring of 1992. A major focus of this BPS follow-up was the persistence and degree attainment of these beginners. Specifically, these beginners could have left postsecondary education during the first year (by June 1990), during the second year (between July 1990 and June 1991), after the second year (after June 1991), or they could have been still enrolled at the time of the follow-up. Some of the leavers may have attained degrees (especially those in shorter term vocational programs).

Based on spring 1992 information, the group of beginners during the July 1989 through June 1990 period was initially categorized as having attained if any certificate, license, or degree had been awarded. The group who had not attained was subsequently categorized as still enrolled if at the time of the follow-up they reported an enrollment. The group who was not still enrolled was subsequently sorted into three exhaustive categories based on when they left postsecondary education for

the last time. An analysis of these data found the following:

- \* As expected, many of the students initially enrolled in institutions offering programs of less than 4-year durations were no longer enrolled. Only four (4) percent of students who initially enrolled in private for-profit institutions were still enrolled. Low enrollment rates were also evident for students initially enrolled in public less-than-2-year institutions (8 percent) and for students initially enrolled in private not-for-profit less-than-4-year institutions (14 percent). For the public 2-year sector, where enrollments are mixed between academic and vocational programs, about one-third (32 percent) of the beginners were still enrolled.
- \* About two-thirds of the beginners in 4-year institutions were still enrolled as of spring 1992. The first-year dropout rates were higher in public 4-year institutions than in private not-for-profit 4-year institutions (13 vs. 10 percent).
- \* Females were less likely than males to leave postsecondary education during their first year (19 vs. 23 percent).

- \* Asians were most likely to still be enrolled as of spring 1992, when 63 percent of Asians were still enrolled. In comparison, 41 percent of whites were still enrolled.

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Table 1.--Persistence and attainment percentages by spring 1992 for postsecondary students who began in AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91 enrolled	Attained	
Total	21	10	11	41	18
Postsecondary institution type					
Public 4-year	13	7	14	62	4
Private not-for-profit 4-year		10	6	16	63 5
Public 2-year	28	13	9	32	19
Private not-for-profit less					
than 4-year	16	16	10	14	45

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Public less than 2-year	41	10	3	8	38
Private for-profit	23	11	4	4	58

#### Gender of student

Male	23	10	11	42	14
Female	19	10	10	39	21

#### Race/ethnicity

American Indian	29	8	21	27	16
Asian/Pacific Islander	10	6	9	63	12
Black, non-Hispanic	25	12	12	31	21
Hispanic	19	13	11	40	16
White, non-Hispanic	21	10	11	41	18

#### Grant receipt, AY 1989-90

No grants(s) received	23	10	11	39	16
Dependent students	17	9	13	46	16
Family income less than \$30,000	18	8	13	42	19
Family income \$30,000 or more	17	9	13	47	15
Independent	41	15	8	19	17
Received grant(s)	18	10	10	43	20

#### Loan receipt, AY 1989-90

No loan(s) received	22	10	11	41	16
Dependent students	15	9	12	49	15
Family income less than \$30,000	17	8	12	46	17
Family income \$30,000 or more	15	9	13	50	14
Independent students	40	14	7	19	20
Received loan(s)	17	10	9	39	25

#### Work-study receipt, AY 1989-90

No work-study received	21	10	11	39	18
Dependent students	16	9	12	47	16
Family income less than \$30,000	17	9	12	43	19
Family income \$30,000 or more	15	9	12	50	14
Independent students	37	14	7	17	25
Received work-study	11	9	9	60	11

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	21	10	11	42	16
Dependent students	15	9	12	48	15
Family income less than \$30,000	15	10	12	43	19
Family income \$30,000 or more	14	9	12	50	14
Independent students	42	14	7	19	18
Received Pell grant(s)	20	9	9	37	25



Stafford loan receipt, AY 1989-90

No Stafford loan received	21	10	11	41	16
Dependent students	15	9	12	49	15
Family income less than \$30,000	16	8	12	47	17
Family income \$30,000 or more	15	9	12	50	14
Independent students	40	14	7	18	20
Received Stafford loan	17	11	9	36	27

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Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education  
Statistics, Beginning Postsecondary Students study, 1992.

Table 2.--Persistence and attainment percentages by spring 1992 for  
public 4-year students who began in AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91 enrolled	Attained	
Total	13	7	14	62	4

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Gender of student

Male	14	7	13	64	3
Female	12	8	14	60	5

Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	4	8	11	75	3
Black, non-Hispanic	17	7	18	57	2
Hispanic	14	10	8	64	5
White, non-Hispanic	13	7	14	61	4

Grant receipt, AY 1989-90

No grants(s) received	13	7	16	60	4
Dependent students	11	7	16	63	4
Family income less than \$30,000	11	9	20	55	5
Family income \$30,000 or more	11	6	15	64	4
Independent students	32	15	11	33	9
Received grant(s)	13	7	11	65	4

Loan receipt, AY 1989-90

No loan(s) received	13	7	14	62	4
Dependent students	11	7	15	65	4
Family income less than \$30,000	11	8	15	63	3

Family income \$30,000 or more	10	6	15	66	4
Independent students	34	15	10	31	10
Received loan(s)	14	7	13	61	4

#### Work-study receipt, AY 1989-90

No work-study received	13	7	14	61	4
Dependent students	11	6	15	64	4
Family income less than \$30,000	13	8	16	59	4
Family income \$30,000 or more	11	6	14	66	3
Independent students	33	15	11	34	8
Received work-study	8	11	7	67	7

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	12	7	14	62	4
Dependent students	11	6	15	64	4
Family income less than \$30,000	10	10	17	58	4
Family income \$30,000 or more	11	6	14	66	4
Independent students	32	15	9	37	7
Received Pell grant(s)	16	8	12	59	4

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	13	7	14	62	4
Dependent students	11	6	14	65	4

Family income less than \$30,000	11	8	14	63	3
Family income \$30,000 or more	11	6	14	66	4
Independent students	34	15	10	32	10
Received Stafford loan	14	8	14	60	5

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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 3.--Persistence and attainment percentages by spring 1992 for private not-for-profit 4-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	10	6	16	63	5
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Gender of student

Male	9	7	17	63	5
Female	10	6	15	63	6

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	5	1	18	71	5
Black, non-Hispanic	9	8	21	58	5
Hispanic	9	12	13	65	1
White, non-Hispanic	10	6	15	63	6

#### Grant receipt, AY 1989-90

No grants(s) received	11	5	18	61	6
Dependent students	8	4	18	64	6
Family income less than \$30,000	13	4	20	58	4
Family income \$30,000 or more	7	4	18	64	6
Independent students	34	10	9	36	11
Received grant(s)	9	7	15	64	5

#### Loan receipt, AY 1989-90

No loan(s) received	10	6	17	62	6
Dependent students	8	5	17	65	5
Family income less than \$30,000	10	5	19	61	5
Family income \$30,000 or more	7	4	17	66	5

Independent students	30	13	9	36	12
Received loan(s)	9	7	15	64	5

Work-study receipt, AY 1989-90

No work-study received	10	7	17	61	6
Dependent students	8	6	17	64	5
Family income less than \$30,000	10	7	16	62	4
Family income \$30,000 or more	7	6	18	65	5
Independent student s	28	12	11	36	13
Received work-study	10	5	12	69	4

Pell grant receipt, AY 1989-90

No Pell grant(s) received	9	7	16	63	6
Dependent students	7	6	17	65	5
Family income less than \$30,000	9	9	16	61	5
Family income \$30,000 or more	7	5	17	66	5
Independent students	25	14	11	38	12
Received Pell grant(s)	14	5	14	62	4

Stafford loan receipt, AY 1989-90

No Stafford loan received	10	6	16	62	6
Dependent students	8	5	17	65	5
Family income less than \$30,000	9	6	17	62	6

Family income \$30,000 or more	7	4	17	66	5
Independent students	30	13	9	36	11
Received Stafford loan	9	8	15	64	4

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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 4.--Persistence and attainment percentages by spring 1992 for public 2-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	28	13	9	32	19
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Gender of student

Male	30	13	10	32	15
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Female	25	12	8	31	23
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Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	32	13	8	24	23
Hispanic	20	15	14	39	13
White, non-Hispanic	29	13	9	30	20

Grant receipt, AY 1989-90

No grants(s) received	29	13	10	32	17
Dependent students	21	11	11	37	20
Family income less than \$30,000	18	8	12	42	21
Family income \$30,000 or more	23	13	10	34	20
Independent students	46	16	8	21	10
Received grant(s)	25	13	7	32	24

Loan receipt, AY 1989-90

No loan(s) received	28	12	9	32	19
Dependent students	19	11	10	38	21
Family income less than \$30,000	18	7	11	43	21
Family income \$30,000 or more	20	13	10	35	21
Independent students	45	14	7	19	14



Received loan(s)	25	22	5	26	22
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Work-study receipt, AY 1989-90

No work-study received	28	12	9	31	19
Dependent students	20	12	10	38	21
Family income less than \$30,000	18	8	11	41	21
Family income \$30,000 or more	21	14	10	35	20
Independent students	44	14	7	20	15
Received work-study	--	--	--	--	--

Pell grant receipt, AY 1989-90

No Pell grant(s) received	28	13	9	31	19
Dependent students	19	12	10	36	22
Family income less than \$30,000	16	10	11	40	23
Family income \$30,000 or more	21	13	10	35	21
Independent students	47	14	7	19	12
Received Pell grant(s)	24	10	9	36	21

Stafford loan receipt, AY 1989-90

No Stafford loan received	28	12	9	32	19
Dependent students	19	11	10	39	21
Family income less than \$30,000	18	7	11	44	21
Family income \$30,000 or more	20	13	10	35	21

Independent students	45	15	7	19	14
Received Stafford loan	22	23	4	24	26

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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 5.--Persistence and attainment percentages by spring 1992 for private not-for-profit less-than-4-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	16	16	10	14	45
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Gender of student

Male	20	14	13	13	41
------	----	----	----	----	----

Female	14	17	7	14	48
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Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	24	7	5	16	48
Hispanic	--	--	--	--	--
White, non-Hispanic	15	17	10	13	44

Grant receipt, AY 1989-90

No grants(s) received	14	22	10	12	42
Dependent students	16	27	10	15	32
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	14	18	15	19	34
Independent students	9	6	10	5	70
Received grant(s)	18	10	10	15	47

Loan receipt, AY 1989-90

No loan(s) received	15	19	11	13	42
Dependent students	16	23	11	15	35
Family income less than \$30,000	17	32	8	11	33
Family income \$30,000 or more	15	18	13	18	36
Independent students	15	7	12	7	60

Received loan(s)	18	8	6	17	51
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Work-study receipt, AY 1989-90

No work-study received	15	17	11	13	44
Dependent students	16	21	11	15	37
Family income less than \$30,000	17	30	6	10	37
Family income \$30,000 or more	15	15	14	18	37
Independent students	12	7	10	8	63
Received work-study	27	5	4	20	45

Pell grant receipt, AY 1989-90

No Pell grant(s) received	13	18	12	14	43
Dependent students	14	21	10	16	38
Family income less than \$30,000	17	37	3	9	35
Family income \$30,000 or more	13	14	14	19	39
Independent students	9	7	16	5	63
Received Pell grant(s)	23	10	6	14	47

Stafford loan receipt, AY 1989-90

No Stafford loan received	16	18	11	13	42
Dependent students	16	23	11	15	36
Family income less than \$30,000	16	31	8	12	34
Family income \$30,000 or more	16	17	13	18	37

Independent students	16	6	11	6	60
Received Stafford loan	18	8	6	17	51

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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 6.--Persistence and attainment percentages by spring 1992 for public less-than-2-year students who began in AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91 enrolled	Attained	
<hr/>					
Total	41	10	3	8	38
Gender of student					
Male	51	7	5	1	36
Female	29	13	0	16	42

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	--	--	--	--	--
Hispanic	--	--	--	--	--
White, non-Hispanic	43	11	3	8	36

#### Grant receipt, AY 1989-90

No grants(s) received	37	9	3	10	41
Dependent students	35	5	5	16	40
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	--	--	--	--	--
Independent students	40	16	0	0	43
Received grant(s)	50	11	2	4	33

#### Loan receipt, AY 1989-90

No loan(s) received	42	11	2	9	36
Dependent students	37	5	5	17	37
Family income less than \$30,000	54	8	3	6	29
Family income \$30,000 or more	--	--	--	--	--
Independent students	46	18	0	0	36
Received loan(s)	34	1	6	0	60

Work-study receipt, AY 1989-90

No work-study received	41	10	3	8	38
Dependent students	38	4	4	16	38
Family income less than \$30,000	56	7	3	6	28
Family income \$30,000 or more	--	--	--	--	--
Independent students	44	16	1	0	39
Received work-study	--	--	--	--	--

Pell grant receipt, AY 1989-90

No Pell grant(s) received	39	11	3	9	39
Dependent students	35	5	5	16	39
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	--	--	--	--	--
Independent students	43	17	0	0	39
Received Pell grant(s)	50	7	3	4	35

Stafford loan receipt, AY 1989-90

No Stafford loan received	41	11	2	9	37
Dependent students	37	4	5	17	37
Family income less than \$30,000	54	8	3	6	29
Family income \$30,000 or more	--	--	--	--	--
Independent students	46	18	0	0	36

Received Stafford loan	--	--	--	--	--
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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.--Persistence and attainment percentages by spring 1992 for private for-profit students who began in AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91 enrolled	Attained	
<hr/>					
Total	23	11	4	4	58
Gender of student					
Male	28	14	3	3	52
Female	21	10	4	4	61



#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	26	20	8	3	43
Hispanic	32	12	2	4	49
White, non-Hispanic	22	9	3	4	63

#### Grant receipt, AY 1989-90

No grants(s) received	26	9	3	5	57
Dependent students	23	7	3	6	61
Family income less than \$30,000	24	3	8	9	56
Family income \$30,000 or more	23	8	2	5	63
Independent students	29	13	1	5	52
Received grant(s)	22	12	5	3	58

#### Loan receipt, AY 1989-90

No loan(s) received	25	11	4	4	56
Dependent students	25	8	4	4	59
Family income less than \$30,000	31	8	6	4	51
Family income \$30,000 or more	22	8	3	4	63
Independent students	24	15	4	4	53
Received loan(s)	23	11	4	4	59

Work-study receipt, AY 1989-90

No work-study received	23	11	4	4	58
Dependent students	22	9	4	5	60
Family income less than \$30,000	25	10	5	5	55
Family income \$30,000 or more	20	7	3	5	65
Independent students	24	13	3	3	56
Received work-study	--	--	--	--	--

Pell grant receipt, AY 1989-90

No Pell grant(s) received	26	10	3	5	57
Dependent students	22	8	3	6	61
Family income less than \$30,000	26	8	6	8	53
Family income \$30,000 or more	20	8	2	5	64
Independent students	31	12	2	5	51
Received Pell grant(s)	21	12	5	3	59

Stafford loan receipt, AY 1989-90

No Stafford loan received	25	11	4	4	57
Dependent students	24	8	4	4	59
Family income less than \$30,000	30	8	7	4	51
Family income \$30,000 or more	21	8	3	4	64
Independent students	25	14	3	4	54
Received Stafford loan	22	11	4	4	59

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-- Too few sample cases for a reliable estimate.

Note: Details may not add to 100 percent due to rounding.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

### Technical Notes

#### 1. Survey Content

The Beginning Postsecondary Students 1990/92 (BPS:90/92) longitudinal survey followed students identified in the 1990 National Postsecondary Student Aid Study (NPSAS:90) as potential first-time entrants in postsecondary education. The 1992 followup identified those who were first-time beginning (FTB) students from the academic year 1989-90. The CATI (computer assisted telephone interview) interview obtained information concerning enrollment, program completion, education financing, employment, and family formation after the NPSAS:90 survey; expectations for graduate school; participation in additional education (provided by an employer or other non-postsecondary provider); family income and expenditures; goals and aspirations; and community service. The data derived from this survey permit a variety of

analyses concerning postsecondary persistence and completion, entry into the work force, and community participation.

BPS data are made available in two formats: public use Data Analysis Systems and restricted use files. Each DAS contains numerous variables relevant to a particular research topic, but not all data available in the full BPS system. Thus, the DAS used to generate this Ed-Tab contains all variables reported in the tab, but is not limited to those variables. The DAS used to generate this ED Tab is available on compact disk (contact Arlie Gordon, 202 219-1367).

## 2. Target Population

The target population is all students who entered postsecondary education for the first time in academic year 1989-90. Students who were still enrolled in high school were not eligible for NPSAS, nor BPS. Similarly, institutions offering only correspondence courses, institutions enrolling only their own employees, and US service academies were not eligible for NPSAS or BPS. Students eligible for BPS were identified in two stages. The first stage involved selection for the NPSAS:90 sample, identified to be representative of all students enrolled in postsecondary education between July 1, 1989 and June 30, 1990. Of the NPSAS:90 sample, those who were identified as being first-time enrollees were eligible for BPS and retained in

the 1992 interview. BPS data are nationally representative by institution level and control, but like NPSAS, are not representative at the state level.

### 3. Sample Design

A data base of 11,700 NPSAS:90 participants that was believed to contain all possible first-time beginning students (FTBs) in the NPSAS:90 sample was used as the basis for selecting the BPS:90/92 sample.

The initial set of 11,700 potential FTBs contained 10,566 students who had been identified as probable undergraduate students, 333 students who had been identified as probable first-professional students, and 801 students who had been identified as probable graduate students. (Undergraduates in vocational programs sometimes consider themselves as being in their first level professional program, and if they have completed the program, they consider themselves graduates of that program. This is not the same as being in First-Professional programs such as Medicine or Dentistry, nor have they graduated from a baccalaureate level program. Hence, some students are improperly classified. Other non-FTB students were included as part of the potential BPS sample because they were identified as being first-time in the NPSAS institution.)

Considerable effort was directed toward ensuring that the sample for BPS:90/92 contained appropriate members. Since the preliminary sample contained fairly large numbers of individuals with questionable status as FTBs. Non-FTBs were identified in almost every phase of the data collection process. A small number of non-FTBs were identified in the various locating activities. These were principally serendipitous identifications resulting from conscientious institutional coordinators and alert locator staff members

#### 4. Data Collection Procedures

In order to minimize the locating effort needed at time of interview, student locating began in October 1991. Mailouts to parents of all students identified through NPSAS as potential FTBs introduced to the BPS survey and requested current locating information for the potential respondents. In January 1992, information packets were mailed to the 10,724 students considered to be possible FTBs. Data collection for BPS:90/92 took place between late April and the end of August 1992. Data was collected by Computer Assisted Telephone Interview (CATI).

#### 5. Response Rates and Weighting

Since the BPS:90/92 is a longitudinal follow-up of the first-time, beginning (FTB) students identified in the 1990 NPSAS, the initial weights for the BPS sample were the final analysis weights for NPSAS:90. Thus, the first part of this section briefly reviews the NPSAS:90 weights. The next part discusses development of weight adjustment cells for the BPS that compensate for the potential bias due to ineligibility and nonresponse among the 11,700 potential FTB students that formed the basis for the BPS sample. The remaining parts of this section discuss the nonresponse compensation procedures that have been implemented for BPS:90/92.

## 5.1 Weighting for NPSAS:90

The initial sampling weight for each student selected for NPSAS:90 was based on the students overall probability of selection. The probability of selection accounted for the probability of selecting the institution, subsampling the institutions and requesting lists of students for the four time points in the academic year, and selecting students from the lists obtained. A multiplicity adjustment was incorporated into the weight for students that attended more than one institution during the 1989-90 academic year. Weight adjustments were implemented to compensate for nonresponse of sample institutions to the request for student lists, for nonresponse of institutions in the student record abstractions, and for nonresponse by the students themselves in the telephone survey. The final step in the weight

adjustment process was a post-stratification adjustment based on numbers of Pell grant recipients.

This overview of the analysis weights for NPSAS:90 is based on the final methodology report, to which the reader is referred for additional details (U.S. Department of Education, 1992).

## 5.2 Defining Weight Adjustment Cells

NPSAS:90 yielded an initial set of 11,700 potential FTBs, which contained 10,566 students who had been selected as undergraduate students, 333 students who had been selected as first-professional students, and 801 students who had been selected as graduate students, as discussed in section 3.

The fielded BPS:90/92 sample consisted of the 10,624 members. Response and eligibility status were defined for each of the 10,624 members of the fielded BPS sample as shown in Table 5.1. Sample-based adjustment cell weighting was used to compensate for BPS nonresponse and ineligibility. Population-based adjustment cell weighting was not proposed because there were no external population totals for first-time, beginning (FTB) students that were believed to be more accurate than the BPS estimates.



BPS sample members were classified as eligible if they were found to satisfy all the following conditions:

- (1) first-time, beginning student during the 1989-90 academic year,
- (2) eligible for NPSAS:90 (i.e., enrolled in a course for credit in a qualifying postsecondary institution during the 1989-90 academic year),
- (3) not deceased at the time of the 1992 BPS follow-up survey.

Any student who was found to not satisfy any one of the above conditions was classified as ineligible for BPS. Those students for whom the eligibility determination process could not be completed were classified as having undetermined eligibility status.

BPS sample members were classified as respondents if they completed at least one question beyond those needed to determine eligibility status. Because tracing students and determining their eligibility for BPS was a complex process and because the response rule was quite liberal, most of the BPS nonrespondents were sample students whose eligibility status could not be determined. The number of students with known eligibility status at the conclusion of BPS data collection (eligible or ineligible in Table 5.1) was 9,077. Thus, the unweighted percent of the BPS sample who were respondents regarding eligibility determination is 85.4 percent (9,077 out of 10,624).

The weighted percent responding at this phase of data collection (i.e., the estimated percent of the population represented by the sample of 10,624 students for whom eligibility could be determined using the BPS procedures) is 85.8 percent. Both the weighted and unweighted percentage of respondents among the sample students known to be eligible for BPS are 99.7 percent (6,525 out of 6,543). Therefore, the weighted and unweighted BPS response rates (products of the above response rates for eligibility determination and BPS interviewing) are 85.5 percent and 85.2 percent, respectively. Since nonresponse occurs primarily at the stage of eligibility determination, that was the focus of the nonresponse adjustments.

Because BPS nonresponse occurs at two stages -- determination of eligibility and survey response among eligibles -- weight adjustments for nonresponse were implemented in two corresponding stages. Since over 99 percent of the students who were determined to be eligible were also classified as respondents, the adjustment for nonresponse among students known to be eligible was a single overall weight adjustment. Weight adjustment classes were used to compensate for nonresponse regarding the determination of eligibility.

The NPSAS:90 variables considered for forming the nonresponse adjustment cells are listed in Table 5.2. The distribution of percent eligible was first examined for each variable separately. All weight adjustment cells were

formed by taking the weight adjustment cells formed by crossing BPSSTRA2 and typical age, and subdividing them by other variables when there were differences of about five percent or more in eligibility rates, subject to the requirement that each final weight adjustment cell must contain approximately 30 or more students with known eligibility status. In addition, most weighting classes were defined to contain only institutions with a single level of control because public, private, and proprietary institutions will often define separate analysis domains. This information was used to develop the final weight adjustment cells (see the sample design report for further information).

Table 5.1--Distribution of final response status

Final Survey Result	Number	Percent
Eligible	6,538	61.54
Responded	6,520	61.37
Refused	13	0.12
Ran out of time	4	0.04
All tracing leads exhausted	1	0.01

Ineligible	2,539	23.90
Not FTB	2,447	21.12
Deceased	14	0.13
Other	78	0.73
Undetermined Eligibility	1,547	14.56
Refused	364	3.43
Hostile refusal	2	0.02
Ran out of time	219	2.06
Unavailable during BPS:92	197	1.85
No phone	46	0.43
Institutionalized	8	0.08
Language barrier	2	0.02
Predicted not FTB	169	1.59
All tracing leads exhausted	540	5.08
TOTAL	10,624	100.00

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Table 5.2-- Variables analyzed to develop weight adjustment classes

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1. OFCON2 (institution type and control)
  2. BPSSTRA2 (likely FTBs, undergraduates of questionable level, others)
  3. ENROLL1 (current enrollment status for students sampled from 4-year institutions)
  4. ANYAID (aid status)
  5. DEPEND (dependency status)
  6. CONTROL
  7. LEVEL
  8. GENDER
  9. RACE (including ethnicity)
  10. OFERDFA1 (importance of financial aid)
  11. PROGTYP (degree program enrolled in)
  12. GPACAT (categorized GPA)
  13. ATTNSTAT (full-time/part-time attendance status)
  14. EXEDCOL (highest level expected to complete)
  15. INCOME (dependency and income level)
  16. TYPAGE (younger, older, or typical age)
-

### 5.3 Adjustment for Nonresponse and Ineligibility

Each step of the process for adjusting the weights for nonresponse and ineligibility was performed independently using each of the 36 NPSAS:90 analysis weights (PSKEEPWT and PSSRPL1 through PSSRPL35) as the initial sampling weight for BPS:90/92. The variability introduced by the weight adjustment process is, therefore, reflected in the 35 sets of replicate weights and, hence, would be included in replication-method variance estimates based upon them.

### References

Little, R. J. A. (1986). Survey Nonresponse Adjustments for Estimates of Means. *International Statistical Review*, Vol. 54, pp. 139-157.

## 6. Definitions

FTB - First-time beginning student, one who first enrolled in postsecondary education between July 1, 1989 and June 30, 1990 for inclusion in BPS:90/92.

Persistence - continued enrollment in postsecondary education. Persistence may or may not be continuous (e.g., terms may be skipped as long as the subject has re-enrolled before being interviewed). Those who were no longer enrolled at the time of interview (spring term) were considered to have left for purposes of this report. This unenrollment activity may be temporary or permanent, and cannot be determined until additional followup studies are completed. Date of leaving was defined as the last month enrolled.

Attainment - is the completion of an academic or vocational program. Students who have attained a degree, license, or certificate and who were currently enrolled at the time of the BPS followup are considered to have attained.

## 7. Standard Errors

Standard errors for all estimates presented in tables 1 through 7 were calculated using Taylor estimation procedures. These standard errors are presented in tables 7.1 through 7.7. Statistical significance of highlighted

comparisons was assessed at the .05 level with Student's t-tests and adjustments for multiple comparisons using Bonferoni corrections. The comparisons in the highlights have been tested for statistical significance to insure that the differences are larger than those that might be expected due to sampling variations.

Table 7.1--Standard errors for persistence and attainment percentages  
by spring 1992 for postsecondary students who began in  
AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91	enrolled	Attained
<hr/>					
Total	1.0	0.6	0.6	1.2	0.9
Postsecondary institution type					
Public 4-year	1.0	0.7	0.9	1.5	0.5
Private not-for-profit 4-year	0.9	0.6	0.9	1.6	0.7
Public 2-year	2.0	1.2	1.2	2.0	1.6
Private not-for-profit less					
than 4-year	2.7	2.6	2.3	2.2	4.6
Public less than 2-year	6.0	3.7	1.3	6.0	6.0



Private for-profit	1.8	1.7	0.7	0.9	2.7
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Gender of student

Male	1.3	0.9	0.9	1.5	1.1
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Female	1.2	0.8	0.8	1.5	1.3
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Race/ethnicity

American Indian	11.0	6.8	11.2	7.8	5.5
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Asian/Pacific Islander	3.4	2.2	3.0	5.4	3.1
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Black, non-Hispanic	2.8	2.4	1.9	3.0	2.6
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Hispanic	3.6	2.8	2.8	3.7	2.5
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White, non-Hispanic	1.1	0.7	0.7	1.3	1.0
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Grant receipt, AY 1989-90

No grants(s) received	1.3	0.8	0.9	1.5	1.1
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Dependent students	1.3	0.9	1.0	1.7	1.3
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Family income less than \$30,000	2.6	2.1	2.3	3.7	3.0
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Family income \$30,000 or more	1.4	1.0	1.1	1.7	1.3
--------------------------------	-----	-----	-----	-----	-----

Independent students	2.9	1.9	1.7	2.3	2.3
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Received grant(s)	1.2	0.8	0.7	1.5	1.3
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Loan receipt, AY 1989-90

No loan(s) received	1.2	0.7	0.7	1.3	1.0
---------------------	-----	-----	-----	-----	-----

Dependent students	1.1	0.8	0.9	1.5	1.1
Family income less than \$30,000	2.0	1.4	1.6	2.8	2.3
Family income \$30,000 or more	1.2	0.9	1.0	1.6	1.2
Independent students	2.5	1.6	1.3	1.8	2.1
Received loan(s)	1.2	1.0	0.8	1.7	1.6

#### Work-study receipt, AY 1989-90

No work-study received	1.0	0.7	0.7	1.2	0.9
Dependent students	1.0	0.7	0.8	1.3	1.0
Family income less than \$30,000	1.7	1.2	1.4	2.3	2.0
Family income \$30,000 or more	1.2	0.9	0.9	1.5	1.1
Independent students	2.1	1.4	1.1	1.6	1.9
Received work-study	1.6	1.7	1.4	2.6	2.0

#### Pell grant receipt AY 1989-90

No Pell grant(s) received	1.1	0.7	0.7	1.3	1.0
Dependent students	1.0	0.8	0.8	1.4	1.1
Family income less than \$30,000	2.1	1.8	1.8	3.1	2.7
Family income \$30,000 or more	1.1	0.8	0.9	1.5	1.1
Independent students	2.6	1.7	1.4	1.9	2.1
Received Pell grant(s)	1.5	1.0	0.9	1.9	1.7

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	1.1	0.7	0.7	1.3	1.0
Dependent students	1.0	0.7	0.8	1.4	1.1
Family income less than \$30,000	1.8	1.3	1.5	2.6	2.2
Family income \$30,000 or more	1.2	0.9	0.9	1.6	1.2
Independent students	2.5	1.6	1.3	1.8	2.1
Received Stafford loan	1.2	1.2	0.8	1.8	1.7

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Note: Corresponds to table 1.

Source: United States Department of Education, National Center for Education  
Statistics, Beginning Postsecondary Students study, 1992.

Table 7.2--Standard errors for persistence and attainment percentages by  
spring 1992 for public 4-year students who began in AY 1989-90

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	-----Left-----				
	By 7/90- After Still				
	6/90	6/91	6/91	enrolled	Attained
Total	1.0	0.7	0.9	1.5	0.5

---

Gender of student

Male	1.3	1.0	1.3	2.0	0.6
Female	1.2	0.9	1.2	1.9	0.8

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	2.1	3.1	3.8	5.7	2.4
Black, non-Hispanic	3.3	2.1	3.9	4.0	1.0
Hispanic	4.1	3.6	2.9	5.9	2.4
White, non-Hispanic	1.1	0.8	1.0	1.6	0.5

#### Grant receipt, AY 1989-90

No grants(s) received	1.3	0.9	1.2	1.9	0.6
Dependent students	1.2	0.8	1.3	1.8	0.6
Family income less than \$30,000	2.7	2.6	3.6	4.4	1.8
Family income \$30,000 or more	1.3	0.8	1.4	1.9	0.7
Independent students	5.4	4.3	4.7	5.5	3.5
Received grant(s)	1.4	1.0	1.2	2.0	0.8

#### Loan receipt, AY 1989-90

No loan(s) received	1.1	0.8	1.0	1.7	0.6
Dependent students	1.1	0.8	1.1	1.6	0.6
Family income less than \$30,000	1.9	1.6	2.4	2.9	1.1
Family income \$30,000 or more	1.2	0.8	1.2	1.8	0.6

Independent students	4.8	3.3	3.2	4.4	3.1
Received loan(s)	2.1	1.3	1.7	2.8	1.1

#### Work-study receipt, AY 1989-90

No work-study received	1.1	0.7	0.9	1.6	0.5
Dependent students	1.0	0.7	1.0	1.5	0.5
Family income less than \$30,000	1.7	1.4	2.1	2.5	0.9
Family income \$30,000 or more	1.2	0.7	1.1	1.7	0.6
Independent students	4.4	3.0	3.1	4.1	2.4
Received work-study	2.2	2.7	2.2	3.8	2.2

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	1.1	0.8	1.0	1.7	0.5
Dependent students	1.0	0.7	1.1	1.6	0.6
Family income less than \$30,000	2.1	2.2	2.7	3.6	1.3
Family income \$30,000 or more	1.1	0.7	1.2	1.7	0.6
Independent students	5.2	3.7	3.8	5.0	2.9
Received Pell grant(s)	2.1	1.4	1.7	2.9	1.0

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	1.1	0.7	1.0	1.6	0.5
Dependent students	1.0	0.7	1.0	1.5	0.5
Family income less than \$30,000	1.7	1.6	2.2	2.6	1.0

Family income \$30,000 or more	1.2	0.8	1.2	1.7	0.6
Independent students	4.7	3.3	3.2	4.5	3.0
Received Stafford loan	2.5	1.7	2.1	3.3	1.3

---

-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 2.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.3--Standard errors for persistence and attainment percentages by spring 1992 for private not-for-profit 4-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	0.9	0.6	0.9	1.6	0.7
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Gender of student

Male	1.1	0.9	1.2	1.9	0.9
Female	1.1	0.8	1.1	2.0	0.8

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	2.3	0.9	4.7	5.2	2.1
Black, non-Hispanic	2.6	2.3	3.6	4.6	2.1
Hispanic	3.0	3.5	3.0	4.6	0.6
White, non-Hispanic	1.0	0.7	0.9	1.8	0.7

#### Grant receipt, AY 1989-90

No grants(s) received	1.4	0.9	1.6	2.5	1.1
Dependent students	1.2	0.9	1.8	2.4	1.1
Family income less than \$30,000	4.7	2.9	6.1	7.2	3.0
Family income \$30,000 or more	1.2	0.9	1.9	2.5	1.2
Independent students	7.5	4.3	4.1	6.7	4.4
Received grant(s)	1.0	0.7	1.0	1.8	0.6

#### Loan receipt, AY 1989-90

No loan(s) received	1.0	0.7	1.2	2.0	0.9
Dependent students	0.8	0.6	1.3	1.9	0.8
Family income less than \$30,000	2.2	1.7	3.1	4.2	1.6
Family income \$30,000 or more	0.9	0.7	1.4	1.9	0.8

Independent students	4.8	3.1	2.8	4.9	3.2
Received loan(s)	1.2	1.1	1.2	1.9	0.8

#### Work-study receipt, AY 1989-90

No work-study received	1.0	0.7	1.0	1.8	0.8
Dependent students	0.8	0.7	1.1	1.7	0.7
Family income less than \$30,000	1.7	1.6	2.1	2.9	1.1
Family income \$30,000 or more	0.8	0.7	1.3	1.8	0.8
Independent students	4.5	2.6	2.6	4.7	3.0
Received work-study	1.5	1.1	1.5	2.3	1.0

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	0.8	0.7	1.0	1.6	0.7
Dependent students	0.7	0.7	1.0	1.5	0.7
Family income less than \$30,000	2.1	2.4	2.7	3.7	1.7
Family income \$30,000 or more	0.7	0.6	1.1	1.6	0.7
Independent students	5.0	3.3	3.0	5.2	3.2
Received Pell grant(s)	1.9	1.1	1.6	2.9	1.1

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	1.0	0.6	1.1	1.9	0.9
Dependent students	0.8	0.6	1.2	1.8	0.9
Family income less than \$30,000	1.8	1.5	2.4	3.7	1.6



Family income \$30,000 or more	0.9	0.7	1.3	1.8	0.8
Independent students	4.6	3.0	2.7	4.8	3.1
Received Stafford loan	1.4	1.2	1.3	2.2	0.9

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-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 3.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.4--Standard errors for persistence and attainment percentages by spring 1992 for public 2-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

---

Total	2.0	1.2	1.2	2.0	1.6
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Gender of student

Male	2.4	1.6	1.8	2.6	2.0
Female	2.7	1.8	1.6	2.9	2.4

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	6.0	4.6	3.3	5.7	5.3
Hispanic	5.7	4.4	4.6	5.6	3.7
White, non-Hispanic	2.3	1.4	1.3	2.3	1.9

#### Grant receipt, AY 1989-90

No grants(s) received	2.3	1.4	1.4	2.3	1.7
Dependent students	2.4	1.7	1.8	2.9	2.2
Family income less than \$30,000	3.7	3.0	3.3	5.3	4.3
Family income \$30,000 or more	2.9	2.1	2.1	3.1	2.6
Independent students	4.0	2.6	2.3	3.2	2.7
Received grant(s)	3.4	2.2	1.8	3.4	3.0

#### Loan receipt, AY 1989-90

No loan(s) received	2.1	1.3	1.2	2.1	1.7
Dependent students	2.1	1.5	1.6	2.7	2.1
Family income less than \$30,000	3.1	2.2	2.4	4.5	3.7
Family income \$30,000 or more	2.7	2.0	2.0	3.0	2.4

Independent students	3.4	2.1	1.8	2.5	2.7
Received loan(s)	6.3	6.5	3.0	6.2	5.8

#### Work-study receipt, AY 1989-90

No work-study received	2.0	1.3	1.2	2.0	1.6
Dependent students	2.1	1.5	1.7	2.6	2.0
Family income less than \$30,000	3.1	2.3	2.5	4.5	3.7
Family income \$30,000 or more	2.7	2.1	2.0	2.9	2.3
Independent students	3.3	2.1	1.7	2.5	2.6
Received work-study	--	--	--	--	--

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	2.1	1.4	1.3	2.1	1.7
Dependent students	2.1	1.6	1.7	2.7	2.1
Family income less than \$30,000	3.3	2.9	2.9	5.1	4.4
Family income \$30,000 or more	2.7	2.0	2.0	2.9	2.4
Independent students	3.6	2.3	1.9	2.6	2.6
Received Pell grant(s)	4.0	2.6	2.4	4.7	3.5

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	2.0	1.2	1.2	2.1	1.7
Dependent students	2.0	1.5	1.6	2.7	2.0
Family income less than \$30,000	3.0	2.1	2.5	4.4	3.7

Family income \$30,000 or more	2.7	2.0	2.0	3.0	2.4
Independent students	3.3	2.1	1.7	2.4	2.6
Received Stafford loan	6.5	8.3	3.1	6.5	7.0

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-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 4.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.5--Standard errors for persistence and attainment percentages by spring 1992 for private not-for-profit less-than-4-year students who began in AY 1989-90

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-----Left-----

By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

---

Total	2.7	2.6	2.3	2.2	4.6
-------	-----	-----	-----	-----	-----

Gender of student

Male	4.8	4.3	4.5	3.7	8.6
Female	3.0	3.5	2.0	2.7	4.4

#### Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	8.1	4.4	2.7	6.0	14.0
Hispanic	--	--	--	--	--
White, non-Hispanic	3.0	2.8	2.6	2.4	5.1

#### Grant receipt, AY 1989-90

No grants(s) received	4.2	4.9	4.0	2.8	8.2
Dependent students	4.9	5.3	4.6	3.2	6.3
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	4.9	7.8	7.4	4.4	6.7
Independent students	5.2	4.8	8.7	3.4	12.8
Received grant(s)	3.1	2.5	2.9	3.0	4.4

#### Loan receipt, AY 1989-90

No loan(s) received	3.2	3.3	3.0	2.2	5.4
Dependent students	3.5	3.7	3.5	2.6	4.6
Family income less than \$30,000	7.9	9.1	3.5	3.3	7.1
Family income \$30,000 or more	3.5	5.6	5.7	2.9	4.9

Independent students	7.3	3.5	5.9	3.3	9.5
Received loan(s)	3.8	3.0	1.6	4.1	6.3

#### Work-study receipt, AY 1989-90

No work-study received	2.9	2.9	2.6	2.3	5.1
Dependent students	3.2	3.3	3.0	2.7	4.3
Family income less than \$30,000	6.6	7.7	3.0	2.6	6.5
Family income \$30,000 or more	3.0	4.8	4.6	3.4	4.5
Independent students	4.8	3.0	5.0	3.4	8.7
Received work-study	5.7	2.4	2.1	6.1	6.1

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	3.1	3.4	3.1	2.4	5.5
Dependent students	3.5	3.6	3.3	2.6	4.5
Family income less than \$30,000	9.4	10.8	1.8	3.4	8.5
Family income \$30,000 or more	3.1	4.5	5.0	3.2	4.6
Independent students	4.4	4.3	7.7	3.1	11.3
Received Pell grant(s)	4.7	3.6	3.4	3.7	6.4

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	3.3	3.1	2.9	2.1	5.3
Dependent students	3.5	3.5	3.4	2.5	4.5
Family income less than \$30,000	7.3	8.6	3.3	3.4	6.7

Family income \$30,000 or more	3.2	5.4	5.6	2.8	5.0
Independent students	7.2	3.3	5.8	3.2	9.2
Received Stafford loan	4.3	3.7	2.0	4.7	6.9

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-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 5.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.6--Standard errors for persistence and attainment percentages by spring 1992 for public less-than-2-year students who began in AY 1989-90

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By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	6.0	3.7	1.3	6.0	6.0
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Student: Gender of student

Male	7.5	3.9	2.2	1.1	8.6
Female	6.8	6.2	0.0	10.9	8.7

Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	--	--	--	--	--
Hispanic	--	--	--	--	--
White, non-Hispanic	6.4	3.9	1.3	6.5	5.8

Grant receipt, AY 1989-90

No grants(s) received	7.3	4.0	1.7	7.6	8.4
Dependent students	11.4	2.7	2.7	12.1	12.2
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	--	--	--	--	--
Independent students	7.3	6.7	0.0	0.5	9.7
Received grant(s)	9.4	7.0	1.8	3.1	7.5

Loan receipt, AY 1989-90

No loan(s) received	6.7	4.0	1.3	6.6	6.6
Dependent students	10.0	2.6	2.4	12.0	10.8
Family income less than \$30,000	11.4	5.1	2.6	4.5	8.4



Family income \$30,000 or more	--	--	--	--	--
Independent students	7.4	6.0	0.0	0.3	8.1
Received loan(s)	14.7	0.6	3.5	0.0	17.6

Work-study receipt, AY 1989-90

No work-study received	5.9	3.7	1.3	6.0	6.0
Dependent students	9.5	2.4	2.3	11.4	10.3
Family income less than \$30,000	10.7	4.8	2.5	4.1	8.0
Family income \$30,000 or more	--	--	--	--	--
Independent students	6.3	5.6	1.1	0.3	7.1
Received work-study	--	--	--	--	--

Pell grant receipt, AY 1989-90

No Pell grant(s) received	7.2	4.2	1.4	7.2	7.3
Dependent students	11.3	2.6	2.6	12.6	12.2
Family income less than \$30,000	--	--	--	--	--
Family income \$30,000 or more	--	--	--	--	--
Independent students	6.4	6.4	0.0	0.4	8.5
Received Pell grant(s)	12.3	4.0	3.0	4.4	9.9

Stafford loan receipt, AY 1989-90

No Stafford loan received	6.6	4.0	1.3	6.6	6.5
Dependent students	9.8	2.5	2.3	11.9	10.7

Family income less than \$30,000	11.4	5.1	2.6	4.5	8.4
Family income \$30,000 or more	--	--	--	--	--
Independent students	7.4	6.0	0.0	0.3	8.1
Received Stafford loan	--	--	--	--	--

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-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 6.

Source: United States Department of Education, National Center for Education Statistics, Beginning Postsecondary Students study, 1992.

Table 7.7--Standard errors for persistence and attainment percentages by spring 1992 for private for-profit students who began in AY 1989-90

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By 7/90- After Still

6/90 6/91 6/91 enrolled Attained

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Total	1.8	1.7	0.7	0.9	2.7
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Gender of student

Male	3.3	3.1	1.0	0.9	3.8
Female	2.0	1.7	1.0	1.3	3.1

Race/ethnicity

American Indian	--	--	--	--	--
Asian/Pacific Islander	--	--	--	--	--
Black, non-Hispanic	3.8	6.0	2.8	1.4	4.5
Hispanic	6.4	4.2	1.4	2.0	5.8
White, non-Hispanic	2.3	1.4	0.7	1.1	3.3

Grant receipt, AY 1989-90

No grants(s) received	2.8	2.1	0.9	1.3	3.7
Dependent students	4.2	2.4	1.4	1.7	5.1
Family income less than \$30,000	7.3	2.1	4.4	4.6	9.9
Family income \$30,000 or more	4.6	2.9	1.4	1.3	5.2
Independent students	4.0	3.8	0.7	1.9	5.5
Received grant(s)	2.1	2.0	1.1	1.1	3.0

Loan receipt, AY 1989-90

No loan(s) received	3.3	3.0	1.4	1.2	4.3
Dependent students	5.1	2.7	1.6	1.8	5.8
Family income less than \$30,000	9.3	4.1	3.3	2.9	9.8

Family income \$30,000 or more	5.6	3.5	1.8	1.8	6.2
Independent students	4.0	4.6	2.2	1.7	6.0
Received loan(s)	1.9	1.6	0.9	1.3	2.8

#### Work-study receipt, AY 1989-90

No work-study received	1.8	1.7	0.7	0.9	2.7
Dependent students	3.0	1.7	1.0	1.5	4.3
Family income less than \$30,000	3.9	2.5	1.5	1.6	5.1
Family income \$30,000 or more	3.7	2.5	1.2	1.8	4.9
Independent students	2.2	2.3	1.0	1.0	3.1
Received work-study	--	--	--	--	--

#### Pell grant receipt, AY 1989-90

No Pell grant(s) received	2.3	2.0	0.8	1.4	3.2
Dependent students	3.5	2.2	1.2	1.7	4.7
Family income less than \$30,000	5.5	3.9	3.1	3.3	7.8
Family income \$30,000 or more	4.1	2.7	1.2	1.9	5.0
Independent students	3.4	3.1	0.7	2.1	4.6
Received Pell grant(s)	2.3	2.1	1.2	0.9	3.3

#### Stafford loan receipt, AY 1989-90

No Stafford loan received	3.0	2.8	1.3	1.2	4.0
Dependent students	4.9	2.5	1.5	1.7	5.4

Family income less than \$30,000	8.6	3.8	3.1	2.6	9.0
Family income \$30,000 or more	5.3	3.3	1.7	1.7	6.0
Independent students	3.7	4.3	2.0	1.6	5.5
Received Stafford loan	1.9	1.7	0.9	1.3	2.8

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-- Too few sample cases for a reliable estimate.

Note: Corresponds to table 7.

Source: United States Department of Education, National Center for  
Education Statistics, Beginning Postsecondary Students study,  
1992.