

## DOCUMENT RESUME

ED 396 597

HE 029 222

AUTHOR Berkner, Lutz K.; And Others  
 TITLE Descriptive Summary of 1989-90 Beginning Postsecondary Students: 5 Years Later, with an Essay on Postsecondary Persistence and Attainment. Statistical Analysis Report.  
 INSTITUTION National Center for Education Statistics (ED), Washington, DC.  
 REPORT NO NCES-96-155  
 PUB DATE May 96  
 NOTE 302p.  
 PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

EDRS PRICE MF01/PC13 Plus Postage.  
 DESCRIPTORS Academic Persistence; \*Educational Attainment; \*Educational Experience; Higher Education; \*Job Placement; Longitudinal Studies; \*Outcomes of Education; Statistical Data; \*Student Educational Objectives; \*Student Employment; Tables (Data)  
 IDENTIFIERS \*Beginning Postsecondary Students Long Study

## ABSTRACT

This report describes the status after 5 years of the diverse groups of students who first entered institutions of postsecondary education during the academic year 1989-90. It describes their economic and demographic characteristics, their educational objectives, the types of institutions they attended, their experiences while enrolled, and their persistence and attainment through the spring of 1994. In addition, this report describes the work experiences of these first-time students, both while enrolled and after they left postsecondary education. The data in this report were drawn from the second followup, of the 1990 Beginning Postsecondary Students Longitudinal Study. The study included students who enrolled immediately after high school and those who delayed their postsecondary studies. This report begins with an essay that describes the persistence and attainment of the 1989-90 beginning students in postsecondary education after 5 years. The essay explores persistence and attainment rates from several different perspectives and examines the factors associated with lower rates of completion among nontraditional students. Following the essay is a compendium of tables which provide more detail about persistence and attainment, student characteristics, educational financing, employment experiences, marriage, family formation, civic participation and graduate education. Three appendices provide additional information on persistence and attainment variables, technical notes and methodology, and a glossary. (Author/JPB)

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**Statistical Analysis Report**

**May 1996**

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**With an Essay on Postsecondary  
Persistence and Attainment**

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Statistical Analysis Report

May 1996

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## Descriptive Summary of 1989-90 Beginning Postsecondary Students: 5 Years Later

With an Essay on Postsecondary  
Persistence and Attainment

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U.S. Department of Education  
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NCES 96-155

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**Suggested Citation**

U.S. Department of Education. National Center for Education Statistics. *Descriptive Summary of 1989-90 Beginning Postsecondary Students 5 Years Later: With an Essay on Postsecondary Persistence and Attainment*, NCES 96-155, by Lutz K Berkner, Stephanie Cuccaro-Alamin, and Alexander C. McCormick. Larry G. Bobbitt, project officer. Washington, D.C.: 1996.

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## Foreword

This report describes the status after 5 years of the diverse groups of students who first entered postsecondary education during the academic year 1989–90. It describes their economic and demographic characteristics, their educational objectives, the types of institutions they attended, their experiences while enrolled, and their persistence and attainment through the spring of 1994. In addition, this report describes the work experiences of these first-time students, both while enrolled and after they left postsecondary education.

The data for this report were drawn from the second follow-up of the 1990 Beginning Postsecondary Students (BPS) Longitudinal Study conducted in the spring of 1994. The BPS sample was drawn from students who participated in the 1990 National Postsecondary Student Aid Study (NPSAS), a nationally representative cross-sectional survey of graduate and undergraduate students.

The 1990 BPS Study included not only students who enrolled immediately after high school, but also students who delayed their postsecondary studies. Thus, this study is a departure from previous National Center for Education Statistics (NCES) longitudinal studies of high school cohorts, in that it provides information for a steadily growing segment of the postsecondary student population—those who delay their initial entry into postsecondary education. Students in both academic and vocational programs are represented in the survey.

This report begins with an essay that describes the persistence and attainment of the 1989–90 beginning students in postsecondary education after 5 years. The essay explores persistence and attainment rates from several different perspectives and examines the factors associated with lower rates of completion among nontraditional students. Following the essay is a compendium of tables which provide more detail about persistence and attainment, student characteristics, educational financing, employment experiences, marriage, family formation, civic participation, and graduate education.

The estimates presented in this report were produced using the public access BPS:90/94 Data Analysis System (DAS). The DAS is a microcomputer application that allows users to specify and generate their own tables from the BPS data. The DAS produces design-adjusted standard errors necessary for testing the statistical significance of differences shown in the tables. Additional information about the DAS, and how it may be obtained, is included in appendix C of this report.

We hope that the information provided in this report will be useful to a wide range of interested readers, and that the results reported here will encourage others to use the BPS data. We welcome recommendations for improving the format, content and analytic approach to make the subsequent descriptive reports more informative and accessible.

## Acknowledgments

The authors wish to gratefully acknowledge the assistance of staff members of the National Center for Education Statistics in the preparation of this report. We owe special thanks to Larry Bobbitt, Project Officer, and C. Dennis Carroll, Branch Chief, of the Postsecondary Longitudinal Studies Branch for their guidance and help throughout all phases of the report. Robert Burton, Susan Ahmed, Mary Frase, and Marilyn McMillen reviewed the draft of the report in detail and offered many helpful suggestions to improve it.

We also wish to thank the members of the Beginning Postsecondary Students Longitudinal Study technical review panel for their contributions to the planning of the study and the direction of the report. Dan Goldenberg at the Planning and Evaluation Service, U.S. Department of Education, and Carol Fuller at the National Association of Independent Colleges and Universities also reviewed the text and provided helpful comments.

The data collection and analysis of the Beginning Postsecondary Students Longitudinal Study was the joint effort of MPR Associates and Research Triangle Institute, which conducted the data collection and prepared the data files. We wish to thank Daniel Pratt, the project director for the second follow-up at Research Triangle Institute, as well as Joe Simpson and Al Bethke, for their hard work, expertise, and cooperative spirit in all aspects of the project.

We wish to acknowledge the staff at MPR Associates who made this report possible. We thank each of them for their hard work, patience, and humor. The programming of the variables was the responsibility of Ellen Liebman and Vicky Dingler. Phil Pierpont and Ron Moscovitz assisted with data checking and running tables. Andrea Livingston and Karyn Madden edited the various drafts. Dawn Cayabyab, Don Eike, Sanjay Kothari, Laura Mihailoff, Leslie Retallick, Lynn Sally, Mary Sukkestad, and Connie Yin produced the figures, formatted the tables, and typed the text. Simone Figueroa coordinated the production of the report and produced the glossary. The guidance of Susan Choy and Laura Horn was invaluable. We thank these staff members for their efforts and the other staff at MPR for their support.

## Table of Contents

	Page
Foreword .....	iii
Acknowledgments .....	iv
List of Tables .....	vii
List of Figures .....	xxii

### The Educational Persistence and Attainment of 1989-90 Beginning Postsecondary Students After Five Years

Introduction .....	1
Overall Student Attainment and Persistence in Postsecondary	
Education After 5 Years .....	2
Student Persistence and Institutional Retention .....	4
Transfers and Changing Institutions .....	7
Degree Programs and Objectives .....	8
Changing Programs and Degree Objectives .....	10
Enrollment Continuity .....	12
Average Enrollment Time .....	14
Student Characteristics and Persistence According to Sector .....	15
Nontraditional Students and Risk of Attrition .....	18
Persistence Toward the Bachelor's Degree at 4-Year	
Institutions .....	22
Summary and Conclusion .....	28

### Table Compendium

#### Part I: Supplemental Persistence and Attainment Tables

Section 1: Overall Persistence and Attainment of Highest Degree—Total .....	31
Section 2: Overall Persistence and Attainment of Highest Degree—By Sectors ...	38
Section 3: Overall Persistence and Attainment of First Degree .....	51
Section 4: Overall Persistence and Attainment Including Transfer Status .....	55
Section 5: Attainment and Retention at the First Institution .....	59
Section 6: Persistence and Attainment of a Bachelor's Degree .....	66
Section 7: Persistence and Attainment of an Associate's Degree .....	70
Section 8: Persistence and Attainment of a Certificate .....	74
Section 9: Persistence and Attainment During the First Spell of	
Continuous Enrollment—Total .....	78
Section 10: Persistence and Attainment During the First Spell of	
Continuous Enrollment—By Institution Type .....	84
Section 11: Persistence and Attainment During the Longest Spell of	
Continuous Enrollment .....	100
Section 12: Persistence and Attainment During the Last Spell of	
Continuous Enrollment .....	104
Section 13: Annual Persistence and Attainment of Bachelor's Degree	
Seekers at 4-Year Institutions .....	108

Part II: Supplemental Descriptive Summary Tables

Section 14: Student Characteristics .....	116
Section 15: Education Financing .....	130
Section 16: Marriage, Family Formation, Civic Participation, and Further Education Activities .....	155
Section 17: Employment Experiences .....	177

**Appendices**

Appendix A: Persistence and Attainment Variables .....	A1
Appendix B: Glossary .....	B1
Appendix C: Technical Notes and Methodology .....	C1



## List of Tables

	Page
<b>Essay Tables</b>	
1 Percentage distribution of beginning postsecondary students according to highest degree attained as of spring 1994, by level of first institution attended . . . . .	3
2 Percentage distribution of 1989-90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, by level of first institution attended . . . . .	3
3 Percentage distribution of 1989-90 beginning postsecondary students according to attainment and retention at the first institution attended as of spring 1994, by level of first institution attended . . . . .	6
4 Percentage distribution of 1989-90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by level of first institution attended . . . . .	6
5 Percentage distribution of 1989-90 beginning postsecondary students who transferred or attended more than one institution as of spring 1994, by level of first institution attended . . . . .	7
6 Percentage distribution of 1989-90 beginning postsecondary students according to level of last institution attended as of spring 1994, by level of first institution attended . . . . .	8
7 Percentage distribution of 1989-90 beginning postsecondary students according to degree working toward at first institution attended, by level of first institution attended . . . . .	8
8 Percentage distribution of 1989-90 beginning postsecondary students according to persistence and attainment of highest degree as of spring 1994, by degree working toward at first institution and level of first institution attended . . . . .	9
9 Percentage distribution of 1989-90 beginning postsecondary students according to number of degree types attempted as of spring 1994, by level of first institution attended . . . . .	10
10 Percentage distribution of 1989-90 beginning postsecondary students according to degree working toward at first institution attended and the percentage ever attempting each degree as of spring 1994, by level of first institution attended . . . . .	10

**Essay Tables**

**Page**

11	Percentage distribution of 1989–90 beginning postsecondary students according to highest degree attained as of spring 1994, by type of degree attempted . . . . .	11
12	Percentage distribution of 1989–90 beginning postsecondary students according to level of first institution attended, by highest degree attained as of spring 1994 . . . . .	11
13	Percentage distribution of 1989–90 beginning postsecondary students according to transfer status and enrollment continuity as of spring 1994, by attendance characteristics . . . . .	12
14	Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, by transfer and enrollment continuity . . . . .	13
15	Average number of months 1989–90 beginning postsecondary students were enrolled through first degree (if any) or last enrollment as of spring 1994 according to overall persistence and attainment, including transfer status, by attendance characteristics . . . . .	14
16	Demographic characteristics 1989–90 by beginning postsecondary students, according to level of first institution attended . . . . .	15
17	Percentage distribution of 1989–90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution attended according to level of first institution attended, by selected demographic characteristics . . . . .	16
18	Percentage distribution of 1989–90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution attended, by persistence risk factors when they began postsecondary education . . . . .	19
19	Percentage distribution of 1989–90 beginning postsecondary according to number of risk factors when they began postsecondary education, by selected demographic and attendance characteristics . . . . .	21
20	Percentage distribution of 1989–90 beginning postsecondary students seeking a bachelor’s degree at 4-year institutions according to persistence and attainment outcomes as of spring 1994, by selected student and enrollment characteristics: 1994 . . . . .	24



**Essay Tables**

**Page**

21 Percentage distribution of 1989-90 beginning postsecondary students seeking a bachelor's degree at 4-year institutions according to date of bachelor's degree receipt by June 1994, by selected enrollment characteristics . . . . . 26

22 Percentage distribution of persistence track outcomes among 1989-90 beginning postsecondary students seeking a bachelor's degree at 4-year institutions: 1989-94 . . . . . 27

**Section 1: Overall Persistence and Attainment of Highest Degree—Total**

1.1 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by first institution attended, first degree working toward, and first degree attained . . . . . 32

1.2 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . 33

1.3 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics . . . . . 34

1.4 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began postsecondary education . . . . . 35

1.5 Percentage of 1989-90 beginning postsecondary students who ever attended selected types of institutions as of spring 1994, by first institution attended, first degree working toward, and highest degree attained . . . . . 36

1.6 Percentage distribution of 1989-90 beginning postsecondary students according to control of transfer institutions as of spring 1994, by first institution attended, first degree working toward, and highest degree attained . . . . . 37

**Section 2: Overall Persistence and Attainment of Highest Degree—By Sectors**

2.1a Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution attended, first degree working toward, and first degree attained . . . . . 39

2.1b Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution attended, first degree working toward, and first degree attained . . . . . 40

2.1c Percentage distribution of 1989–90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution attended, first degree working toward, and first degree attained . . . . . 41

Table Compendium

2.2a Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . . . 42

2.2b Percentage distribution of 1989-90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . . . 43

2.2c Percentage distribution of 1989-90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . . . 44

2.3a Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics . . . . . 45

2.3b Percentage distribution of 1989-90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics . . . . . 46

2.3c Percentage distribution of 1989-90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics . . . . . 47

2.4a Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution . . . . . 48

2.4b Percentage distribution of 1989-90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution . . . . . 49

2.4c Percentage distribution of 1989-90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution . . . . . 50



**Section 3: Overall Persistence and Attainment of First Degree—Total**

- 3.1 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by first institution attended, first degree working toward, and highest degree attained . 52
- 3.2 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . . . 53
- 3.3 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by demographic characteristics . . . . . 54

**Section 4: Overall Persistence and Attainment Including Transfer Status**

- 4.1 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by first institution attended, first degree working toward, and first degree attained . . . . . 56
- 4.2 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by attendance patterns through first degree attained (if any) or last enrollment . . 57
- 4.3 Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by demographic characteristics . . . . . 58

**Section 5: Attainment and Retention at the First Institution**

- 5.1 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by first institution attended, first degree working toward, and highest degree attained . 60
- 5.2 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment . . . . . 61
- 5.3 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by demographic characteristics . . . . . 62
- 5.4 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at first institution as of spring 1994, by persistence risk factors when they began at first institution . . . . . 63

<b>Table Compendium</b>	<b>Page</b>
5.5 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by social, academic, and work experiences and measure of satisfaction during the 1989–90 academic year . . . . .	64
5.6 Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by education financing during the 1989–90 academic year . . . . .	65

**Section 6: Persistence and Attainment of a Bachelor's Degree**

6.1 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor's degree according to persistence and attainment of a bachelor's degree as of spring 1994, by institution where they began working toward the degree and type of degree attained . . . . .	67
6.2 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor's degree according to persistence and attainment of a bachelor's degree as of spring 1994, by demographic characteristics . . . .	68
6.3 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor's degree according to persistence and attainment of a bachelor's degree as of spring 1994, by persistence risk factors when they began working toward the degree . . . . .	69

**Section 7: Persistence and Attainment of an Associate's Degree**

7.1 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by institution where they began working toward the degree and the type of degree attained . . . . .	71
7.2 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by demographic characteristics . . .	72
7.3 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by persistence risk factors when they began working toward the degree . . . . .	73

**Section 8: Persistence and Attainment of a Certificate**

- 8.1 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by institution where they began working toward the degree and type of degree attained . . . . . 75
- 8.2 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by demographic characteristics . . . . . 76
- 8.3 Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by persistence risk factors when they began working toward the degree . . . . . 77

**Section 9: Persistence and Attainment During the First Spell of Continuous Enrollment—Total**

- 9.1 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 79
- 9.2 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics . . . . . 80
- 9.3 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when they began first spell . . . . . 81
- 9.4 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989–90 academic year . . . . . 82
- 9.5 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989–90 academic year . . . . . 83



**Section 10: Persistence and Attainment During the First Spell of Continuous Enrollment—By Institution Type**

10.1a Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 85

10.1b Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 86

10.1c Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 87

10.2a Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics . . . . . 88

10.2b Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics . . . . . 89

10.2c Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics . . . . . 90

10.3a Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when they began first spell . . . . . 91

10.3b Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when they began first spell . . . . . 92

10.3c Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when they began first spell . . . . . 93

**Table Compendium**

**Page**

10.4a Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989-90 academic year . . . . . 94

10.4b Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989-90 academic year . . . 95

10.4c Percentage distribution of 1989-90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989-90 academic year . . . . . 96

10.5a Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989-90 academic year . . . . . 97

10.5b Percentage distribution of 1989-90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989-90 academic year . . . . . 98

10.5c Percentage distribution of 1989-90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989-90 academic year . . . . . 99

**Section 11: Persistence and Attainment During the Longest Spell of Continuous Enrollment—Total**

11.1 Percentage distribution of 1989-90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 101

11.2 Percentage distribution of 1989-90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by demographic characteristics . . . . . 102

11.3 Percentage distribution of 1989-90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by persistence risk factors when they began longest spell . . . . . 103

**Section 12: Persistence and Attainment During the Last Spell of Continuous Enrollment—Total**

- 12.1 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained . . . . . 105
- 12.2 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by demographic characteristics . . . . . 106
- 12.3 Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by persistence risk factors when they began last spell . . . . . 107

**Section 13: Annual Persistence and Attainment of Bachelor’s Degree Seekers at 4-year Institutions**

- 13.1 Percentage distribution of annual persistence and attainment outcomes among 1989–90 beginning postsecondary bachelor’s degree seekers in 4-year institutions: 1989–90 . . . . . 109
- 13.2 Percentage distribution of annual persistence and attainment outcomes among persisting bachelor’s degree seekers in 4-year institutions: 1990–91 . . . . . 110
- 13.3 Percentage distribution of annual persistence and attainment outcomes among persisting bachelor’s degree seekers in 4-year institutions: 1991–92 . . . . . 111
- 13.4 Percentage distribution of annual persistence and attainment outcomes among persisting bachelor’s degree seekers in 4-year institutions: 1992–93 . . . . . 112
- 13.5 Percentage distribution of annual persistence and attainment outcomes among persisting bachelor’s degree seekers in 4-year institutions: 1993–94 . . . . . 113
- 13.6 Percentage distribution of persistence and attainment outcomes as of spring 1994, among bachelor’s degree seekers in 4-year institutions who left the persistence track—1994 . . . . . 114

**Section 14: Student Characteristics**

- 14.1 Percentage distribution of 1989–90 beginning postsecondary students according to gender, by demographic characteristics . . . . . 119

## Table Compendium

Page

14.2	Percentage distribution of 1989-90 beginning postsecondary students according to age when began at first institution, by demographic characteristics . . . . .	120
14.3	Percentage distribution of 1989-90 beginning postsecondary students according to socioeconomic status, by demographic characteristics . . . . .	121
14.4	Percentage distribution of 1989-90 beginning postsecondary students according to race-ethnicity of student, by demographic characteristics . . . . .	122
14.5	Percentage distribution of 1989-90 beginning postsecondary students according to marital status when began at first institution, by demographic characteristics . . . . .	123
14.6	Percentage distribution of 1989-90 beginning postsecondary students according to parental education, by demographic characteristics . . . . .	124
14.7	Percentage distribution of 1989-90 beginning postsecondary students according to dependency status in 1989-90, by demographic characteristics . . . . .	125
14.8	Percentage of 1989-90 beginning postsecondary students with component persistence risk factors when they began at first institution, by demographic characteristics . . . . .	126
14.9	Percentage distribution of 1989-90 beginning postsecondary students according to age when began at first institution, by first institution attended, first degree working toward, and highest degree attained . . . . .	127
14.10	Percentage distribution of 1989-90 beginning postsecondary students according to level of first institution, by selected demographic and institutional characteristics . . . . .	128
14.11	Percentage distribution of 1989-90 beginning postsecondary students according to control of first institution, by selected demographic and institutional characteristics . . . . .	129

## Section 15: Education Financing

15.1	Percentage of 1989-90 beginning postsecondary students ever receiving financial aid as of spring 1994 according to the type of aid received, by selected demographic and institutional characteristics . . . . .	133
15.2	Percentage of 1989-90 beginning postsecondary students ever receiving assistance from family or using personal savings as of spring 1994 according to the type of assistance received, by selected demographic and institutional characteristics . . . . .	135

**Table Compendium**

**Page**

15.3 Percentage distribution of 1989-90 beginning postsecondary students according to level and control of first institution, by education financing during the 1989-90 academic year . . . . . 137

15.4 Percentage distribution of 1989-90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, by types of financial aid and family assistance used during postsecondary education . . . . . 138

15.5 Percentage distribution of 1989-90 beginning postsecondary students who attained a degree or were still enrolled in 1994 according to financial aid receipt as of spring 1994 and level of first institution, by selected demographic characteristics . . . . . 139

15.6 Percentage of 1989-90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics . . . . . 141

15.7 Average amount borrowed by 1989-90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics . . . . . 143

15.8a Percentage of 1989-90 beginning postsecondary students who owe on postsecondary loans as of spring 1994, according to overall persistence and attainment, as of spring 1994, by selected demographic and institutional characteristics . . . . . 145

15.8b Average amount owed on postsecondary loans as of spring 1994 by 1989-90 beginning postsecondary students according to overall persistence and attainment, as of spring 1994, by selected demographic and institutional characteristics . . . 147

15.9a Percentage of 1989-90 beginning postsecondary students who borrowed for postsecondary education according to loan repayment arrangements as of spring 1994, by selected demographic and institutional characteristics . . . . . 149

15.9b Percentage distribution of 1989-90 beginning postsecondary students who borrowed for postsecondary education and are currently repaying loans according to average monthly loan payment as of spring 1994, by selected demographic and institutional characteristics . . . . . 152

**Section 16: Marriage, Family Formation, Civic Participation, and Further Education Activities**

16.1a Percentage distribution of 1989-90 beginning postsecondary students according to marital status in spring 1994, by selected demographic and institutional characteristics . . . . . 158

## Table Compendium

	Page
16.1b Percentage distribution of ever married 1989-90 beginning postsecondary students as of spring 1994 according to timing of marriage, by selected demographic and institutional characteristics . . . . .	160
16.2a Percentage distribution of 1989-90 beginning postsecondary students according to the number of children in spring 1994, by selected demographic and institutional characteristics . . . . .	162
16.2b Percentage distribution of 1989-90 beginning postsecondary students who had children in spring 1994 according to the timing of first child, by selected demographic and institutional characteristics . . . . .	164
16.3 Percentage of 1989-90 beginning postsecondary students participating in volunteer/community service activities, and type of volunteer/community service organization involved with within the past 2 years, by selected demographic and institutional characteristics . . . . .	166
16.4a Percentage distribution of 1989-90 beginning postsecondary students according to current voter registration status in spring 1994, by selected demographic and institutional characteristics . . . . .	169
16.4b Percentage of 1989-90 beginning postsecondary students who recently voted, by selected demographic and institutional characteristics . . . . .	171
16.5 Percentage of 1989-90 beginning postsecondary students who had attained a bachelor's degree by June 1993 according to graduate school application and attendance, as of spring 1994, by selected demographic and institutional characteristics . . . . .	173
16.6 Percentage of 1989-90 beginning postsecondary students who took licensing exams and percentage of exam takers according to the type of licensing exam taken as of spring 1994, by selected demographic and institutional characteristics . . . . .	174

## Section 17: Employment Experiences

17.1 Percentage of 1989-90 beginning postsecondary students who were employed while enrolled at some time during postsecondary education, by selected demographic and institutional characteristics . . . . .	180
17.2 Percentage distribution of 1989-90 beginning postsecondary students according to their primary occupation in 1993, by selected demographic and institutional characteristics . . . . .	182
17.3 Percentage of 1989-90 beginning postsecondary students reporting satisfaction with aspects of their most recent job, by selected demographic and institutional characteristics . . . . .	184

## Table Compendium

Page

- 17.4 Percentage of 1989–90 beginning postsecondary students who were ever unemployed and average duration of unemployment as of spring 1994, by selected demographic and institutional characteristics . . . . . 186
- 17.5 Percentage of 1989–90 beginning postsecondary students who were ever unemployed during calendar years 1990 through 1993, by selected demographic and institutional characteristics . . . . . 188
- 17.6 Percentage distribution of 1989–90 beginning postsecondary students according to the number of months after leaving postsecondary education before obtaining first principal job, by selected demographic and institutional characteristics . . . . . 190
- 17.7 Percentage of 1989–90 beginning postsecondary students according to actions taken to obtain their most recent principal job as of spring 1994, by selected demographic and institutional characteristics . . . . . 192
- 17.8 Percentage of 1989–90 beginning postsecondary students according to relationship between their most recent principal job and their postsecondary education, by selected demographic and institutional characteristics . . . . . 194

## List of Figures

Figure		Page
1	Institutional retention and overall persistence rates of 1989-90 beginning postsecondary students after 5 years . . . . .	4
2	Percentage of 1989-90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution, by age when began postsecondary education . . . . .	17
3	Persistence, degree attainment, and nondegree departure among bachelor's degree seekers in 4-year institutions: 1989-90 through 1993-94 . . . . .	23



# The Educational Persistence and Attainment of 1989-90 Beginning Postsecondary Students After Five Years

## Introduction

During the 1989-90 academic year, approximately 2.6 million students enrolled in postsecondary education for the first time.<sup>1</sup> A sample of these students was selected for the Beginning Postsecondary Students Longitudinal Study.<sup>2</sup> The sampled students were interviewed three times: at the end of their first year in 1990, in the spring of 1992, and in the spring of 1994. This essay describes the educational experiences of these first-time beginners over the 5-year period, focusing on their persistence in postsecondary education and their attainment of any degrees or certificates at the baccalaureate level or below.

There are many different ways of measuring persistence and attainment.<sup>3</sup> In this essay the subject will be approached from four different perspectives: 1) overall persistence in postsecondary education; 2) institutional retention; 3) persistence toward degree objectives; and 4) persistence toward the bachelor's degree at 4-year institutions. Each of these approaches results in different levels of persistence and attainment rates.

The first perspective presented in this essay examines the overall experience of the beginning students in postsecondary education as a whole. It looks at whether the students attained any type of degree anywhere or were still enrolled anywhere without a degree in 1994, no matter where they started or whether they changed institutions or degree objectives. It addresses the issue of student persistence in the broadest sense by asking what proportion of beginning students had completed or were still attempting to complete a postsecondary program within the 5 years after they had started.

The second approach examines the experience of the students only in relation to the first institution attended. It addresses the issue of institutional retention by asking what proportion of beginners remained at the same institution to complete a degree or certificate. Students who do not remain there may either leave postsecondary education permanently or transfer to some other institution before completing a degree program. In either case the students have not been retained at the first institution, but by transferring elsewhere they continue to persist in postsecondary education. Because many students do transfer before attaining a degree, institutional rates of retention tend to understate levels of student persistence.

A third approach is to examine persistence and attainment in relation to a particular degree objective, whether the student is working toward a bachelor's degree, an associate's

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<sup>1</sup>Appendix C, table C3.

<sup>2</sup>For more details, see U.S. Department of Education, National Center for Education Statistics, *Descriptive Summary of 1989-90 Beginning Postsecondary Students: Two Years Later* (Washington, D.C.:1994).

<sup>3</sup>Appendix A contains a detailed description of the persistence and attainment variables used in this report.

degree, or a vocational certificate. This perspective is useful when the level of the degree that the students are seeking is not the highest undergraduate degree offered at the institution that they are attending at the time. This is especially common at community colleges, where students may be taking courses toward either a bachelor's degree or a vocational certificate rather than an associate's degree.

The fourth approach presented in this essay is to focus specifically on the students with a bachelor's degree objective who are beginning at 4-year institutions and to trace their progress towards the bachelor's degree on a year-by-year basis. This perspective is useful in determining what proportion of beginning students at 4-year colleges follow a path of continuous enrollment towards the bachelor's degree and how long it takes them to achieve their objective.

### **Overall Student Attainment and Persistence in Postsecondary Education After 5 Years**

One of the most important distinctions in studying persistence and attainment is the highest undergraduate degree offered at the institution in which the student enrolls, because the time spent at the institution reflects the normal duration of the degree programs. Less-than-2-year institutions only offer certificates, usually in vocational programs that can be completed in less than one year. Two-year institutions offer associate's degrees that can typically be completed in two years of full-time study, but often offer shorter certificate programs as well. Four-year institutions primarily offer bachelor's degrees, but some also offer shorter associate's and certificate programs. In this report, the institutions are categorized into the 4-year, 2-year, and less-than-2-year sectors according to their highest level of undergraduate degree offered.<sup>4</sup> Postbaccalaureate enrollment and degrees are excluded from this analysis.

Among the first-time beginners in 1989-90, almost half started postsecondary education at institutions in the 2-year sector, 42 percent in the 4-year sector, and less than 10 percent at institutions in the less-than-2-year sector.<sup>5</sup> The distribution of students by the control of the institution attended varied within these sectors. Nearly 90 percent of those in the 2-year sector attended public community colleges; three-quarters of those in the less-than-2-year sector attended private, for-profit institutions; and in the 4-year sector, two-thirds attended public, and one-third private, not-for-profit colleges and universities.<sup>6</sup>

Tables 1 and 2 show the distribution of the highest undergraduate degree attained, as well as students' enrollment status in the spring of 1994 in relation to the level of institution where the first-time beginners entered postsecondary education. The outcomes shown, however, did not necessarily take place at the institution or sector where they began. Rather they are the persistence and attainment rates for first-time beginners in postsecondary education overall without any restrictions: these rates include students who changed institutions, changed degree programs, or were awarded more than one undergraduate degree at any time during the 5 years.

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<sup>4</sup>Each sector included institutions that are under public, private, not-for-profit; or private, for-profit control.

<sup>5</sup>Essay table 12.

<sup>6</sup>Compendium table 14.11.

**Table 1—Percentage distribution of 1989–90 beginning postsecondary students according to highest degree attained as of spring 1994, by level of first institution attended**

	Highest degree attained			Total attained	No degree attained
	Certificate	Associate's degree	Bachelor's degree		
Total	12.9	11.2	25.8	50.0	50.0
Level of first institution					
4-year	2.9	4.2	53.3	60.4	39.6
2-year	13.8	18.6	6.1	38.4	61.6
Less-than-2-year	58.3	2.8	0.9	62.0	38.0

NOTE: The second follow-up interviews began in late March 1994; students who expected to graduate by June were classified as attainners.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

By the spring of 1994, half of the first-time beginners in 1989–90 had attained a certificate or degree of some kind: 26 percent had attained a bachelor's degree; 11 percent had attained an associate's degree as their highest degree; and 13 percent had attained a certificate. Of those who began at 4-year institutions, a majority (53 percent) had completed a bachelor's degree, but some (about 7 percent) had attained a lower credential. Of those who began at less-than-2-year institutions, which primarily offer short-term vocational programs, 58 percent had attained a certificate but some (about 4 percent) went on to earn a higher degree elsewhere. The highest degrees attained by those who had started at 2-year institutions were distributed as follows: 14 percent had attained certificates, 19 percent associate's degrees, and 6 percent bachelor's degrees. Unlike the 4-year and less-than-2-year institutional sectors, however, a majority of students who began in a 2-year institution (62 percent) had not attained any degree by the spring of 1994.

**Table 2—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, by level of first institution attended**

	Attained or still enrolled			No degree, not enrolled
	Attained degree	No degree, enrolled	Total	
Total	50.0	13.3	63.2	36.8
Level of first institution				
4-year	60.4	15.2	75.6	24.4
2-year	38.4	13.6	52.0	48.0
Less-than-2-year	62.0	2.5	64.5	35.5

NOTE: The second follow-up interviews began in late March 1994; students who expected to graduate by June were classified as attainners.

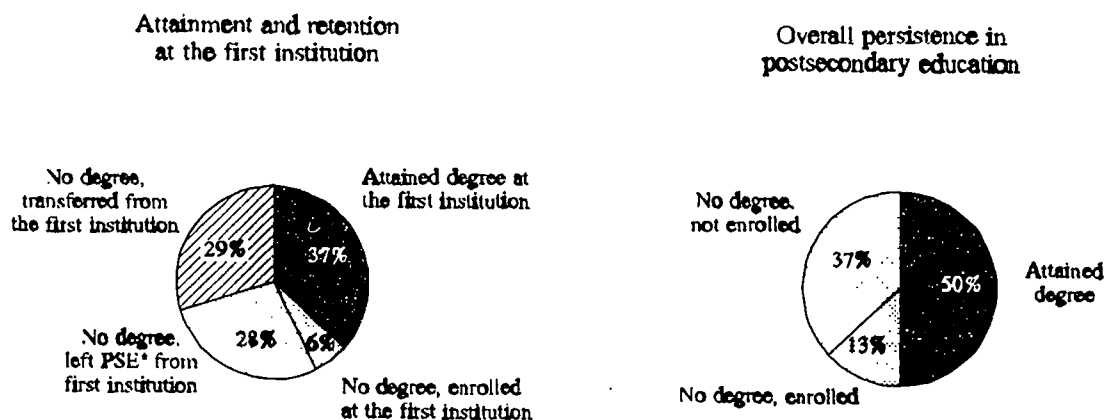
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Table 2 shows that in addition to the 50 percent of first-time beginners who had attained a certificate or degree by 1994, another 13 percent were still enrolled without a degree at some postsecondary institution. The sum of the proportion of students who attained and the proportion still enrolled in any postsecondary institution indicates that nearly two-thirds (63 percent) of the 1989–90 beginning postsecondary students persisted in the broadest possible sense. About half (52 percent) of those who had started at a 2-year institution had either attained a credential or were still enrolled, as well as about two-thirds (65 percent) of those who had started at less-than-2-year institutions and three-quarters (76 percent) of those who had started at 4-year colleges or universities.

### Student Persistence and Institutional Retention

Most of the studies of persistence and attainment in postsecondary education are based on institutional data that focus on the issue of student retention at that institution.<sup>7</sup> The longitudinal nature of the Beginning Postsecondary Students Longitudinal Study, however, allows for the measurement of persistence both within and across institutions.<sup>8</sup>

Figure 1—Institutional retention and overall persistence rates of 1989–90 beginning postsecondary students after 5 years



\*Postsecondary education

NOTE: Transfers only include those who transferred before attaining a first degree.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>7</sup>Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. (Chicago, IL: University of Chicago Press, 1993), chapter 2.

<sup>8</sup>See Appendix A for the decision rules used in determining the persistence categories discussed below.

The difference between institutional rates of retention and overall persistence among first-time beginners in postsecondary education is substantial, especially in the 2-year and 4-year sectors. From the perspective of the individual students after 5 years, 50 percent had attained a postsecondary degree or certificate; 13 percent were still enrolled without a degree; and 37 percent were no longer enrolled and had not earned a degree (table 2). From the perspective of the first institution attended, however, the results are very different (table 3). After 5 years, only 37 percent had attained a degree at the first institution attended, and an additional 6 percent were still enrolled there without a degree.

The difference in the two perspectives is illustrated in figure 1. Whereas nearly two-thirds of the students who began postsecondary education for the first time in the 1989-90 academic year had persisted or attained an award within 5 years, less than half had done so at the institution where they began. The overall persistence rate of first-time beginners anywhere in postsecondary education is 20 percentage points higher than their persistence rate at the first institution attended.

The difference between institutional retention rates and overall student persistence rates is explained by what happens to those who transfer before attaining a degree. From the institutional perspective shown in table 3, only those 43 percent who attained or were still enrolled at that institution have persisted; the other 57 percent have left the institution before completing a program. About half of those who left the institution (29 percent), however, had transferred.

In the 4-year sector, table 3 shows that 47 percent of the first-time beginners had attained a degree at the first institution within 5 years, and another 9 percent were still attending the college or university where they had first enrolled—for an overall retention rate of 56 percent at the first institution. Those who were no longer enrolled at their initial 4-year institution were more likely to have transferred elsewhere (28 percent) than to have left postsecondary education (16 percent).

Table 4 shows what happened to those beginners who transferred from a 4-year institution: 13 percent of the beginners attained a degree elsewhere; 7 percent were still enrolled elsewhere in 1994; and 8 percent had left without a degree from a transfer institution. The sum of the "attained" and "enrolled" columns results in the totals shown earlier in table 2: 76 percent of those who had started at a 4-year institution in 1989-90 had either completed a program or were still enrolled in a program 5 years later (although these beginners were not all in bachelor's degree programs).

There was also a substantial difference between institutional retention and overall persistence and attainment rates for those who started in the 2-year sector. For example, 24 percent who had first enrolled in a 2-year institution had attained a certificate or degree at that institution within 5 years, but an additional 14 percent had attained a degree elsewhere after leaving (table 4). The retention rate at the first 2-year institution attended was only 30 percent (table 3), but 52 percent of those who began postsecondary education in 2-year institutions had either attained a degree or were still enrolled somewhere 5 years later (table 2).

**Table 3—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution attended as of spring 1994, by level of first institution attended**

	Attainment and retention at the first institution			Not retained at the first institution		
	Attained degree	No degree, enrolled	Total retained	No degree, left PSE*	No degree, transferred elsewhere	Total not retained
Total	36.9	6.4	43.3	27.9	28.8	56.7
Level of first institution						
4-year	47.0	8.6	55.5	16.4	28.1	44.5
2-year	24.3	5.7	30.0	37.7	32.3	69.9
Less-than-2-year	56.7	0	56.7	29.8	13.5	43.3

\*Postsecondary education.

NOTE: Transfers only include those who transferred before attaining a degree at the first institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

**Table 4—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by level of first institution attended**

	Did not transfer			Transferred from first institution		
	Attained degree at first institution	No degree, enrolled at first institution	No degree, left PSE* from first institution	Attained degree elsewhere	No degree, enrolled elsewhere	No degree, left PSE* after transfer
Total	36.9	6.4	27.9	13.0	6.8	8.9
Level of first institution						
4-year	47.0	8.6	16.4	13.4	6.6	8.0
2-year	24.3	5.7	37.7	14.1	7.9	10.3
Less-than-2-year	56.7	0	29.8	5.3	2.5	5.7

\*Postsecondary education.

NOTE: Transfers only include those who transferred before attaining a degree at the first institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

## Transfers and Changing Institutions

The difference between the retention rate at the first institution attended and the persistence of students anywhere in postsecondary education over the 5-year period under study reflects the frequency of student transfers. Overall, 29 percent of the beginning postsecondary students left the first institution attended without attaining a degree and then enrolled in a different institution (table 5). Including those who enrolled in a different institution after they had attained their first degree (about 5 percent), the overall transfer rate was 35 percent.<sup>9</sup>

Students were classified as transfers only if they changed institutions permanently without returning to the original institution. This excludes students who enrolled at courses in two institutions simultaneously, attended summer school at a different institution, or were enrolled temporarily at a second institution and then returned to the first one. When these are included with transfers, then nearly half (45 percent) of all the 1989–90 beginning students attended more than one postsecondary institution during the 5-year period.

**Table 5—Percentage of 1989–90 beginning postsecondary students who transferred or attended more than one institution as of spring 1994, by level of first institution attended**

	Transferred before first degree	Transferred before or after first degree	Attended more than one institution*
Total	28.8	34.8	45.4
Level of first institution			
4-year	28.1	28.3	47.1
2-year	32.3	42.5	47.4
Less-than-2-year	13.5	24.5	26.4

\*Includes all transfers as well as simultaneous enrollment at two institutions, enrollment in summer school, and temporary enrollment followed by a return to the first institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Transfers could take place within or between sectors, and students could transfer more than once. Student transfers between sectors are shown in table 6 by comparing the levels of the first and the last institution attended during the 5 years.<sup>10</sup> Of those who started at 4-year institutions, 10 percent were last enrolled in the 2-year sector. Although 5 percent of those who began at 2-year institutions were last enrolled in less-than-2-year institutions, the movement from 2-year institutions was primarily upwards: 20 percent of those who started in the 2-year sector were last enrolled in a 4-year institution. Nevertheless, the majority of beginning students did not change sectors.

<sup>9</sup>See U.S. Department of Education, National Center for Education Statistics, *Transfer Behavior Among Beginning Postsecondary Students: 1990–94* (Washington, D.C., forthcoming), for a detailed discussion of transfers.

<sup>10</sup>Comparing the first and last institutions may overlook intermediate transitions between sectors.

**Table 6—Percentage distribution of 1989–90 beginning postsecondary students according to level of last institution attended as of spring 1994, by level of first institution attended**

	Level of last institution attended*		
	4-year	2-year	Less-than-2-year
Total	48.4	41.4	10.2
Level of first institution			
4-year	89.2	9.7	1.0
2-year	19.6	75.1	5.2
Less-than-2-year	5.8	11.7	82.5

\*Includes students who attended only one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

### Degree Programs and Objectives

Since 2-year institutions typically offer both associate's degrees and certificates, and some 4-year institutions offer both of these credentials in addition to the baccalaureate degree, students were asked toward which degree or certificate they were working at each institution attended.<sup>11</sup> The purpose of the question was to identify the students' current degree program and objective. For the first institution attended (table 7), 51 percent of the first-time beginners responded that they were working toward a bachelor's degree; 30 percent were working toward an associate's degree; 16 percent were working toward a certificate; and 4 percent were not working toward any degree.

**Table 7—Percentage distribution of 1989–90 beginning postsecondary students according to degree working toward at the first institution attended, by level of first institution attended**

	Degree working toward at first institution			
	None	Certificate	Associate's degree	Bachelor's degree
Total	3.8	15.7	29.7	50.8
Level of first institution				
4-year	1.4	1.2	6.4	91.1
2-year	6.5	14.5	54.8	24.1
Less-than-2-year	1.2	93.8	3.3	1.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Of those starting at 4-year institutions, more than 90 percent said that they were working toward a bachelor's degree, and of those starting at a less-than-2-year institution, 94 percent said that they were working toward a certificate. Therefore, in these sectors, there was a relatively close relationship between degree objective and highest undergraduate degree

<sup>11</sup>This is different from the students' aspirations in terms of the highest degree or level of education they ever expected to complete, which was a separate question. See Compendium tables 10.4a-c for aspirations.



offered. In the 2-year sector, however, only about half of the students (55 percent) said that they were working toward an associate's degree, while one-quarter (24 percent) reported that they were working toward a bachelor's degree, an objective that could only be achieved by transferring to a 4-year institution.

In table 8, the persistence and attainment of students who started working toward a bachelor's degree in 2-year institutions are compared with students working toward an associate's degree in 2-year institutions and with those working toward a bachelor's degree in 4-year institutions.

**Table 8—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment of highest degree as of spring 1994, by degree working toward at first institution and level of first institution attended**

	Highest degree attained			Total	No degree.	
	Certificate	Associate's degree	Bachelor's degree		No degree, enrolled	not enrolled
<b>Degree working toward at first institution</b>						
Associate's degree	11.3	22.9	8.9	43.2	12.1	44.7
Bachelor's degree	3.8	7.2	45.8	56.8	17.0	26.1
<b>Level of first institution</b>						
2-year	13.8	18.6	6.1	38.4	13.6	48.0
4-year	2.9	4.2	53.3	60.4	15.2	24.4
<b>Degree working toward and level of first institution</b>						
Associate's degree at 2-year institution	11.4	23.7	7.5	42.6	12.1	45.2
Bachelor's degree at 2-year institution	8.1	21.0	7.9	36.9	22.5	40.6
Bachelor's degree at 4-year institution	2.4	3.1	57.1	62.6	15.6	21.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS'90/94)

Those who said that they were working toward a bachelor's degree at 2-year institutions were about as likely to earn an associate's degree (21 percent) as those who said that they were only working toward an associate's degree (24 percent). The bachelor's degree attainment rate was similar for both groups (8 percent). Bachelor's degree seekers beginning in a 4-year institution were much more likely to attain a bachelor's degree within 5 years (57 percent) than those beginning in a 2-year institution. Those seeking a bachelor's degree at 2-year institutions make up nearly one-quarter (23 percent) of all students with a bachelor's degree objective,<sup>12</sup> and their lower rates of attainment are reflected in the aggregate bachelor's degree attainment rate for all students with a bachelor's degree objective (46 percent).

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<sup>12</sup>Compendium table 14.10.

## Changing Programs and Degree Objectives

During the 5-year period, about one-fifth (22 percent) of the first-time beginners changed their degree objective. Table 9 shows the number of degrees attempted by the first-time beginners in relation to the first institution attended. Of those who started in the 2-year sector, almost one-third (31 percent) reported attempting more than one type of degree.

**Table 9—Percentage distribution of 1989–90 beginning postsecondary students according to number of degree types attempted as of spring 1994, by level of first institution attended**

	Number of degrees attempted		
	None	One	Two or more
Total	2.6	75.9	21.5
Level of first institution			
4-year	0.9	88.4	10.7
2-year	4.5	64.2	31.3
Less-than-2-year	0.6	79.4	20.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

An alternative approach to measuring persistence and attainment is to measure these rates in relation to particular degree objectives. Using this approach, the students who changed objectives and attempted a second degree are counted more than once because they will be included in both categories of degree objectives. The proportion of beginning postsecondary students who ever attempted a specific type of degree will be greater than the proportion who first attempted such a degree. For example, 16 percent of the first-time beginners initially said that they were working toward a certificate, but over the 5-year period, 25 percent were working toward a certificate at one time or another (table 10). Similarly, 30 percent initially had an associate's degree as an objective, but 39 percent were working toward an associate's degree at some time. Another 51 percent were working toward a bachelor's degree initially, but 58 percent had a bachelor's degree objective at some time during the 5 years.<sup>13</sup>

**Table 10—Percentage distribution of 1989–90 beginning postsecondary students according to the degree working toward at first institution attended and the percentage ever attempting each degree as of spring 1994, by level of first institution attended**

	Degree working toward at first institution			Degree attempted at any time		
	Certificate	Associate's degree	Bachelor's degree	Certificate	Associate's degree	Bachelor's degree
Total	15.7	29.7	50.8	25.0	38.5	58.0
Level of first institution						
4-year	1.2	6.4	91.1	5.9	13.7	93.3
2-year	14.5	54.8	24.1	29.1	64.3	36.6
Less-than-2-year	93.8	3.3	1.6	95.8	10.8	6.6

NOTE: Degrees attempted at any time exceeds 100 percent because students can be included in more than one category.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>13</sup>Because the same students can be in more than one category, the totals add up to more than 100 percent.

Those who had more than one degree objective were more likely to attain a degree or certificate than those who had only one (table 11). This includes students who earned one degree or certificate and then pursued a higher one, as well as those who attained a degree that was lower than the original objective.

**Table 11—Percentage distribution of 1989–90 beginning postsecondary students according to highest degree attained as of spring 1994, by type of degree attempted**

	Highest degree attained			Total	No degree attained
	Certificate	Associate's degree	Bachelor's degree		
Total	12.9	11.2	25.8	50.0	50.0
Type of degree attempted					
Certificate only	54.0	†	†	54.0	46.0
Associate's degree only	†	25.1	†	25.1	74.9
Bachelor's degree only	†	†	54.1	54.1	45.9
More than one degree	23.1	27.9	16.6	67.6	32.4

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Table 12 displays the first institution attended according to the type of highest degree attained by the beginning students. It illustrates how attainers of each type of degree began their postsecondary education. Nine percent of those whose highest degree was a certificate and 16 percent of those who attained an associate's degree began their education at a 4-year institution. Twelve percent of those who attained a bachelor's degree had started at a 2-year institution and transferred. Overall, however, more than one-quarter (28 percent) of those who earned bachelor's degrees had enrolled for courses in a 2-year public community college at some time during the five-year period.<sup>14</sup>

**Table 12—Percentage distribution of 1989–90 beginning postsecondary students according to level of first institution attended, by highest degree attained as of spring 1994**

	Level of first institution		
	4-year	2-year	Less-than-2-year
Total	42.2	49.2	8.6
Highest degree attained			
None	33.2	60.3	6.5
Certificate	9.4	52.0	38.6
Associate's degree	15.7	82.2	2.1
Bachelor's degree	88.0	11.7	0.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>14</sup>Compendium table 1.5.

## Enrollment Continuity

Continuous enrollment is defined in this report as maintaining enrollment in postsecondary education without an interruption of more than 4 months (which allows for the normal summer break). Enrollment continuity is considered separately from transfer behavior. Students may transfer with or without breaking enrollment continuity by more than 4 months. Those who stop attending an institution for more than 4 months and then return to the same institution at some later time are often called "stopouts."

Table 13 shows that a considerable proportion of students either broke enrollment continuity, transferred, or did both. Fourteen percent were not continuously enrolled, but returned to the same institution; 13 percent transferred to another institution without a break in continuity; and 15 percent both interrupted enrollment continuity and transferred.

**Table 13—Percentage distribution of 1989–90 beginning postsecondary students according to transfer status and enrollment continuity as of spring 1994, by attendance characteristics**

	Did not transfer, continuously enrolled	Did not transfer, not continuously enrolled	Transferred, continuously enrolled	Transferred, not continuously enrolled
Total	57.2	14.1	13.4	15.4
Level of first institution				
4-year	58.3	13.6	14.9	13.2
2-year	51.5	16.3	13.8	18.5
Less-than-2-year	83.7	2.8	4.1	9.5
Degree working toward at first institution				
None	43.5	18.0	13.5	24.9
Certificate	77.4	8.3	4.3	9.9
Associate's degree	54.1	15.0	12.7	18.2
Bachelor's degree	53.3	15.5	16.7	14.5
First type of degree attained				
None	50.5	18.1	11.4	20.1
Certificate	55.4	5.4	16.7	22.5
Associate's degree	62.4	12.9	14.1	10.5
Bachelor's degree	69.7	11.0	15.3	4.0

NOTE: Continuously enrolled is defined as enrolled without a break of more than 4 months before first degree (if any) or last enrollment. All column categories include students who left without a degree.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

The result of these four different paths through postsecondary education relative to overall persistence and attainment is shown in table 14. In terms of attainment of any degree within 5 years, no difference was found between transferring and not transferring if there was no break in enrollment continuity (56–57 percent attained). In fact, those who transferred without a break in continuity were the least likely to leave postsecondary education (21 percent left without a degree compared with approximately 40 percent for the other categories). Combining the attained and still-enrolled categories, those who transferred without a break in continuity had a persistence rate of nearly 80 percent, compared with about 60 percent for all the others.

**Table 14—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment status as of spring 1994, by transfer and enrollment continuity**

	Attained or still enrolled			No degree, not enrolled
	Attained degree	No degree, enrolled	Total	
Total	50.0	13.3	63.2	36.8
Transfer status and enrollment continuity				
Did not transfer, continuous	55.8	5.4	61.2	38.8
Did not transfer, not continuous	35.6	23.6	59.2	40.8
Transferred, continuous	57.4	21.4	78.8	21.1
Transferred, not continuous	34.7	25.9	60.6	39.4

NOTE: Continuously enrolled is defined as enrolled without a break of more than 4 months before first degree (if any) or last enrollment.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Breaking enrollment continuity was associated with a lower rate of attainment for both those who transferred and those who did not. Only about one-third those who broke continuity had attained a degree by 1994, as compared to more than half of those who had no break in continuity. This is to be expected because breaks in enrollment continuity will obviously increase the time required to complete a program.

## Average Enrollment Time

How long beginning students were enrolled relative to their persistence and attainment outcomes is shown in table 15. Enrolled time only includes the number of months that the student is actually in attendance, and does not include periods (such as the summer months) when the student is not enrolled. Those who had attained a bachelor's degree at their first institution were enrolled for an average of 41 months—that is, about 5 months longer than the typical 36 months in 4 academic years. Those who had attained an associate's degree at their first institution averaged 27 months of enrollment, or about 3 academic years, whereas those who had attained a certificate were enrolled for an average of 13 months.

**Table 15—Average number of months 1989–90 beginning postsecondary students were enrolled through first degree (if any) or last enrollment as of spring 1994 according to overall persistence and attainment, including transfer status, by attendance characteristics**

	Did not transfer			Transferred from first institution <sup>1</sup>			Total number of months enrolled
	Attained degree at first institution	No degree, enrolled at first institution	No degree, left PSE <sup>*</sup> from first institution	Attained degree elsewhere	No degree, enrolled elsewhere	No degree, left PSE <sup>*</sup> after transfer	
Total	31.0	41.3	13.6	29.8	39.3	22.5	26.4
Level of first institution							
4-year	40.1	45.4	21.1	35.9	40.7	25.3	35.7
2-year	23.9	36.1	11.6	25.5	39.2	21.4	21.2
Less-than-2-year	11.0	—	7.3	—	—	14.8	10.8
Degree working toward at first institution							
None	—	—	10.9	—	—	—	17.8
Certificate	13.1	—	8.3	18.9	—	14.6	12.4
Associate's degree	25.8	36.0	12.5	24.8	40.0	20.5	22.0
Bachelor's degree	39.2	43.8	21.0	35.0	42.4	24.6	34.9
First type of degree attained							
None	†	41.3	13.6	†	39.3	22.5	22.2
Certificate	12.6	†	†	18.7	†	†	15.0
Associate's degree	27.3	†	†	30.9	†	†	28.2
Bachelor's degree	40.9	†	†	42.0	†	†	41.1

—Too few cases for a reliable estimate.

†Not applicable.

\*Postsecondary education

<sup>1</sup>Transfers only include those who transferred before attaining a degree at the first institution.

NOTE: For attainers, the table shows the average number of months enrolled up to attainment of the first degree only. Enrolled time only includes the number of months that the student is actually in attendance, and does not include periods (such as the summer months) when the student is not enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

## Student Characteristics and Persistence According to Sector

Are the differences in the persistence and attainment rates related to the differences in the characteristics of students who begin at various types of institutions? A comparison of the demographic characteristics of the beginning students according to their first institution attended is displayed in table 16. The profile of students entering 4-year institutions in 1989–90 reflects the characteristics of traditional college freshmen: they are predominantly 18 years old or younger (84 percent) and are dependent on their parents (92 percent). Of those entering 2-year institutions, which are primarily public community colleges, only about half were 18 years old or younger (48 percent) and two-thirds were dependent on their parents (65 percent). Among the students beginning postsecondary education at less-than-2-year institutions, which are primarily private, for-profit institutions offering vocational certificate programs, only one-quarter were 18 years old or younger, and less than half (40 percent) were dependent on their parents.

**Table 16—Demographic characteristics of 1989–90 beginning postsecondary students according to level of first institution attended**

	Total	Level of first institution		
		4-year	2-year	Less-than-2-year
Total	100.0	100.0	100.0	100.0
Gender				
Male	46.0	47.2	47.6	36.6
Female	54.0	52.8	52.4	63.4
Age when began at first institution				
18 years or younger	61.2	83.6	48.1	24.7
19 years	12.1	8.9	14.4	15.4
20–29 years	17.2	4.9	23.8	39.8
30 years or older	9.5	2.6	13.7	20.1
Dependency status in 1989–90				
Independent	26.0	8.5	34.8	59.6
Dependent	74.0	91.5	65.2	40.4
Marital status when began at first institution				
Not married	86.7	96.5	80.6	72.4
Married	12.1	3.3	17.9	23.0
Separated	1.2	0.2	1.5	4.5
Socioeconomic status				
Lowest quartile	14.7	5.6	18.7	35.0
Middle quartiles	45.7	37.0	52.0	51.1
Highest quartile	39.7	57.5	29.3	13.9
Race–ethnicity				
American Indian/Alaskan Native	0.7	0.4	0.7	1.4
Asian/Pacific Islander	4.0	4.5	3.5	1.8
Black, non-Hispanic	8.8	7.8	9.2	15.3
Hispanic	7.6	4.5	10.9	8.1
White, non-Hispanic	78.8	82.7	75.8	73.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

In terms of age and dependency, therefore, the population of beginning students was predominantly traditional at 4-year institutions, less traditional at 2-year institutions, and predominantly nontraditional at less-than-2-year institutions. A similar pattern across the three sectors is reflected in the composition of students by socioeconomic status (SES), a composite measure derived from information about family income, parental education levels and occupation, and household possessions. More than half (58 percent) of the students beginning at 4-year institutions were in the highest SES quartile, as compared with 30 percent of those beginning at 2-year institutions and only 14 percent of those beginning at less-than-2-year institutions. Both Hispanic and black, non-Hispanic postsecondary students were less likely to begin at 4-year institutions than were Asian/Pacific Islander and white, non-Hispanic students.<sup>15</sup>

To what extent are persistence and attainment rates related to these differences in the demographic characteristics of the beginning students by sector? Table 17 shows the percentage of 1989–90 beginning students who were either still enrolled or had attained a degree or certificate as of spring 1994, both overall and within each institutional sector. Overall, as age at entry into postsecondary education increased, persistence and attainment decreased. For example, nearly three-quarters (72 percent) of those who began at age 18 or younger had attained a credential or were still enrolled through spring 1994, as compared with less than half of those who began in their 20s or later.

**Table 17—Percentage of 1989–90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution attended, by selected demographic characteristics**

	Percentage who attained or were still enrolled in spring 1994			
	Total	Began at 4-year institution	Began at 2-year institution	Began at less-than-2-year institution
Total	63.2	75.6	52.0	64.5
Gender				
Male	61.6	73.7	50.8	62.4
Female	64.6	77.3	53.2	65.7
Age when began at first institution				
18 years or younger	72.4	79.7	61.5	68.0
19 years	56.4	64.5	50.5	65.0
20–29 years	47.9	47.5	43.2	63.8
30 years or older	40.2	34.6	35.7	61.2
Socioeconomic status				
Lowest quartile	46.9	50.9	41.6	57.9
Middle quartiles	59.8	70.8	51.7	65.9
Highest quartile	73.1	81.0	59.3	75.8
Race-ethnicity				
American Indian/Alaskan Native	72.0	--	--	--
Asian/Pacific Islander	74.4	86.1	60.7	--
Black, non-Hispanic	55.3	72.1	46.5	43.3
Hispanic	63.7	71.9	58.7	70.0
White, non-Hispanic	63.5	75.6	51.3	67.5

--Sample size too small for a reliable estimate.

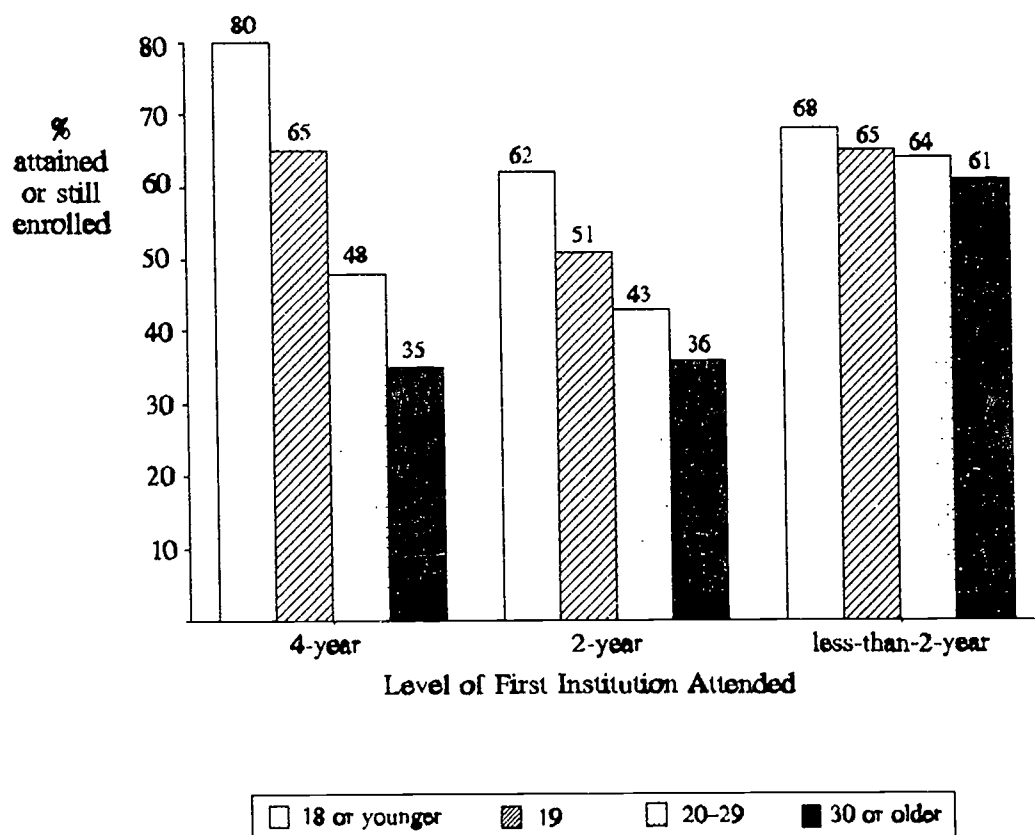
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>15</sup>Compendium table 14.10.



The difference in the persistence and attainment rates by beginning age and sector of first institution is illustrated in figure 2. At the less-than-2-year institutions, where the majority of beginning students were older than 18, age at entry did not make much difference: 68 percent of those who began at age 18 or younger had attained a certificate or were still enrolled 5 years later, as well as 61 percent of those age 30 or older. For those beginning at 4-year institutions, a persistence and attainment decline occurs as early as age 19. Nearly 80 percent of those who had entered 4-year institutions at age 18 or younger had attained a degree or were still enrolled after 5 years, as compared with 65 percent of students who entered at age 19.<sup>16</sup>

Figure 2—Percentage of 1989–90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution, by age when began postsecondary education



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>16</sup>This finding is consistent with previous research. See U.S. Department of Education, National Center for Education Statistics, *College Persistence and Degree Attainment for 1980 High School Graduates: Hazards for Transfers, Stopouts, and Part-timers* (Washington, D.C.: 1989); U.S. Department of Education, National Center for Education Statistics, *High School and Beyond, Educational Attainment of 1980 High School Sophomores by 1992: 1992 Descriptive Summary of 1980 High School Sophomores 12 Years Later* (Washington, D.C.: 1995).

Persistence and attainment of beginning students decreased at lower levels of socioeconomic status. This was true overall and within each sector. Although few statistically significant differences were found among racial-ethnic groups overall, they did appear within racial-ethnic groups according to the sector in which students started. As shown in table 17, at 4-year institutions, the persistence and attainment rate of Asian/Pacific Islander students (86 percent) was higher than that of all other racial-ethnic groups. At less-than-2-year institutions, beginning black, non-Hispanic students were significantly less likely than Hispanic or white, non-Hispanic students to persist or attain a credential (43 percent versus 70 percent and 68 percent, respectively). Black, non-Hispanic students who began at 4-year institutions, however, had the same overall persistence and attainment rates (72 percent) as the white, non-Hispanic and Hispanic students who began there. Whereas both non-Hispanic black and white students beginning in the 2-year sector had lower persistence and attainment rates than those who began in the 4-year sector, among Hispanic students the difference was not statistically significant.

### Nontraditional Students and Risk of Attrition

Previous research suggests that many factors detrimental to postsecondary persistence and attainment are associated with students who did not follow a traditional path through postsecondary education.<sup>17</sup> These include such attributes as not receiving a regular high school diploma, delaying entry into postsecondary education after high school, being financially independent of parents, having children, being a single parent, attending school part time, and working full time while enrolled in postsecondary education. In a recent study of undergraduates enrolled in 1992-93, a risk index was developed by summing the number of these attributes associated with each student.<sup>18</sup> This risk index was shown to be negatively associated with 1-year persistence rates in postsecondary education.

Following this model, a persistence risk index consisting of the sum of the seven risk factors was assigned to each of the 1989-90 beginning postsecondary students as part of this analysis.<sup>19</sup> The results, which are shown in table 18, are consistent with the previous findings. As the number of risk factors increases, the overall likelihood of having attained a degree or of still being enrolled 5 years after beginning postsecondary education decreases. More than three-quarters (78 percent) of the first-time beginners with no risk factors when they began postsecondary education had attained a credential or were still enrolled as of spring 1994, compared with less than half (43 percent) of those with three or more risk factors.

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<sup>17</sup>J.P. Bean and B.S. Metzner, "A Conceptual Model of Non-traditional Undergraduate Student Attrition," *Review of Educational Research*, 55 (4) (1985): 485-540.

<sup>18</sup>U.S. Department of Education, National Center for Education Statistics, *Profile of Undergraduates in U.S. Postsecondary Institutions: 1992-93: With an Essay on Undergraduates at Risk* (Washington, D.C.: 1995).

<sup>19</sup>The seven risk factors included no high school diploma (students who did not receive a high school diploma or who received a GED or certificate of completion were considered not to have received a regular high school diploma); delayed entry after high school (students were automatically considered to have delayed entry if they did not receive a regular high school diploma or if they received a GED or certificate of completion. If the students received a high school diploma, they were categorized as delayed if they did not enter postsecondary education in the same year that they graduated from high school); being financially independent; having children; being a single parent (students were considered single parents if they had children living with them and were unmarried); attending less than full time during the first term; and working full time while enrolled (working full time while enrolled was defined as working 34 or more hours per week).

Table 18 also shows that lower persistence and attainment rates were associated with each of the seven component risk factors. This was not always true when examined within the three institutional sectors, however. Although the presence of nearly all individual risk factors was associated with lower persistence and attainment in both the 2-year and the 4-year sectors,<sup>20</sup> neither the number of risk factors nor any individual component was significantly related to the persistence and attainment of students who began at less-than-2-year institutions.

**Table 18—Percentage of 1989–90 beginning postsecondary students who attained or were still enrolled as of spring 1994 according to level of first institution attended, by persistence risk factors when they began postsecondary education**

	Percentage who attained or were still enrolled			
	Total	Began at 4-year institution	Began at 2-year institution	Began at less-than-2-year institution
Total	63.2	75.6	52.0	64.5
Number of risk factors when began at first institution				
None	77.5	81.7	69.3	75.7
One	63.7	74.2	54.3	51.3
Two	53.8	51.3	50.3	72.0
Three or more	42.5	42.4	38.0	61.0
Attendance status when began at first institution				
Full time	71.3	78.8	61.7	67.9
Part time	44.3	48.1	41.8	65.6
Dependency status when began at first institution				
Dependent	73.0	79.6	63.2	71.0
Independent	48.2	56.5	42.1	63.0
Delayed postsecondary enrollment				
Did not delay	72.1	79.6	61.5	71.6
Delayed	44.9	45.3	40.0	61.5
Number of children when began at first institution				
None	66.4	76.9	54.7	68.1
One or more	45.8	39.5	42.0	59.1
Single parent when began at first institution				
Not a single parent	65.0	76.8	53.5	66.8
Single parent	46.9	37.5	43.4	56.3
Worked full time while enrolled at first institution				
Did not work full time	67.6	77.8	56.8	66.1
Worked full time	52.8	67.9	43.3	63.7
Type of high school diploma				
High school diploma	64.8	76.0	54.1	65.5
GED, cert. of completion, no diploma	39.8	47.5	29.0	60.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

<sup>20</sup>All differences in persistence between those who had the risk factor present and those who did not were statistically significant except for single parents beginning at 2-year institutions.

Moreover, beginning students with two or more of these risk factors were more likely to persist and attain at less-than-2-year institutions than in either of the other two sectors. Students with high risk of attrition were, therefore, more successful at completing the short vocational certificate programs offered at less-than-2-year institutions than they were at persisting in the longer programs.

Among students with two or more risk factors, persistence and attainment rates did not differ according to whether they began at 4-year or at 2-year institutions (about 50 percent with two risk factors and about 40 percent with three factors). Students with only one or with no risk factors at all, however, were more likely to persist and attain a credential if they started at a 4-year institution than a 2-year institution. For such low-risk students, factors other than those measured by the seven risk factors, such as institutional selectivity, academic preparation, and individual motivation, may explain the differences in persistence and attainment.<sup>21</sup>

The overall difference in the 5-year persistence and attainment rates between those starting at 4-year institutions (76 percent) and those starting at 2-year institutions (52 percent) reflects the substantial difference in the proportion of beginning students with risk factors in the two sectors (table 19). Two-thirds (64 percent) of those entering 4-year institutions had no risk factors at all, as compared with about one-quarter (28 percent) of those entering 2-year institutions.

How is the presence of a high number of risk factors related to the demographic characteristics of beginning students? As shown in table 19, the number of risk factors was inversely related to the SES of the beginning students. There were few significant differences in the number of risk factors among racial-ethnic groups, except that Hispanic students were less likely to begin with no risk factors than white, non-Hispanic students.

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<sup>21</sup>See Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. (Chicago, IL: University of Chicago Press, 1993), chapter 3.

**Table 19—Percentage distribution of 1989–90 beginning postsecondary students according to number of risk factors when they began postsecondary education, by selected demographic and attendance characteristics**

	Number of risk factors in 1989–90			
	None	One	Two	Three or more
Total	42.2	22.4	10.4	25.0
Level of first institution				
4-year	63.5	24.3	5.8	6.5
2-year	28.2	22.2	13.1	36.6
Less-than-2-year	18.7	13.1	18.4	49.8
Degree working toward at first institution				
None	17.2	14.2	20.6	47.9
Certificate	16.6	15.0	14.7	53.6
Associate's degree	31.1	23.7	11.7	33.5
Bachelor's degree	59.8	24.3	7.4	8.4
Age when began at first institution				
18 years or younger	62.8	27.7	6.9	2.7
19 years	27.9	33.4	21.8	16.9
20–29 years	2.5	7.9	17.0	72.5
30 years or older	0	1.2	6.5	92.3
Socioeconomic status				
Lowest quartile	10.1	11.7	12.9	65.0
Middle quartiles	36.8	21.2	12.5	29.4
Highest quartile	60.1	27.8	7.1	5.1
Race-ethnicity				
American Indian/Alaskan Native	43.0	6.7	7.8	42.5
Asian/Pacific Islander	49.3	21.4	7.4	22.0
Black, non-Hispanic	41.1	19.5	11.3	28.0
Hispanic	27.9	28.2	15.2	28.7
White, non-Hispanic	43.5	22.3	10.0	24.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

The number of risk factors was directly related to the student's age at entry into postsecondary education. Because many of the risk factors, such as having children and being independent of parents, are correlated with age, it is not surprising that more than 70 percent of those who started postsecondary education in their 20s or older began with three or more risk factors. Although only 3 percent of students age 18 or younger had three or more risk factors, students who entered postsecondary education at age 19, only 1 year later, were more than five times as likely (17 percent) to have three or more risk factors. This is consistent with results discussed earlier, showing that 19-year-old beginners at 4-year institutions were significantly less likely to persist than those who began at age 18 or younger.

The direct relationship of age at entry into postsecondary education and the number of risk factors is consistent with previous research that suggests that the environmental variables and external constraints that interfere with persistence and attainment increase with student age.<sup>22</sup> Older nontraditional students who began postsecondary education at either 2-year or 4-year institutions were much less likely to have attained a degree or still be enrolled after 5

<sup>22</sup>J.P. Bean and B.S. Metzner, "A Conceptual Model of Non-traditional Undergraduate Student Attrition," *Review of Educational Research* 55 (4) (1985): 485–540.

years than traditional 18-year-old beginners. One important exception to this pattern, however, is the finding that neither age at entry nor the number of risk factors is associated with persistence and attainment at less-than-2-year institutions. The shorter time commitment required to complete a vocational certificate at less-than-2-year institutions,<sup>23</sup> an average of 11 months, appears to mitigate the impact of the risk factors on persistence and attainment.

### **Persistence Toward the Bachelor's Degree at 4-Year Institutions**

The previous discussion of persistence and attainment by sector has assumed a very broad definition of these terms to include students who were still enrolled anywhere in postsecondary education and those who had attained any degree or certificate during the 5 years under consideration, no matter where they started. This broad definition of persistence in postsecondary education allows for breaks in enrollment continuity, changes in degree objectives, and transfers to lower level sectors.

A more restricted definition specifically designed for analyzing the persistence of beginning students working toward a bachelor's degree at 4-year institutions has been used in previous research.<sup>24</sup> In this approach, persistence is defined as uninterrupted year-to-year enrollment continuity within the 4-year sector toward a single degree objective, the bachelor's degree. Students who meet these conditions are considered to be on the "persistence track," following an enrollment path that results in a high likelihood of bachelor's degree attainment. Students leave the track if they interrupt enrollment continuity in any number of ways: "stopping out" by leaving and then returning to the same institution, transferring after an enrollment gap, transferring to a less-than-4-year institution, or leaving postsecondary education without reenrolling anywhere.

An analysis using the persistence-track approach involves tracing the persistence and attainment status of students from year to year, by examining the following outcomes for each year: degree attainment, persistence through the year and into the next year at the same or another 4-year institution, and interruptions in persistence through stopouts and downward or delayed transfers. Figure 3 illustrates the flow of persisters along the persistence track from 1989-90 through the 1993-94 academic year. The numbers in parentheses trace the flow of a cohort of 1,000 beginning students through the entire model. For example, tracing the flow of persisters down the central axis of the figure reveals that 837 out of 1,000 students persisted into the second year, 758 through the second year and into the third, and 602 through the third year into the fourth. The number and percentage of those who leave the persistence track each year are shown in the boxes on the left side of the figure.

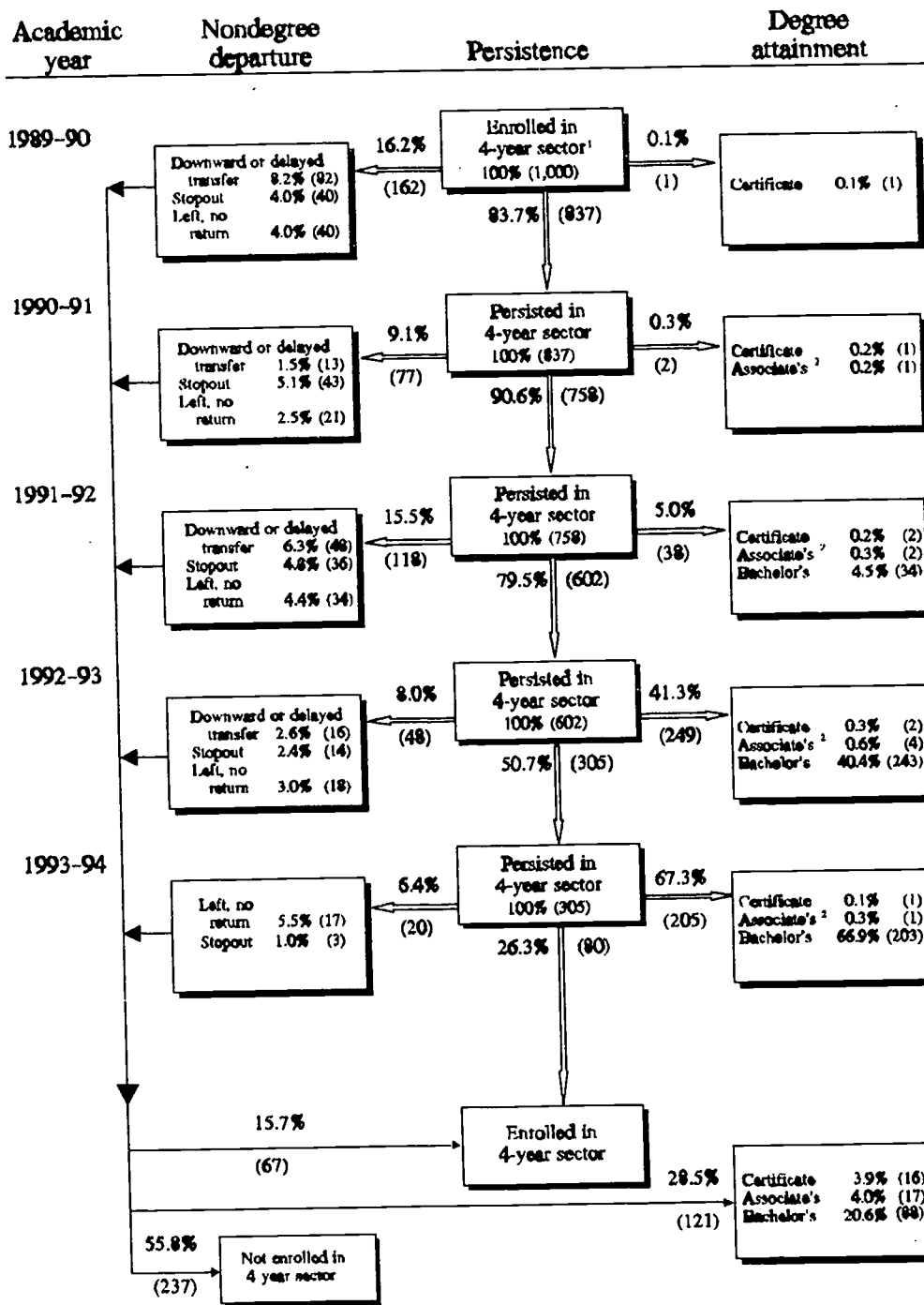
As figure 3 illustrates, year-to-year persistence rates for those who stayed on the persistence track in the previous year were very high: 84 percent persisted into their second year, and 91 percent of those persisted on to year three. In the third year, students begin to complete bachelor's degrees; therefore, the bachelor's degree attainment rates must be added to the percentage of those who persist into the next year.

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<sup>23</sup>See table 15.

<sup>24</sup>U.S. Department of Education, National Center for Education Statistics. *College Persistence and Degree Attainment for 1980 High School Graduates: Hazards for Transfers, Stopouts, and Part-timers* (Washington, D.C.: 1989).

Figure 3—Persistence, degree attainment, and nondegree departure among bachelor's degree seekers in 4-year institutions: 1989–90 through 1993–94



<sup>1</sup>Students enrolled in a 4-year institution who indicated they were working toward a bachelor's degree represented by a standard cohort of 1,000.

<sup>2</sup>Includes only associate's degree completers who did not continue working toward a bachelor's degree in the 4-year sector.

NOTE: Details may not sum to totals due to rounding.

SOURCE: Compendium tables 13.1–13.5.

The combined rates of persistence and bachelor's degree attainment for those on the persistence track were 85 percent for the third year (80 percent persisted into the next year and 5 percent attained in the third year); 91 percent for the fourth year (51 percent persisted and 40 percent attained); and 93 percent in the fifth year (26 percent persisted and 67 percent attained). In the first year, 16 percent of the initial cohort left the persistence track; in the second year, 9 percent of those who had persisted left the track; and in the third year, 16 percent of the persisters left the track. In the fourth year, 8 percent of persisters left and in the fifth year, only 6 percent left.

The difference in the attainment of those who stayed on the persistence track and those who did not is displayed in table 20. Overall, 57 percent of bachelor's degree seekers who began at 4-year institutions in 1989-90 had completed the degree by spring 1994, and another 15 percent indicated that they were still enrolled at a 4-year institution. Students who left the persistence track were much less likely to have completed the degree within 5 years (21 percent) than the persisters who had a pattern of continuous enrollment in the 4-year sector (84 percent).

**Table 20—Percentage distribution of 1989-90 beginning students seeking a bachelor's degree at 4-year institutions according to persistence and attainment outcomes as of spring 1994, by selected student and enrollment characteristics**

	Attained bachelor's or still enrolled at 4-year institution in 1994			Not enrolled at 4-year institution		
	Total	Attained bachelor's	No degree, enrolled	Attained associate's	Attained certificate	No degree
Total	71.9	57.0	14.9	2.3	2.2	23.6
Departure from the persistence track						
Did not leave	98.0	83.8	14.2	1.2	0.8	†
Left persistence track	36.3	20.6	15.7	3.9	4.0	55.8
Type of departure from the persistence track						
Did not leave	98.0	83.8	14.2	1.2	0.8	†
Downward or delayed transfer	42.3	22.0	20.3	9.9	9.4	38.4
Stopout	64.4	38.8	25.5	0.5	1.4	33.8
Timing of departure from the persistence track						
Did not leave	98.0	83.8	14.2	1.2	0.8	†
1989-90 departure	25.2	12.8	12.4	9.4	7.4	58.0
1990-91 departure	38.7	23.4	15.4	0.8	3.7	56.8
1991-92 departure	48.3	31.7	16.7	0.5	1.5	49.7
1992-93 departure	50.4	21.3	29.1	0.2	0.9	48.5
Control of first institution						
Public	68.8	50.5	18.4	2.6	2.5	26.0
Private, not-for-profit	78.1	70.4	7.7	1.8	1.4	18.7



**Table 20—Percentage distribution of 1989–90 beginning students seeking a bachelor’s degree at 4-year institutions according to persistence and attainment outcomes as of spring 1994, by selected student and enrollment characteristics—Continued**

	Attained bachelor’s or still enrolled at 4-year institution in 1994			Not enrolled at 4-year institution		
	Total	Attained bachelor’s	No degree, enrolled	Attained associate’s	Attained certificate	No degree
<b>Intensity of enrollment when began at first institution</b>						
Full time	74.3	59.9	14.4	2.3	2.0	21.4
Part time	42.9	24.3	18.6	7.2	4.0	46.0
<b>Gender</b>						
Male	71.1	53.2	17.8	2.0	1.9	25.1
Female	72.6	60.5	12.1	2.7	2.4	22.3
<b>Age when began at first institution</b>						
18 years or younger	75.0	60.2	14.8	2.3	1.9	20.8
19 years	58.4	43.0	15.4	1.8	3.9	35.9
20–29 years	45.2	29.3	15.9	4.2	4.6	46.1
30 years or older	34.5	19.7	14.8	3.3	1.5	60.7
<b>Race–ethnicity</b>						
American Indian/Alaskan Native	—	—	—	—	—	—
Asian/Pacific Islander	83.3	65.7	17.6	0	1.0	15.7
Black, non-Hispanic	64.9	43.8	21.1	2.0	3.5	29.6
Hispanic	69.9	49.2	20.7	1.2	1.2	27.7
White, non-Hispanic	72.1	58.3	13.8	2.6	2.1	23.2
<b>Grade point average in 1989–90</b>						
Less than C’s	42.0	29.5	12.5	5.1	5.1	47.8
Mostly C’s	65.9	44.1	21.8	0.5	3.2	30.4
B’s and C’s	76.0	57.9	18.2	3.5	1.2	19.2
Mostly B’s	81.3	68.4	12.9	1.2	1.8	15.8
A’s and B’s	85.8	73.4	12.5	0.5	0.5	13.1
Mostly A’s	85.3	76.0	9.3	1.4	1.4	11.9

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Table 21 presents information on the timing of bachelor’s degree completion. Overall, 31 percent of bachelor’s degree seekers who began at 4-year institutions attained the degree within 4 years, and another 26 percent attained it during their fifth year. As would be expected, students with continuous enrollment in the 4-year sector were far more likely than students with interrupted persistence to have completed the degree within 4 years (48 percent compared with 8 percent) or in the fifth year (36 percent compared with 13 percent). Although persistence in the 4-year sector is highly correlated with completion of a bachelor’s degree, it should be noted that about one out of five (21 percent) of the students who stopped out, transferred after a break in enrollment, or transferred to a less-than-4-year institution also returned and completed their initial bachelor’s degree objective within 5 years, and another 16 percent were enrolled in the 4-year sector in 1994 (figure 3).

**Table 21—Percentage distribution of 1989–90 beginning students seeking a bachelor's degree at 4-year institutions according to date of bachelor's degree receipt by June 1994, by selected enrollment characteristics**

	No degree	Date of bachelor's degree receipt	
		By June 1993	July 1993– June 1994
Total	42.9	31.3	25.8
Departure from the persistence track			
Did not leave	16.2	48.3	35.6
Left persistence track	79.4	8.1	12.5
Type of departure from the persistence track			
Did not leave	16.2	48.3	35.6
Downward or delayed transfer	78.0	8.6	13.4
Stopout	61.2	15.4	23.4
Timing of departure from the persistence track			
Did not leave	16.2	48.3	35.6
1989–90 departure	87.3	7.4	5.3
1990–91 departure	76.7	9.1	14.3
1991–92 departure	68.3	10.8	20.9
1992–93 departure	78.7	5.6	15.7
Control of first institution			
Public	49.5	21.6	29.0
Private, not-for-profit	29.6	51.2	19.3
Attendance status when began at first institution			
Full-time	40.0	33.2	26.8
Part-time	75.7	11.6	12.7
Grade point average in 1989–90			
Less than C's	70.3	11.0	18.7
Mostly C's	55.9	18.1	26.0
B's and C's	42.1	27.8	30.2
Mostly B's	31.6	40.5	27.9
A's and B's	26.6	42.2	31.1
Mostly A's	23.8	54.7	21.5

SOURCE: U.S. Department of Education, National Center for Education Statistics. 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

The propensity to leave the persistence track toward the bachelor's degree was related to the age of entry into a 4-year institution. As is shown in table 22, older students were less likely than younger students to maintain persistence, and the decline began at age 19. Of students who began college at age 18 or younger, 60 percent persisted without interruption, contrasted with only 45 percent of those who began at age 19, 38 percent of those who began in their 20s, and 23 percent of those who began at age 30 or later. Black, non-Hispanic students starting at 4-year institutions were less likely to stay on the persistence track towards the bachelor's degree than either Asian/Pacific Islander or white, non-Hispanic students.<sup>25</sup> Other differences between racial-ethnic groups were not statistically significant.

<sup>25</sup>This is not inconsistent with the finding that there was no difference in overall persistence (anywhere in postsecondary education) between black, non-Hispanic and white, non-Hispanic students who began at 4-year institutions (table 17).

Table 22—Percentage distribution of persistence track outcomes among 1989–90 beginning students seeking a bachelor's degree at 4-year institutions: 1989–94

	Did not leave persistence track	First type of departure from the persistence track		
		Downward or delayed transfer	Stopout	Left without return
Total	57.7	16.1	13.3	12.9
Gender	55.2	16.7	15.0	13.1
Male	60.0	15.5	11.8	12.8
Female				
Age when began at first institution	60.4	16.1	12.8	10.7
18 years or younger	45.2	17.6	17.1	20.1
19 years	37.7	11.5	16.6	34.2
20–29 years	22.5	20.1	10.3	47.1
30 years or older				
Attendance status when began at first institution	61.1	14.8	12.7	11.4
Full time	25.2	28.5	17.4	28.9
Part time				
Grade point average in 1989–90	30.5	26.9	20.3	22.3
Less than C's	50.8	16.1	18.1	15.0
Mostly C's	60.5	17.2	11.9	10.3
B's and C's	67.7	11.0	10.3	11.0
Mostly B's	71.9	10.0	9.9	8.1
A's and B's	74.3	7.0	10.4	8.4
Mostly A's				
Race-ethnicity	—	—	—	—
American Indian/Alaskan Native	62.7	9.7	16.8	10.8
Asian/Pacific Islander	45.4	20.8	16.7	17.1
Black, non-Hispanic	53.1	20.1	13.2	13.7
Hispanic	58.9	15.6	12.8	12.6
White, non-Hispanic				
Control of first institution	54.6	17.3	14.1	14.0
Public	63.9	13.7	11.7	10.7
Private, not-for-profit				

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

The propensity to leave the persistence track was also related to how and where students entered postsecondary education, and to their academic performance. Of bachelor's degree seekers who began their postsecondary education at a public 4-year institution, 55 percent maintained persistence, as compared with 64 percent among those who began at private, not-for-profit institutions. Those who first enrolled as full-time students were twice as likely to persist without interruption as those who first enrolled as part-time students (61 percent compared with 25 percent). Students' academic performance in their first year was also related to their persistence rates: 74 percent of those who earned mostly A's maintained their persistence, as compared with 31 percent of those whose grades were mostly below C's.

## Summary and Conclusion

Tracing a group of students longitudinally for 5 years, as was done in the Beginning Postsecondary Students Longitudinal Study, provides the data necessary to understand what happens to the nearly 60 percent of beginning students in postsecondary education who leave their initial institution without completing a program. The survey data show that about half of these students continue in postsecondary education by transferring elsewhere, presumably to find a more appropriate program or institutional match. Many do find such a match: within 5 years, nearly two-thirds of all first-time beginners had either attained a degree or certificate or were still enrolled somewhere in postsecondary education.

Finding a more appropriate program or institution, however, takes time and delays completion. Pursuing one degree at one institution without interruption is the most direct way to complete a program in postsecondary education and to attain a degree in the shortest time. Many of the beginning students, however, did not follow this direct path. They changed institutions, changed degree programs, interrupted their studies, or some combinations therein. Interrupting the continuity of enrollment in postsecondary education substantially decreased rates of attainment for all groups of students. As long as there was no break in enrollment continuity, however, changing institutions or degree programs was an effective way for students to persist in postsecondary education at high rates and to attain a credential, even if it was not at the same level as their original degree objective.

A majority of the students who began postsecondary education for the first time in 1989-90 were age 18 or younger, the traditional age cohort for beginning college. Only a small proportion of these students had more than one persistence risk factor, and this young cohort had higher rates of five-year persistence and attainment than any other age group. Ninety percent of all the first-time beginners who attained a bachelor's degree within 5 years were age 18 or younger at the time that they began postsecondary education in 1989-90.<sup>26</sup>

Those who did not begin postsecondary education until after the traditional age of 18 were burdened with persistence risk factors which increased with their age at entry. Although neither age at entry nor the number of risk factors was related to persistence and attainment rates for those who began at less-than-2-year institutions, older nontraditional students who began at either 2-year or 4-year institutions were less likely than their younger counterparts to attain any degree or to still be enrolled anywhere in postsecondary education after 5 years.

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<sup>26</sup>Compendium table 14.9.

## Table Compendium

## **Part I**

### **Supplemental Persistence and Attainment Tables**

## **Section 1**

### **Overall Persistence and Attainment of Highest Degree – Total**

**Table 1.1—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by first institution attended, first degree working toward, and first degree attained**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Total	50.0	12.9	11.2	25.8	50.0	13.3	36.8
Level and control of first institution							
4-year							
Public	45.2	3.2	4.7	47.0	54.8	18.4	26.8
Private, not-for-profit	28.1	2.3	3.0	66.6	71.9	8.6	19.5
Private, for-profit	—	—	—	—	—	—	—
2-year							
Public	63.3	12.9	17.5	6.3	36.7	14.7	48.6
Private, not-for-profit	47.8	14.5	29.6	8.1	52.2	12.5	35.3
Private, for-profit	48.0	22.9	26.8	2.3	52.0	1.5	46.5
Less-than-2-year							
Public	45.1	52.6	2.3	0	54.9	1.6	43.5
Private, not-for-profit	37.2	40.3	22.5	0	62.8	14.9	22.3
Private, for-profit	36.0	60.9	1.8	1.2	64.0	2.1	33.9
Level of first institution							
4-year	39.6	2.9	4.2	53.3	60.4	15.2	24.4
2-year	61.6	13.8	18.6	6.1	38.4	13.6	48.0
Less-than-2-year	38.0	58.3	2.8	0.9	62.0	2.5	35.5
Control of first institution							
Public	55.8	10.2	12.2	21.8	44.2	15.8	40.1
Private, not-for-profit	30.5	4.5	6.3	58.8	69.5	9.1	21.3
Private, for-profit	40.4	46.9	11.1	1.6	59.6	1.9	38.6
Degree working toward at first institution							
None	82.8	7.6	3.7	5.9	17.2	13.2	69.6
Certificate	45.2	48.3	4.8	1.7	54.8	3.8	41.4
Associate's degree	56.8	11.3	22.7	8.9	43.2	12.1	44.7
Bachelor's degree	43.2	3.8	7.2	45.8	56.8	17.0	26.1
First type of degree attained							
None	100.0	†	†	†	†	26.5	73.5
Certificate	†	95.8	3.1	1.1	100.0	†	†
Associate's degree	†	†	82.2	17.8	100.0	†	†
Bachelor's degree	†	†	†	100.0	100.0	†	†

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 1.2—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree enrolled	No degree, not enrolled
Total	50.0	12.9	11.2	25.8	50.0	13.3	36.8
Number of months enrolled through first degree*							
Less than 12 months	72.6	25.4	1.7	0.4	27.5	0.6	72.0
12–24 months	53.7	20.3	17.4	8.7	46.3	8.2	45.5
25–36 months	39.8	7.4	24.0	28.9	60.2	10.5	29.3
37–48 months	31.2	1.8	8.4	58.6	68.8	22.6	8.6
More than 48 months	49.7	1.0	2.9	46.4	50.3	45.5	4.2
Intensity of enrollment through first degree*							
Exclusively part time	81.3	16.5	1.5	0.7	18.7	6.4	74.9
Mixed	46.4	9.5	14.2	29.9	53.6	20.7	25.7
Exclusively full time	38.8	15.0	12.7	33.5	61.2	8.4	30.5
Number of institutions attended through first degree*							
One	50.8	12.2	11.0	26.0	49.2	8.3	42.5
More than one	48.8	14.1	11.5	25.6	51.2	20.9	28.0
Enrollment continuity through first degree*							
Continuously enrolled	43.9	13.2	11.5	31.5	56.1	8.4	35.4
Not continuously enrolled	64.9	12.4	10.5	12.2	35.1	24.8	40.1
Transfer status through first degree*							
Did not transfer	48.2	11.1	11.3	29.4	51.8	9.0	39.2
Transferred	54.7	17.5	11.0	16.8	45.3	23.8	30.9
Academic year of last enrollment							
1989–90	84.6	15.4	0	0	15.4	†	84.6
1990–91	56.5	34.5	9.0	0	43.5	†	56.5
1991–92	57.0	17.7	18.9	6.5	43.0	†	57.0
1992–93	19.0	5.0	11.6	64.3	80.9	†	19.0
1993–94	44.1	7.5	13.8	34.6	55.9	31.7	12.4
Transfer status and enrollment continuity through first degree*							
Did not transfer, continuously enrolled	44.2	12.6	11.2	32.0	55.8	5.4	38.8
Did not transfer, not continuously enrolled	64.4	5.2	11.6	18.8	35.6	23.6	40.8
Transferred, continuously enrolled	42.6	15.8	12.6	29.0	57.4	21.4	21.1
Transferred, not continuously enrolled	65.3	18.9	9.6	6.2	34.7	25.9	39.4

\*Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 1.3—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Total	50.0	12.9	11.2	25.8	50.0	13.3	36.8
Gender							
Male	54.0	11.3	10.2	24.5	46.0	15.6	38.4
Female	46.6	14.4	12.1	26.9	53.4	11.2	35.4
Age when began at first institution							
18 years or younger	42.2	7.2	12.5	38.1	57.8	14.6	27.6
19 years	59.2	15.8	12.6	12.5	40.8	15.6	43.6
20–29 years	62.3	24.8	8.2	4.7	37.7	10.2	52.1
30 years or older	67.0	24.9	6.4	1.7	33.0	7.2	59.8
Socioeconomic status							
Lowest quartile	62.1	23.2	8.9	6.1	37.9	9.0	53.1
Middle quartiles	54.6	15.2	11.4	18.7	45.4	14.4	40.2
Highest quartile	40.4	6.6	11.9	41.1	59.6	13.5	26.9
Race-ethnicity of student							
American Indian/Alaskan Native	49.5	22.8	11.9	15.8	50.5	21.5	28.0
Asian/Pacific Islander	45.4	11.4	8.4	34.8	54.6	19.8	25.6
Black, non-Hispanic	58.2	16.1	8.8	16.9	41.8	13.5	44.7
Hispanic	55.0	15.7	11.5	17.8	45.0	18.7	36.3
White, non-Hispanic	48.8	12.3	11.6	27.3	51.2	12.3	36.5
Marital status when began at first institution							
Not married	46.9	11.3	12.0	29.8	53.1	14.1	32.8
Married	64.9	22.7	8.1	4.4	35.1	7.7	57.2
Separated	59.0	37.4	2.5	1.1	41.0	1.2	57.7
Parental education							
Less than high school diploma	59.5	24.3	7.2	9.1	40.5	9.3	50.3
High school diploma	54.7	15.8	12.2	17.4	45.3	11.1	43.5
Some postsecondary	49.4	11.2	12.2	27.2	50.6	14.5	34.9
Bachelor's or higher	41.2	6.2	11.8	40.8	58.8	16.9	24.3
Dependency status in 1989–90							
Dependent	45.2	9.1	12.5	33.3	54.8	14.4	30.8
Independent	64.2	23.9	7.5	4.4	35.8	10.0	54.1
Income and dependency status in 1989–90							
Dependent							
Less than \$20,000	52.6	12.1	13.7	21.6	47.4	14.7	37.9
\$20,000–39,999	48.8	9.8	12.7	28.7	51.2	14.2	34.6
\$40,000–59,999	42.8	9.3	12.0	35.9	57.2	13.8	29.0
\$60,000 or more	35.3	4.9	11.3	48.5	64.8	15.2	20.0
Independent							
Less than \$10,000	57.0	28.3	8.8	5.9	43.0	9.4	47.7
\$10,000–19,999	66.6	22.4	7.4	3.6	33.4	11.0	55.6
\$20,000 or more	71.6	19.4	6.0	3.0	28.4	10.1	61.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 1.4—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began postsecondary education**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Total	50.0	12.9	11.2	25.8	50.0	13.3	36.8
Number of risk factors when began at first institution <sup>1</sup>							
None	37.1	7.2	12.6	43.1	62.9	14.6	22.5
One	50.2	9.9	12.7	27.2	49.8	13.9	36.3
Two	58.2	20.6	13.5	7.7	41.8	12.1	46.2
Three or more	68.4	22.1	6.6	2.9	31.6	10.9	57.5
High school diploma or equivalency status							
High school diploma	49.0	12.1	11.6	27.3	51.0	13.8	35.2
GED or high school equivalent <sup>2</sup>	65.5	25.4	5.7	3.4	34.5	5.3	60.3
Delayed postsecondary enrollment							
Did not delay	42.7	8.3	12.9	36.2	57.3	14.8	27.9
Delayed	65.3	22.6	7.7	4.4	34.7	10.1	55.1
Attendance status when began at first institution							
Full time	42.0	11.3	12.6	34.2	58.0	13.3	28.7
Part time	69.7	16.6	9.6	4.1	30.3	14.0	55.7
Dependency status when began at first institution							
Dependent	41.1	8.9	12.6	37.5	59.0	14.0	27.0
Independent	63.9	19.7	9.2	7.3	36.1	12.1	51.8
Number of children when began at first institution							
None	48.0	10.0	11.8	30.1	52.0	14.4	33.6
One or more	61.9	28.3	7.5	2.3	38.1	7.7	54.2
Single parent status when began at first institution							
Not a single parent	48.7	11.4	11.7	28.1	51.3	13.7	35.0
Single parent	59.0	33.6	5.2	2.2	41.0	6.0	53.1
Worked full time while enrolled when began at first institution							
Did not work full time	45.1	13.6	12.1	29.2	54.9	12.7	32.4
Worked full time	61.8	11.9	9.0	17.4	38.2	14.6	47.2

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 1.5—Percentage of 1989–90 beginning postsecondary students who ever attended selected types of institutions as of spring 1994, by first institution attended, first degree working toward, and highest degree attained**

	Ever attended a 2-year public institution	Ever attended a 4-year institution	Ever attended a private for-profit institution
Total	56.3	54.8	14.1
Level and control of first institution			
4-year			
Public	25.1	100.0	1.9
Private, not-for-profit	20.8	100.0	1.6
Private, for-profit	—	—	—
2-year			
Public	100.0	25.4	6.3
Private, not-for-profit	34.5	39.7	5.3
Private, for-profit	14.1	12.8	100.0
Less-than-2-year			
Public	20.8	5.9	8.6
Private, not-for-profit	41.6	25.4	12.3
Private, for-profit	13.1	5.4	100.0
Level of first institution			
4-year	23.7	100.0	1.8
2-year	91.2	24.9	13.4
Less-than-2-year	15.9	6.3	76.9
Control of first institution			
Public	69.3	53.6	4.7
Private, not-for-profit	22.8	91.8	2.2
Private, for-profit	13.5	8.2	100.0
Degree working toward at first institution			
None	87.0	22.3	11.7
Certificate	45.5	8.3	50.9
Associate's degree	83.7	31.5	13.4
Bachelor's degree	40.5	86.5	3.4
Highest degree attained			
None	65.7	43.7	9.6
Certificate	55.5	15.9	56.0
Associate's degree	81.4	48.6	14.5
Bachelor's degree	27.5	98.4	1.5

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 1.6—Percentage distribution of 1989–90 beginning postsecondary students according to control of transfer institutions as of spring 1994, by first institution attended, first degree working toward, and highest degree attained**

	Control of transfer institution				
	Did not transfer	Public to public	Private, not-for-profit to public	Public to private, not-for-profit	Other transfers
Total	65.5	21.1	3.7	2.6	7.1
Level and control of first institution					
4-year					
Public	72.0	22.5	†	4.1	1.4
Private, not-for-profit	71.3	†	21.0	†	7.7
Private, for-profit	—	†	†	†	—
2-year					
Public	57.8	33.3	†	3.2	5.6
Private, not-for-profit	37.6	†	44.8	†	17.6
Private, for-profit	68.2	†	†	†	31.8
Less-than-2-year					
Public	74.1	16.0	†	1.4	8.4
Private, not-for-profit	46.4	†	21.5	†	32.1
Private, for-profit	77.9	†	†	†	22.0
Level of first institution					
4-year	71.8	15.1	6.8	2.8	3.5
2-year	57.9	29.6	1.6	2.9	8.1
Less-than-2-year	75.9	3.5	0.8	0.3	19.5
Control of first institution					
Public	63.7	28.7	†	3.5	4.1
Private, not-for-profit	67.1	†	23.6	†	9.3
Private, for-profit	74.3	†	†	†	25.6
Degree working toward at first institution					
None	59.9	22.0	2.7	3.1	12.3
Certificate	80.0	3.4	0.9	1.2	14.4
Associate's degree	57.8	28.2	2.6	3.5	7.9
Bachelor's degree	65.6	22.5	5.3	2.5	4.0
Highest degree attained					
None	67.6	21.8	4.1	2.3	4.1
Certificate	55.8	14.4	1.9	1.6	26.3
Associate's degree	44.9	39.0	3.6	3.9	8.6
Bachelor's degree	75.1	15.2	3.9	3.0	2.8

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 2**

### **Overall Persistence and Attainment of Highest Degree – By Sectors**

**Table 2.1a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution attended, first degree working toward, and first degree attained**

	Highest degree attained			Overall persistence and attainment			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, not enrolled	
Students who began in 4-year institutions							
Total	39.6	2.9	4.2	53.3	60.4	15.2	24.4
Control of first institution							
Public	45.2	3.2	4.7	47.0	54.8	18.4	26.8
Private, not-for-profit	28.1	2.3	3.0	66.6	71.9	8.6	19.5
Private, for-profit	—	—	—	—	—	—	—
Degree working toward at first institution							
None	69.6	5.3	4.4	20.8	30.5	12.4	57.1
Certificate	42.7	15.2	9.3	32.8	57.3	9.4	33.3
Associate's degree	56.0	5.8	16.7	21.5	44.0	13.1	43.0
Bachelor's degree	37.4	2.4	3.1	57.1	62.6	15.6	21.8
First type of degree attained							
None	100.0	†	†	†	†	38.4	61.6
Certificate	†	89.3	4.0	6.7	100.0	†	†
Associate's degree	†	†	78.1	21.9	100.0	†	†
Bachelor's degree	†	†	†	100.0	100.0	†	†

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.1b—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution attended, first degree working toward, and first degree attained**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 2-year institutions							
Total	61.6	13.8	18.6	6.1	38.4	13.6	48.0
Control of first institution							
Public	63.3	12.9	17.5	6.3	36.7	14.7	48.6
Private, not-for-profit	47.8	14.5	29.6	8.1	52.2	12.5	35.3
Private, for-profit	48.0	22.9	26.8	2.3	52.0	1.5	46.5
Degree working toward at first institution							
None	87.0	6.0	3.6	3.4	13.0	13.8	73.3
Certificate	56.0	37.7	6.2	0.2	44.0	5.3	50.7
Associate's degree	57.4	11.4	23.7	7.5	42.6	12.1	45.2
Bachelor's degree	63.1	8.1	21.0	7.9	36.9	22.5	40.6
First type of degree attained							
None	100.0	†	†	†	†	22.1	77.9
Certificate	†	96.8	3.1	0.2	100.0	†	†
Associate's degree	†	†	83.3	16.7	100.0	†	†
Bachelor's degree	†	†	†	100.0	100.0	†	†

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 2.1c—Percentage distribution of 1989–90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by control of first institution, first degree working toward, and first degree attained**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree enrolled	No degree not enrolled
Students who began in less-than-2-year institutions							
Total	38.0	58.3	2.8	0.9	62.0	2.5	35.5
Control of first institution							
Public	45.1	52.6	2.3	0	54.9	1.6	43.5
Private, not-for-profit	37.2	40.3	22.5	0	62.8	14.9	22.3
Private, for-profit	36.0	60.9	1.8	1.2	64.0	2.1	33.9
Degree working toward at first institution							
None	—	—	—	—	—	—	—
Certificate	36.3	60.0	2.7	1.0	63.7	2.3	34.0
Associate's degree	—	—	—	—	—	—	—
Bachelor's degree	—	—	—	—	—	—	—
First type of degree attained							
None	100.0	†	†	†	†	6.5	93.5
Certificate	†	96.5	2.6	0.9	100.0	†	†
Associate's degree	†	†	—	—	—	†	†
Bachelor's degree	†	†	†	—	—	†	†

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.2a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 4-year institutions							
Total	39.6	2.9	4.2	53.3	60.4	15.2	24.4
Number of months enrolled through first degree*							
Less than 12 months	90.7	6.0	1.9	1.3	9.3	0.5	90.2
12–24 months	68.4	10.7	8.8	12.1	31.6	7.7	60.7
25–36 months	36.8	3.9	8.2	51.1	63.2	8.3	28.5
37–48 months	23.9	0.6	2.3	73.2	76.1	16.3	7.6
More than 48 months	41.1	0.3	0.4	58.2	58.9	37.1	4.0
Intensity of enrollment through first degree*							
Exclusively part time	90.3	5.5	2.5	1.7	9.7	5.9	84.4
Mixed	40.6	2.9	4.1	52.4	59.4	19.8	20.8
Exclusively full time	32.8	2.5	4.4	60.3	67.3	11.2	21.6
Number of institutions attended through first degree*							
One	37.1	0.9	2.5	59.6	62.9	11.5	25.6
More than one	42.8	5.3	6.3	45.6	57.2	19.8	23.0
Enrollment continuity through first degree*							
Continuously enrolled	31.7	2.1	3.9	62.3	68.3	10.4	21.2
Not continuously enrolled	61.3	5.1	4.7	28.9	38.7	28.2	33.0
Transfer status through first degree*							
Did not transfer	34.7	0.8	2.1	62.4	65.3	11.9	22.8
Transferred	52.2	8.3	9.4	30.2	47.8	23.6	28.6
Academic year of last enrollment							
1989–90	98.1	1.9	0	0	1.9	†	98.1
1990–91	86.2	6.9	6.8	0	13.8	†	86.2
1991–92	65.2	7.8	8.1	18.8	34.8	†	65.2
1992–93	13.5	1.7	3.1	81.7	86.5	†	13.5
1993–94	39.4	2.5	4.3	53.8	60.6	28.9	10.5
Transfer status and enrollment continuity through first degree*							
Did not transfer, continuously enrolled	30.0	0.9	2.1	67.0	70.0	8.7	21.3
Did not transfer, not continuously enrolled	54.7	0.4	2.1	42.9	45.3	25.6	29.1
Transferred, continuously enrolled	38.0	6.8	11.1	44.1	62.0	17.0	21.0
Transferred, not continuously enrolled	68.1	9.9	7.5	14.5	31.9	31.0	37.2

\*Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

66

**Table 2.2b—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 2-year institutions							
Total	61.6	13.8	18.6	6.1	38.4	13.6	48.0
Number of months enrolled through first degree*							
Less than 12 months	80.3	17.7	1.9	0.1	19.7	0.5	79.8
12–24 months	53.1	17.2	21.5	8.2	46.9	8.9	44.2
25–36 months	43.4	9.4	41.1	6.1	56.6	12.7	30.7
37–48 months	53.2	5.5	26.0	15.3	46.8	41.6	11.6
More than 48 months	75.4	3.2	10.0	11.5	24.6	70.4	5.0
Intensity of enrollment through first degree*							
Exclusively part time	87.4	10.9	1.6	0.2	12.6	7.7	79.8
Mixed	53.5	14.3	24.7	7.5	46.5	22.3	31.3
Exclusively full time	48.7	15.7	26.1	9.6	51.3	7.3	41.4
Number of institutions attended through first degree*							
One	65.7	9.3	19.9	5.2	34.3	7.8	57.8
More than one	55.2	20.7	16.7	7.4	44.8	22.6	32.6
Enrollment continuity through first degree*							
Continuously enrolled	58.0	12.5	20.8	8.7	42.0	8.6	49.5
Not continuously enrolled	68.2	16.1	14.6	1.1	31.8	23.1	45.1
Transfer status through first degree*							
Did not transfer	64.1	9.1	21.6	5.2	35.9	8.4	55.6
Transferred	56.2	23.6	12.3	7.9	43.8	24.4	31.8
Academic year of last enrollment							
1989–90	91.0	9.0	0	0	9.0	†	91.0
1990–91	62.8	24.5	12.7	0	37.2	†	62.8
1991–92	56.2	18.2	24.9	0.7	43.8	†	56.2
1992–93	36.1	10.1	36.8	17.0	63.9	†	36.1
1993–94	51.4	11.1	25.3	12.2	48.6	36.5	14.8
Transfer status and enrollment continuity through first degree*							
Did not transfer, continuously enrolled	61.2	9.7	22.5	6.6	38.8	3.8	57.4
Did not transfer, not continuously enrolled	73.2	7.0	19.0	0.9	26.8	23.2	50.0
Transferred, continuously enrolled	46.2	22.7	14.4	16.6	53.8	26.4	19.8
Transferred, not continuously enrolled	63.7	24.2	10.7	1.4	36.3	22.9	40.8

\*Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.2c—Percentage distribution of 1989–90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in less-than-2-year institutions							
Total	38.0	58.3	2.8	0.9	62.0	2.5	35.5
Number of months enrolled through first degree*							
Less than 12 months	41.6	56.9	0.7	0.7	58.4	0.9	40.8
12–24 months	27.3	66.4	5.7	0.7	72.7	4.7	22.6
25–36 months	—	—	—	—	—	—	—
37–48 months	—	—	—	—	—	—	—
More than 48 months	—	—	—	—	—	—	—
Intensity of enrollment through first degree*							
Exclusively part time	46.3	52.9	0.2	0.6	53.7	0.8	45.5
Mixed	36.7	48.3	14.0	1.0	63.3	14.6	22.1
Exclusively full time	33.2	63.9	1.8	1.1	66.8	0.7	32.5
Number of institutions attended through first degree*							
One	35.8	62.5	1.0	0.7	64.2	0	35.8
More than one	48.1	38.9	10.9	2.0	51.9	14.1	34.0
Enrollment continuity through first degree*							
Continuously enrolled	35.3	62.1	1.9	0.6	64.7	0.2	35.1
Not continuously enrolled	57.1	31.0	8.9	3.0	42.9	18.6	38.5
Transfer status through first degree*							
Did not transfer	34.4	63.1	1.8	0.6	65.6	0	34.4
Transferred	60.7	27.8	8.8	2.7	39.3	18.3	42.4
Academic year of last enrollment							
1989–90	54.0	46.0	0	0	46.0	†	54.0
1990–91	26.4	73.2	0.4	0	73.6	†	26.4
1991–92	31.7	66.3	2.0	0.0	68.3	†	31.7
1992–93	—	—	—	—	—	—	—
1993–94	30.6	47.5	15.9	6.1	69.4	17.8	12.8
Transfer status and enrollment continuity through first degree*							
Did not transfer, continuously enrolled	34.4	63.0	1.9	0.7	65.6	0	34.4
Did not transfer, not continuously enrolled	—	—	—	—	—	—	—
Transferred, continuously enrolled	—	—	—	—	—	—	—
Transferred, not continuously enrolled	63.4	21.3	11.5	3.8	36.6	24.0	39.4

\*Through first degree (if any) or last enrollment.

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.3a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 4-year institutions							
Total	39.6	2.9	4.2	53.3	60.4	15.2	24.4
Gender							
Male	43.5	2.4	3.9	50.2	56.5	17.3	26.3
Female	36.1	3.3	4.4	56.2	63.9	13.4	22.7
Age when began at first institution							
18 years or younger	35.6	2.4	4.0	58.0	64.4	15.3	20.3
19 years	52.2	4.7	3.0	40.0	47.8	16.7	35.5
20–29 years	65.2	5.3	6.9	22.5	34.8	12.7	52.5
30 years or older	76.5	7.9	6.4	9.2	23.5	11.1	65.4
Socioeconomic status							
Lowest quartile	66.5	2.8	4.9	25.8	33.5	17.4	49.1
Middle quartiles	46.2	3.7	5.0	45.1	53.8	17.0	29.2
Highest quartile	32.8	2.4	3.5	61.3	67.3	13.8	19.0
Race–ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	32.5	2.7	1.7	63.1	67.6	18.5	13.9
Black, non-Hispanic	49.2	4.6	4.3	41.9	50.8	21.3	27.9
Hispanic	49.4	1.3	2.1	47.2	50.6	21.3	28.1
White, non-Hispanic	38.6	2.7	4.4	54.3	61.4	14.1	24.4
Marital status when began at first institution							
Not married	38.0	2.6	4.1	55.3	62.0	15.3	22.7
Married	65.2	8.9	6.4	19.5	34.8	11.8	53.4
Separated	—	—	—	—	—	—	—
Parental education							
Less than high school diploma	44.3	7.1	6.6	42.0	55.8	14.7	29.6
High school diploma	49.5	4.6	4.6	41.3	50.5	16.7	32.8
Some postsecondary	41.9	2.1	4.9	51.2	58.1	14.9	26.9
Bachelor's or higher	31.9	1.8	3.2	63.1	68.1	14.7	17.2
Dependency status in 1989–90							
Dependent	37.1	2.6	4.0	56.3	62.9	15.3	21.8
Independent	66.9	6.2	5.4	21.5	33.1	14.1	52.8
Income and dependency status in 1989–90							
Dependent							
Less than \$20,000	47.5	3.0	4.9	44.5	52.5	18.2	29.3
\$20,000–39,999	41.9	2.5	4.0	51.5	58.1	16.5	25.5
\$40,000–59,999	35.2	3.3	4.1	57.4	64.8	15.5	19.6
\$60,000 or more	27.8	1.7	3.4	67.1	72.2	12.2	15.6
Independent							
Less than \$10,000	63.0	5.5	6.4	25.1	37.0	17.0	46.0
\$10,000–19,999	60.7	5.8	3.0	30.5	39.3	18.1	42.6
\$20,000 or more	76.9	7.5	5.2	10.4	23.1	7.1	69.8

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.3b—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 2-year institutions							
Total	61.6	13.8	18.6	6.1	38.4	13.6	48.0
Gender							
Male	65.4	13.0	16.2	5.5	34.6	16.2	49.2
Female	58.1	14.4	20.9	6.6	41.9	11.2	46.8
Age when began at first institution							
18 years or younger	53.2	9.9	25.8	11.0	46.8	14.7	38.5
19 years	66.8	13.6	19.3	0.2	33.2	17.4	49.5
20–29 years	68.8	18.8	9.9	2.5	31.2	12.0	56.8
30 years or older	72.7	18.4	8.0	0.8	27.3	8.4	64.3
Socioeconomic status							
Lowest quartile	68.1	18.1	11.8	1.9	31.9	9.6	58.4
Middle quartiles	63.1	14.9	16.6	5.4	36.9	14.8	48.3
Highest quartile	54.6	8.9	26.6	9.9	45.4	13.9	40.7
Race–ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	62.4	15.0	16.7	5.9	37.6	23.0	39.3
Black, non-Hispanic	64.8	17.8	14.1	3.2	35.2	11.3	53.5
Hispanic	61.8	15.3	16.4	6.6	38.2	20.5	41.3
White, non-Hispanic	61.0	13.1	19.6	6.4	39.0	12.2	48.8
Marital status when began at first institution							
Not married	58.1	13.2	21.5	7.3	41.9	14.8	43.3
Married	71.3	16.5	9.7	2.6	28.8	8.5	62.8
Separated	—	—	—	—	—	—	—
Parental education							
Less than high school diploma	69.7	19.2	9.1	2.0	30.3	10.2	59.5
High school diploma	60.4	14.6	18.7	6.3	39.6	9.8	50.7
Some postsecondary	61.0	11.4	20.9	6.8	39.0	16.3	44.7
Bachelor's or higher	57.0	9.8	25.0	8.2	43.0	21.1	35.9
Dependency status in 1989–90							
Dependent	56.5	11.7	23.5	8.4	43.5	14.6	41.8
Independent	71.2	17.6	9.4	1.8	28.8	11.7	59.5
Income and dependency status in 1989–90							
Dependent							
Less than \$20,000	59.4	12.7	22.3	5.6	40.6	14.4	45.1
\$20,000–39,999	56.0	13.1	21.5	9.3	44.0	12.6	43.4
\$40,000–59,999	55.5	12.1	23.3	9.1	44.5	12.5	43.0
\$60,000 or more	53.9	5.9	30.5	9.8	46.1	23.6	30.2
Independent							
Less than \$10,000	60.7	25.0	11.9	2.4	39.3	10.1	50.6
\$10,000–19,999	79.7	11.1	8.7	0.5	20.3	13.5	66.2
\$20,000 or more	76.6	14.1	7.3	2.0	23.4	12.2	64.5

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 2.3c—Percentage distribution of 1989–90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in less-than-2-year institutions							
Total	38.0	58.3	2.8	0.9	62.0	2.5	35.5
Gender							
Male	39.9	55.8	4.0	0.3	60.1	2.3	37.6
Female	36.9	59.7	2.1	1.3	63.1	2.6	34.3
Age when began at first institution							
18 years or younger	35.6	57.5	4.3	2.6	64.4	3.6	32.0
19 years	38.0	58.3	3.7	0.0	62.0	3.0	35.0
20–29 years	39.1	57.4	2.8	0.7	60.9	2.8	36.3
30 years or older	38.8	61.1	0.2	0	61.2	0	38.8
Socioeconomic status							
Lowest quartile	42.9	55.5	0.9	0.8	57.1	0.8	42.1
Middle quartiles	37.0	58.8	3.2	1.0	63.0	2.9	34.1
Highest quartile	29.4	63.7	6.0	0.9	70.6	5.2	24.2
Race–ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	—	—	—	—	—	—	—
Black, non-Hispanic	58.3	39.0	1.4	1.3	41.8	1.6	56.7
Hispanic	31.9	62.2	2.6	3.3	68.1	1.9	30.0
White, non-Hispanic	35.4	60.8	3.2	0.6	64.6	2.8	32.5
Marital status when began at first institution							
Not married	37.5	57.6	3.8	1.2	62.5	2.8	34.7
Married	37.2	61.5	0.7	0.6	62.8	1.0	36.2
Separated	40.5	59.5	0	0	59.5	0	40.5
Parental education							
Less than high school diploma	38.8	59.4	1.0	0.8	61.2	1.6	37.1
High school diploma	42.7	55.0	1.1	1.1	57.3	2.4	40.3
Some postsecondary	28.2	68.4	3.0	0.4	71.8	1.4	26.8
Bachelor's or higher	32.6	50.9	14.4	2.1	67.4	8.8	23.8
Dependency status in 1989–90							
Dependent	36.1	59.2	3.6	1.1	63.9	3.7	32.4
Independent	39.3	57.7	2.2	0.8	60.7	1.7	37.6
Income and dependency status in 1989–90							
Dependent							
Less than \$20,000	42.1	56.3	1.6	0	57.9	1.1	41.0
\$20,000–39,999	44.8	44.6	7.4	3.2	55.2	8.2	36.6
\$40,000–59,999	15.2	83.7	1.1	0	84.8	2.7	12.5
\$60,000 or more	—	—	—	—	—	—	—
Independent							
Less than \$10,000	42.3	54.7	1.7	1.3	57.7	1.6	40.7
\$10,000–19,999	33.9	61.8	4.3	0	66.1	1.1	32.8
\$20,000 or more	40.4	58.4	0.2	0.9	59.6	2.6	37.8

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 2.4a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 4-year institutions							
Total	39.6	2.9	4.2	53.3	60.4	15.2	24.4
Number of risk factors when began at first institution <sup>1</sup>							
None	33.6	2.4	3.4	60.5	66.4	15.4	18.3
One	41.0	2.6	4.9	51.5	59.0	15.2	25.8
Two	62.7	4.5	8.3	24.5	37.3	13.9	48.8
Three or more	72.3	7.1	4.9	15.7	27.7	14.7	57.6
High school diploma or equivalency status							
High school diploma	39.1	2.9	4.2	53.8	60.9	15.2	24.0
GED or high school equivalent <sup>2</sup>	70.5	2.6	4.5	22.5	29.5	18.0	52.5
Delayed postsecondary enrollment							
Did not delay	36.0	2.4	4.0	57.7	64.1	15.5	20.4
Delayed	67.3	6.4	5.4	20.8	32.6	12.7	54.7
Attendance status when began at first institution							
Full time	36.1	2.6	4.0	57.4	63.9	14.9	21.2
Part time	66.7	6.4	8.2	18.7	33.3	14.9	51.9
Dependency status when began at first institution							
Dependent	35.0	2.6	3.8	58.6	65.0	14.6	20.4
Independent	61.8	4.5	6.1	27.6	38.2	18.3	43.5
Number of children when began at first institution							
None	38.4	2.8	4.0	54.8	61.6	15.3	23.1
One or more	74.3	5.3	7.1	13.4	25.7	13.8	60.5
Single parent status when began at first institution							
Not a single parent	38.5	2.9	4.1	54.5	61.5	15.2	23.3
Single parent	75.7	2.0	6.1	16.2	24.3	13.3	62.5
Worked full time while enrolled when began at first institution							
Did not work full time	38.1	2.8	4.2	54.9	61.9	15.9	22.2
Worked full time	44.5	3.5	4.4	47.6	55.5	12.5	32.1

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 2.4b—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in 2-year institutions							
Total	61.6	13.8	18.6	6.1	38.4	13.6	48.0
Number of risk factors when began at first institution <sup>1</sup>							
None	45.7	9.2	31.3	13.8	54.3	14.9	30.7
One	59.6	13.7	21.0	5.7	40.4	13.9	45.7
Two	63.4	16.8	16.6	3.2	36.6	13.7	49.7
Three or more	74.3	16.2	8.2	1.4	25.7	12.3	62.0
High school diploma or equivalency status							
High school diploma	60.4	13.5	19.6	6.5	39.6	14.4	45.9
GED or high school equivalent <sup>2</sup>	74.9	16.1	7.6	1.5	25.1	3.9	70.9
Delayed postsecondary enrollment							
Did not delay	53.6	11.1	25.8	9.5	46.4	15.1	38.5
Delayed	71.6	17.1	9.6	1.7	28.4	11.6	60.0
Attendance status when began at first institution							
Full time	52.0	12.6	25.6	9.8	48.0	13.7	38.3
Part time	72.7	15.0	10.6	1.8	27.3	14.4	58.2
Dependency status when began at first institution							
Dependent	51.4	12.1	26.6	9.9	48.6	14.5	36.8
Independent	70.8	15.4	11.2	2.7	29.2	12.9	57.9
Number of children when began at first institution							
None	60.3	11.4	20.9	7.4	39.7	15.1	45.3
One or more	66.4	22.9	9.6	1.1	33.6	8.5	58.0
Single parent status when began at first institution							
Not a single parent	60.6	12.8	19.8	6.8	39.4	14.0	46.5
Single parent	63.0	29.4	6.8	0.8	37.0	6.4	56.6
Worked full time while enrolled when began at first institution							
Did not work full time	55.1	15.4	22.1	7.3	44.9	11.9	43.2
Worked full time	73.4	11.6	12.2	2.8	26.6	16.7	56.7

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 2.4c—Percentage distribution of 1989–90 beginning postsecondary students who began in less-than-2-year institutions according to overall persistence and attainment of highest degree as of spring 1994, by persistence risk factors when they began at first institution**

	Highest degree attained				Overall persistence and attainment		
	None	Certificate	Assoc .te's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Students who began in less-than-2-year institutions							
Total	38.0	58.3	2.8	0.9	62.0	2.5	35.5
Number of risk factors when began at first institution <sup>1</sup>							
None	24.3	71.1	2.2	2.4	75.7	0	24.3
One	52.5	42.0	4.0	1.5	47.5	3.8	48.7
Two	30.8	61.1	8.1	0	69.2	2.8	28.0
Three or more	42.0	56.8	0.7	0.6	58.0	2.9	39.0
High school diploma or equivalency status							
High school diploma	36.6	59.0	3.4	1.0	63.4	2.2	34.5
GED or high school equivalent <sup>2</sup>	43.4	55.4	0.4	0.8	56.6	3.7	39.6
Delayed postsecondary enrollment							
Did not delay	30.1	64.1	3.6	2.2	69.9	1.7	28.4
Delayed	41.3	55.9	2.4	0.4	58.7	2.8	38.5
Attendance status when began at first institution							
Full time	33.5	62.1	3.4	1.0	66.5	1.4	32.1
Part time	41.0	57.4	0.8	0.8	59.0	6.7	34.4
Dependency status when began at first institution							
Dependent	32.2	64.0	2.0	1.8	67.8	3.2	29.0
Independent	38.7	57.4	3.3	0.6	61.3	1.8	37.0
Number of children when began at first institution							
None	34.6	60.0	4.3	1.1	65.4	2.7	31.9
One or more	43.7	54.6	1.0	0.8	56.3	2.7	40.9
Single parent status when began at first institution							
Not a single parent	35.5	59.9	3.5	1.1	64.5	2.3	33.2
Single parent	45.6	50.8	1.7	0.9	53.4	3.0	43.7
Worked full time while enrolled when began at first institution							
Did not work full time	35.2	60.2	3.5	1.1	64.8	1.3	33.9
Worked full time	43.0	55.9	0.6	0.6	57.0	6.7	36.3

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

### **Section 3**

## **Overall Persistence and Attainment of First Degree – Total**

**Table 3.1—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by first institution attended, first degree working toward, and highest degree attained**

	First degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Total	50.0	13.5	13.1	23.3	50.0	13.3	36.8
<b>Level and control of first institution</b>							
4-year							
Public	45.2	3.4	5.5	46.0	54.8	18.4	26.8
Private, not-for-profit	28.1	2.9	4.5	64.5	71.9	8.6	19.5
Private, for-profit	—	—	—	—	—	—	—
2-year							
Public	63.3	13.4	20.9	2.5	36.7	14.7	48.6
Private, not-for-profit	47.8	15.6	33.5	3.1	52.2	12.5	35.3
Private, for-profit	48.0	23.5	27.2	1.4	52.0	1.5	46.5
Less-than-2-year							
Public	45.1	53.3	1.7	0	54.9	1.6	43.5
Private, not-for-profit	37.2	62.8	0	0	62.8	14.9	22.3
Private, for-profit	36.0	62.4	1.1	0.5	64.0	2.1	33.9
<b>Level of first institution</b>							
4-year	39.6	3.2	5.2	52.0	60.4	15.2	24.4
2-year	61.6	14.2	21.8	2.4	38.4	13.6	48.0
Less-than-2-year	38.0	60.5	1.2	0.4	62.0	2.5	35.5
<b>Control of first institution</b>							
Public	55.8	10.5	14.5	19.1	44.2	15.8	40.1
Private, not-for-profit	30.5	5.6	7.5	56.4	69.5	9.1	21.3
Private, for-profit	40.4	48.0	10.8	0.8	59.6	1.9	38.6
<b>Degree working toward at first institution</b>							
None	82.8	7.6	3.9	5.7	17.2	13.2	69.6
Certificate	45.2	49.7	3.9	1.2	54.8	3.8	41.4
Associate's degree	56.8	12.1	27.7	3.4	43.2	12.1	44.7
Bachelor's degree	43.2	4.1	8.5	44.2	56.8	17.0	26.1
<b>Highest degree attained</b>							
None	100.0	†	†	†	†	26.5	73.5
Certificate	†	100.0	†	†	100.0	†	†
Associate's degree	†	3.7	96.3	†	100.0	†	†
Bachelor's degree	†	0.6	9.1	90.4	100.0	†	†

—Too few cases for a reliable estimate.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 3.2—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	First degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree enrolled	No degree, not enrolled
Total	50.0	13.5	13.1	23.3	50.0	13.3	36.8
Number of months enrolled through first degree*							
Less than 12 months	72.6	26.4	0.9	0.2	27.5	0.6	72.0
12–24 months	53.7	21.1	23.4	1.8	46.3	8.2	45.5
25–36 months	39.8	7.8	26.9	25.5	60.2	10.5	29.3
37–48 months	31.2	1.9	9.4	57.5	68.8	22.6	8.6
More than 48 months	49.7	1.0	2.9	46.4	50.3	45.5	4.2
Intensity of enrollment through first degree*							
Exclusively part time	81.3	16.7	1.4	0.6	18.7	6.4	74.9
Mixed	46.4	9.8	16.7	27.0	53.6	20.7	25.7
Exclusively full time	38.8	16.0	14.9	30.2	61.2	8.4	30.5
Number of institutions attended through first degree*							
One	50.8	12.5	13.8	22.8	49.2	8.3	42.5
More than one	48.8	15.0	12.1	24.0	51.2	20.9	28.0
Enrollment continuity through first degree*							
Continuously enrolled	43.9	13.8	14.3	28.1	56.1	8.4	35.4
Not continuously enrolled	64.9	12.8	10.4	11.9	35.1	24.8	40.1
Transfer status through first degree*							
Did not transfer	48.2	11.5	13.9	26.4	51.8	9.0	39.2
Transferred	54.7	18.4	11.3	15.6	45.3	23.8	30.9
Academic year of last enrollment							
1989–90	84.6	15.4	0	0	15.4	†	84.6
1990–91	56.5	34.7	8.8	0	43.5	†	56.5
1991–92	57.0	17.9	18.7	6.4	43.0	†	57.0
1992–93	19.0	6.3	13.9	60.8	80.9	†	19.0
1993–94	44.1	8.3	17.6	30.1	55.9	31.7	12.4
Transfer status and enrollment continuity through first degree*							
Did not transfer, continuously enrolled	44.2	13.1	14.3	28.4	55.8	5.4	38.8
Did not transfer, not continuously enrolled	64.4	5.2	12.1	18.3	35.6	23.6	40.8
Transferred, continuously enrolled	42.6	16.9	13.9	26.7	57.4	21.4	21.1
Transferred, not continuously enrolled	65.3	19.7	8.9	6.0	34.7	25.9	39.4

\*Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 3.3—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of first degree as of spring 1994, by demographic characteristics**

	First degree attained				Overall persistence and attainment		
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree, enrolled	No degree, not enrolled
Total	50.0	13.5	13.1	23.3	50.0	13.3	36.8
Gender							
Male	54.0	11.6	11.8	22.5	46.0	15.6	38.4
Female	46.6	15.1	14.3	24.0	53.4	11.2	35.4
Age when began at first institution							
18 years or younger	42.2	7.9	15.4	34.5	57.8	14.6	27.6
19 years	59.2	16.0	12.6	12.2	40.8	15.6	43.6
20–29 years	62.3	25.3	9.1	3.3	37.7	10.2	52.1
30 years or older	67.0	25.0	6.6	1.4	33.0	7.2	59.8
Socioeconomic status							
Lowest quartile	62.1	23.4	9.4	5.1	37.9	9.0	53.1
Middle quartiles	54.6	15.9	12.7	16.8	45.4	14.4	40.2
Highest quartile	40.4	7.2	14.9	37.5	59.6	13.5	26.9
Race–ethnicity of student							
American Indian/Alaskan Native	49.5	22.8	11.9	15.8	50.5	21.5	28.0
Asian/Pacific Islander	45.4	11.4	8.5	34.7	54.6	19.8	25.6
Black, non-Hispanic	58.2	17.0	9.5	15.3	41.8	13.5	44.7
Hispanic	55.0	16.1	15.1	13.8	45.0	18.7	36.3
White, non-Hispanic	48.8	12.9	13.6	24.8	51.2	12.3	36.5
Marital status when began at first institution							
Not married	46.9	11.9	14.1	27.0	53.1	14.1	32.8
Married	64.9	22.9	9.3	3.0	35.1	7.7	57.2
Separated	59.0	37.4	2.5	1.1	41.0	1.2	57.7
Parental education							
Less than high school diploma	59.5	24.6	7.8	8.1	40.5	9.3	50.3
High school diploma	54.7	16.1	14.4	14.9	45.3	11.1	43.5
Some postsecondary	49.4	11.8	14.6	24.2	50.6	14.5	34.9
Bachelor's or higher	41.2	7.2	13.6	38.1	58.8	16.9	24.3
Dependency status in 1989–90							
Dependent	45.2	9.7	14.9	30.2	54.8	14.4	30.8
Independent	64.2	24.4	7.9	3.5	35.8	10.0	54.1
Income and dependency status in 1989–90							
Dependent							
Less than \$20,000	52.6	12.4	15.5	19.5	47.4	14.7	37.9
\$20,000–39,999	48.8	10.9	14.5	25.8	51.2	14.2	34.6
\$40,000–59,999	42.8	9.8	15.8	31.6	57.2	13.8	29.0
\$60,000 or more	35.3	5.2	13.6	45.9	64.8	15.2	20.0
Independent							
Less than \$10,000	57.0	28.8	9.4	4.9	43.0	9.4	47.7
\$10,000–19,999	66.6	23.3	6.8	3.3	33.4	11.0	55.6
\$20,000 or more	71.6	19.6	7.0	1.8	28.4	10.1	61.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94); Data Analysis System.

## **Section 4**

### **Overall Persistence and Attainment Including Transfer Status**

**Table 4.1—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by first institution attended, first degree working toward, and first degree attained**

	Did not transfer			Transferred from first institution <sup>1</sup>		
	Attained degree at first institution	No degree, enrolled at first institution	No degree, left PSE <sup>2</sup> from first institution	Attained degree elsewhere	No degree, enrolled elsewhere	No degree, left PSE <sup>2</sup> after transfer
Total	36.9	6.4	27.9	13.0	6.8	8.9
Level and control of first institution						
4-year						
Public	41.8	11.6	18.9	13.1	6.8	7.9
Private, not-for-profit	57.7	2.3	11.2	14.2	6.2	8.4
Private, for-profit	—	—	—	—	—	—
2-year						
Public	22.2	6.4	38.7	14.5	8.3	9.9
Private, not-for-profit	41.3	0.3	16.3	10.9	12.2	19.0
Private, for-profit	41.2	0.5	35.3	10.9	1.0	11.1
Less-than-2-year						
Public	44.7	0	35.4	10.2	1.6	8.1
Private, not-for-profit	59.4	0	17.0	3.4	14.9	5.4
Private, for-profit	60.0	0	28.9	4.0	2.1	5.1
Level of first institution						
4-year	47.0	8.6	16.4	13.4	6.6	8.0
2-year	24.3	5.7	37.7	14.1	7.9	10.3
Less-than-2-year	56.7	0	29.8	5.3	2.5	5.7
Control of first institution						
Public	30.3	8.2	31.0	13.9	7.6	9.1
Private, not-for-profit	56.0	2.1	11.9	13.6	7.1	9.4
Private, for-profit	53.0	0.2	31.2	6.5	1.7	7.3
Degree working toward at first institution						
None	3.2	2.0	56.3	14.0	11.2	13.3
Certificate	47.0	1.8	36.9	7.7	2.1	4.5
Associate's degree	29.0	5.2	34.9	14.1	6.9	9.9
Bachelor's degree	42.8	9.2	16.8	14.0	7.8	9.4
First type of degree attained						
None	†	12.8	55.7	†	13.7	17.8
Certificate	60.8	†	†	39.2	†	†
Associate's degree	75.4	†	†	24.6	†	†
Bachelor's degree	80.7	†	†	19.3	†	†

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Students who attained at first institution and transferred after degree not classified as transfers.

<sup>2</sup>Postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.



**Table 4.2—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by attendance patterns through first degree attained (if any) or last enrollment**

	Did not transfer			Transferred from first institution <sup>1</sup>		
	Attained degree at first institution	No degree, enrolled at first institution	No degree, left PSE <sup>2</sup> from first institution	Attained degree elsewhere	No degree, enrolled elsewhere	No degree, left PSE <sup>2</sup> after transfer
Total	36.9	6.4	27.9	13.0	6.8	8.9
Number of months enrolled through first degree <sup>3</sup>						
Less than 12 months	20.5	0	66.3	7.0	0.6	5.7
12–24 months	32.3	3.4	27.4	13.9	4.8	18.1
25–36 months	43.5	4.6	16.9	16.8	5.9	12.4
37–48 months	53.1	12.3	5.1	15.7	10.3	3.6
More than 48 months	37.5	21.4	1.7	12.8	24.1	2.5
Intensity of enrollment through first degree						
Exclusively part time	15.4	4.2	67.7	3.3	2.3	7.1
Mixed	35.6	9.1	13.9	18.0	11.6	11.8
Exclusively full time	48.9	4.5	23.9	12.3	3.8	6.6
Number of institutions attended through first degree <sup>3</sup>						
One	49.2	8.3	42.5	†	†	†
More than one	18.2	3.5	5.4	33.0	17.4	22.5
Enrollment continuity through first degree <sup>3</sup>						
Continuously enrolled	45.3	4.4	31.4	10.9	4.1	4.0
Not continuously enrolled	17.0	11.3	19.5	18.1	13.5	20.6
Transfer status through first degree <sup>3</sup>						
Did not transfer	51.8	9.0	39.2	†	†	†
Transferred	†	†	†	45.3	23.8	30.9
Academic year of last enrollment						
1989–90	14.9	†	83.7	0.5	†	0.9
1990–91	36.1	†	44.2	7.4	†	12.3
1991–92	27.9	†	32.2	15.1	†	24.8
1992–93	67.4	†	10.4	13.5	†	8.7
1993–94	37.2	15.3	6.0	18.8	16.4	6.4
Transfer status and enrollment continuity through first degree <sup>3</sup>						
Did not transfer, continuously enrolled	55.8	5.4	38.8	†	†	†
Did not transfer, not continuously enrolled	35.6	23.6	40.8	†	†	†
Transferred, continuously enrolled	†	†	†	57.4	21.4	21.1
Transferred, not continuously enrolled	†	†	†	34.7	25.9	39.4

<sup>1</sup>Students who attained at first institution and transferred after degree not classified as transfers.

<sup>2</sup>Postsecondary education.

<sup>3</sup>Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 4.3—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, including transfer status, by demographic characteristics**

	Did not transfer			Transferred from first institution <sup>1</sup>		
	Attained degree at first institution	No degree, enrolled at first institution	No degree, left PSE <sup>2</sup> from first institution	Attained degree elsewhere	No degree, enrolled elsewhere	No degree, left PSE <sup>2</sup> after transfer
Total	36.9	6.4	27.9	13.0	6.8	8.9
Gender						
Male	32.8	7.9	28.3	13.2	7.7	10.1
Female	40.5	5.1	27.5	12.9	6.1	7.9
Age when began at first institution						
18 years or younger	43.0	6.5	18.8	14.9	8.1	8.8
19 years	28.4	5.3	33.9	12.4	10.3	9.6
20–29 years	28.6	7.6	42.5	9.1	2.7	9.6
30 years or older	24.2	5.2	52.6	8.8	2.0	7.1
Socioeconomic status						
Lowest quartile	30.2	6.2	45.7	7.7	2.8	7.4
Middle quartiles	33.2	7.1	30.9	12.2	7.3	9.3
Highest quartile	43.7	5.6	17.9	15.9	7.9	9.0
Race-ethnicity of student						
American Indian/Alaskan Naïve	40.5	21.5	15.7	10.0	0	12.3
Asian/Pacific Islander	44.8	10.6	14.9	9.8	9.2	10.7
Black, non-Hispanic	29.1	7.3	33.1	12.7	6.2	11.6
Hispanic	28.6	11.8	25.5	16.4	6.8	10.8
White, non-Hispanic	38.3	5.4	28.3	12.9	6.9	8.2
Marital status when began at first institution						
Not married	38.8	6.6	23.8	14.3	7.5	9.0
Married	28.0	5.9	52.2	7.2	1.8	5.1
Separated	28.8	0.7	52.9	12.2	0.5	4.8
Parental education						
Less than high school diploma	29.8	4.9	41.8	10.8	4.3	8.5
High school diploma	33.2	5.9	33.6	12.1	5.3	9.9
Some postsecondary	39.8	7.1	25.5	10.8	7.4	9.4
Bachelor's or higher	42.7	7.2	16.0	16.1	9.7	8.3
Dependency status in 1989–90						
Dependent	40.1	6.6	21.5	14.7	7.8	9.3
Independent	27.8	6.0	46.5	8.1	4.0	7.7
Income and dependency status in 1989–90						
Dependent						
Less than \$20,000	33.5	7.8	29.0	14.0	6.8	8.9
\$20,000–39,999	36.5	5.7	23.6	14.7	8.5	11.1
\$40,000–59,999	44.7	7.6	18.9	12.5	6.1	10.1
\$60,000 or more	46.4	5.2	13.8	18.4	10.0	6.2
Independent						
Less than \$10,000	31.0	5.4	37.3	12.0	4.0	10.4
\$10,000–19,999	31.8	5.4	50.6	1.6	5.6	5.0
\$20,000 or more	20.1	7.4	55.1	8.3	2.8	6.4

<sup>1</sup>Students who attained at first institution and transferred after degree not classified as transfers.

<sup>2</sup>Postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 5**

### **Attainment and Retention at the First Institution**

**Table 5.1—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by first institution attended, first degree working toward, and highest degree attained**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		
						Enrolled	Not enrolled	Trans- ferred
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Level and control of first institution								
4-year								
Public	58.2	0.6	2.4	38.8	41.8	11.6	18.9	27.7
Private, not-for-profit	42.3	0.8	1.5	55.3	57.7	2.3	11.2	28.8
Private, for-profit	—	—	—	—	—	—	—	—
2-year								
Public	77.8	5.0	17.2	†	22.2	6.4	38.7	32.7
Private, not-for-profit	58.7	12.2	29.1	†	41.3	0.3	16.3	42.2
Private, for-profit	58.8	18.4	22.8	†	41.2	0.5	35.3	23.0
Less-than-2-year								
Public	55.3	44.7	†	†	44.7	0	35.4	19.9
Private, not-for-profit	40.6	59.4	†	†	59.4	0	17.0	23.7
Private, for-profit	40.0	60.0	†	†	60.0	0	28.9	11.2
Level of first institution								
4-year	53.0	0.6	2.1	44.2	47.0	8.6	16.4	28.1
2-year	75.7	6.3	18.0	†	24.3	5.7	37.7	32.3
Less-than-2-year	43.3	56.7	†	†	56.7	0	29.8	13.5
Control of first institution								
Public	69.7	4.3	11.1	14.9	30.3	8.2	31.0	30.5
Private, not-for-profit	44.0	3.4	4.5	48.1	56.0	2.1	11.9	30.1
Private, for-profit	47.0	44.6	8.4	0	53.0	0.2	31.2	15.5
Degree working toward at first institution								
None	96.8	2.5	0	0.7	3.2	2.0	56.3	38.5
Certificate	53.0	43.6	2.8	0.6	47.0	1.8	36.9	14.3
Associate's degree	70.9	3.9	23.7	1.4	29.0	5.2	34.9	30.9
Bachelor's degree	57.2	0.6	5.2	37.0	42.8	9.2	16.8	31.2
Highest degree attained*								
None	100.0	†	†	†	†	12.8	55.7	31.5
Certificate	38.8	61.2	†	†	61.2	†	†	38.8
Associate's degree	28.2	1.9	69.9	†	71.8	†	†	28.2
Bachelor's degree	18.7	0.3	7.9	73.0	81.3	†	†	18.7

—Too few cases for a reliable estimate.

†Not applicable.

\*At any institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 5.2—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by attendance patterns through first degree attained (if any) or last enrollment**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		Trans- ferred
						Enrolled	Not enrolled	
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Number of months enrolled through first degree*								
Less than 12 months	79.5	19.8	0.7	0	20.5	0	66.3	13.2
12–24 months	67.7	11.8	19.4	1.1	32.3	3.4	27.4	36.8
25–36 months	56.5	1.7	19.8	22.0	43.5	4.6	16.9	35.0
37–48 months	46.9	0.6	5.7	46.8	53.1	12.3	5.1	29.5
More than 48 months	62.5	0.8	2.6	34.1	37.5	21.4	1.7	39.5
Intensity of enrollment through first degree*								
Exclusively part time	84.6	13.8	1.2	0.5	15.4	4.2	67.7	12.7
Mixed	64.4	2.4	12.2	21.0	35.6	9.1	13.9	41.4
Exclusively full time	51.1	11.9	11.6	25.4	48.9	4.5	23.9	22.6
Enrollment continuity through first degree*								
Continuously enrolled	54.7	10.6	11.6	23.0	45.3	4.4	31.4	18.9
Not continuously enrolled	83.0	2.5	5.8	8.7	17.0	11.3	19.5	52.3
Transfer status through first degree*								
Did not transfer	48.2	11.5	13.9	26.4	51.8	9.0	39.2	†
Transferred	100.0	†	†	†	†	†	†	100.0
Academic year of last enrollment								
1989–90	85.1	14.9	0	0	14.9	†	83.7	1.4
1990–91	63.9	27.4	8.7	0	36.1	†	44.2	19.7
1991–92	72.1	7.5	15.3	5.2	27.9	†	32.2	39.9
1992–93	32.6	2.3	10.6	54.6	67.4	†	10.4	22.2
1993–94	62.8	2.8	12.2	22.2	37.2	15.3	6.0	41.5
Transfer status and enrollment continuity through first degree*								
Did not transfer, continuously enrolled	44.2	13.1	14.3	28.4	55.8	5.4	38.8	†
Did not transfer, not continuously enrolled	64.4	5.2	12.1	18.3	35.6	23.6	40.8	†
Transferred, continuously enrolled	100.0	†	†	†	†	†	†	100.0
Transferred, not continuously enrolled	100.0	†	†	†	†	†	†	100.0

\*Through first degree (if any) or last enrollment.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 5.3—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by demographic characteristics**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		
						Enrolled	Not enrolled	Trans- ferred
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Gender								
Male	67.2	6.7	8.3	17.8	32.8	7.9	28.3	31.0
Female	59.5	9.5	11.3	19.7	40.5	5.1	27.5	26.8
Age when began at first institution								
18 years or younger	57.0	3.8	11.4	27.8	43.0	6.5	18.8	31.8
19 years	71.6	9.0	8.9	10.6	28.4	5.3	33.9	32.3
20–29 years	71.4	18.2	7.8	2.5	28.6	7.6	42.5	21.4
30 years or older	75.8	17.9	5.3	1.0	24.2	5.2	52.6	18.0
Socioeconomic status								
Lowest quartile	69.8	18.5	7.6	4.1	30.2	6.2	45.7	17.9
Middle quartiles	66.8	9.8	10.4	13.0	33.2	7.1	30.9	28.8
Highest quartile	56.3	2.6	10.1	30.9	43.7	5.6	17.9	32.8
Race–ethnicity of student								
American Indian/Alaskan Native	59.5	16.7	10.0	13.8	40.5	21.5	15.7	22.3
Asian/Pacific Islander	55.2	7.7	7.3	29.8	44.8	10.6	14.9	29.6
Black, non-Hispanic	70.9	10.3	6.2	12.6	29.1	7.3	33.1	30.5
Hispanic	71.4	6.0	11.4	11.2	28.6	11.8	25.5	34.0
White, non-Hispanic	61.7	8.1	10.3	19.9	38.3	5.4	28.3	28.0
Marital status when began at first institution								
Not married	61.2	6.6	10.4	21.9	38.8	6.6	23.8	30.8
Married	72.0	17.6	8.5	1.9	28.0	5.9	52.2	14.0
Separated	71.2	26.4	1.8	0.6	28.8	0.7	52.9	17.5
Parental education								
Less than high school diploma	70.2	16.4	7.0	6.4	29.8	4.9	41.8	23.5
High school diploma	66.8	10.8	11.2	11.2	33.2	5.9	33.6	27.3
Some postsecondary	60.2	7.6	12.0	20.2	39.8	7.1	25.5	27.6
Bachelor's or higher	57.3	2.5	9.1	31.0	42.7	7.2	16.0	34.1
Dependency status in 1989–90								
Dependent	59.9	4.7	11.0	24.4	40.1	6.6	21.5	31.9
Independent	72.2	18.4	6.6	2.8	27.8	6.0	46.5	19.8
Income and dependency status in 1989–90								
Dependent								
Less than \$20,000	66.5	7.3	11.3	14.9	33.5	7.8	29.0	29.6
\$20,000–39,999	63.5	4.9	11.9	19.8	36.5	5.7	23.6	34.2
\$40,000–59,999	55.3	4.4	12.8	27.5	44.7	7.6	18.9	28.8
\$60,000 or more	53.6	2.2	7.2	37.0	46.4	5.2	13.8	34.6
Independent								
Less than \$10,000	69.0	19.8	7.2	4.0	31.0	5.4	37.3	26.4
\$10,000–19,999	68.2	22.5	6.2	3.2	31.8	5.4	50.6	12.1
\$20,000 or more	79.8	13.0	6.1	1.0	20.1	7.4	55.1	17.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 5.4—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by persistence risk factors when they began at first institution**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		
						Enrolled	Not enrolled	Transferred
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Number of risk factors when began at first institution <sup>1</sup>								
None	52.7	3.8	11.6	32.0	47.3	7.1	15.0	30.5
One	64.1	4.6	11.6	19.7	35.9	4.7	25.6	33.8
Two	72.3	14.7	7.9	5.1	27.8	4.8	37.9	29.5
Three or more	75.8	16.2	6.3	1.6	24.2	7.4	47.5	20.9
High school diploma or equivalency status								
High school diploma	62.5	7.3	10.2	20.0	37.5	6.7	26.6	29.1
GED or high school equivalent <sup>2</sup>	71.4	21.7	4.8	2.0	28.6	1.7	46.5	23.2
Delayed postsecondary enrollment								
Did not delay	58.0	4.0	11.4	26.6	42.0	6.5	19.5	32.0
Delayed	73.5	16.9	6.8	2.8	26.5	6.3	45.3	22.0
Attendance status when began at first institution								
Full time	55.6	7.8	11.4	25.1	44.4	6.3	20.1	29.2
Part time	83.0	7.4	7.6	2.0	17.0	8.1	45.4	29.4
Dependency status when began at first institution								
Dependent	56.5	4.4	11.3	27.8	43.5	6.0	18.8	31.7
Independent	73.3	14.6	7.6	4.5	26.6	7.3	41.7	24.3
Number of children when began at first institution								
None	61.5	6.0	10.4	22.0	38.5	6.8	24.3	30.4
One or more	71.9	20.4	6.4	1.3	28.1	4.9	48.2	18.8
Single parent status when began at first institution								
Not a single parent	62.1	7.1	10.4	20.4	37.9	6.7	26.5	28.9
Single parent	71.5	23.6	3.4	1.5	28.5	2.8	46.5	22.1
Worked full time while enrolled when began at first institution								
Did not work full time	59.4	8.7	10.6	21.4	40.6	6.2	23.1	30.1
Worked full time	71.4	7.5	8.1	12.9	28.6	7.5	39.2	24.7

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled

<sup>2</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS-90/94), Data Analysis System.

**Table 5.5—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by social, academic, and work experiences and measure of satisfaction during the 1989–90 academic year**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		
						Enrolled	Not enrolled	Trans- ferred
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Index of social integration in 1989–90								
Low	79.1	10.8	7.6	2.5	20.9	6.9	50.0	22.2
Moderate	65.9	8.4	10.9	14.8	34.0	6.8	28.7	30.5
High	52.3	6.6	9.2	31.9	47.7	5.6	17.5	29.2
Index of academic integration in 1989–90								
Low	79.9	9.4	6.7	4.0	20.1	6.5	45.6	27.8
Moderate	67.8	8.3	11.1	12.8	32.2	7.1	34.4	26.3
High	57.7	7.6	9.6	25.1	42.3	6.1	21.3	30.3
Local residence in 1989–90								
Campus housing	46.0	2.1	3.5	48.4	54.0	6.2	11.1	28.7
Off-campus	70.6	16.0	8.4	5.0	29.4	4.7	41.4	24.5
With parents	69.9	7.0	15.6	7.5	30.1	7.8	30.3	31.8
Educational aspirations in 1989–90								
Trade school	55.1	40.1	4.4	0.4	44.9	2.1	41.0	12.0
2-year degree	75.1	12.9	11.0	1.0	24.9	6.3	45.4	23.4
Bachelor's degree	69.0	4.5	12.7	13.8	31.0	7.8	27.0	34.2
Advanced degree	55.6	2.2	8.6	33.6	44.4	6.3	18.8	30.5
Satisfaction with first institution in 1989–90								
Low	71.4	18.3	4.9	5.3	28.6	2.5	21.6	47.3
Moderate	63.2	10.4	8.0	18.4	36.8	5.9	19.3	38.0
High	61.3	7.1	11.3	20.4	38.7	7.1	27.5	26.7
Average hours worked while enrolled in 1989–90								
Less than 5 hours	58.2	13.4	7.7	20.8	41.8	4.5	26.6	27.1
5–15 hours	52.0	4.2	11.5	32.3	48.0	7.2	13.7	31.2
16–25 hours	60.7	7.3	11.1	21.0	39.3	5.8	23.7	31.2
26–34 hours	63.8	6.9	14.3	15.0	36.2	8.8	23.2	31.8
More than 34 hours	72.0	7.1	8.2	12.7	28.0	6.8	39.0	26.2
Grade point average in 1989–90								
Less than C's	79.9	3.5	5.4	11.3	20.1	6.3	32.0	41.6
Mostly C's	69.9	4.0	9.8	16.3	30.1	8.1	29.1	32.7
B's and C's	59.7	4.0	10.0	26.4	40.3	8.5	20.3	30.8
Mostly B's	56.5	4.7	12.7	26.1	43.5	5.3	23.2	28.0
A's and B's	45.3	10.0	11.1	33.6	54.7	6.0	17.6	21.6
Mostly A's	53.7	14.8	12.9	18.6	46.3	7.4	28.9	17.4
Number of types of remedial instruction received in 1989–90								
None	61.5	8.6	10.0	19.9	38.5	6.1	27.2	28.1
One	67.0	6.4	12.5	14.1	33.0	6.5	28.2	32.3
Two or more	77.5	6.1	5.1	11.2	22.5	10.0	35.6	32.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 5.6—Percentage distribution of 1989–90 beginning postsecondary students according to attainment and retention at the first institution as of spring 1994, by education financing during the 1989–90 academic year**

	First degree attained at the first institution				Attainment and retention at the first institution			
	None	Certificate	Associate's degree	Bachelor's degree	Attained degree	No degree		
						Enrolled	Not enrolled	Trans- ferred
Total	63.1	8.2	9.9	18.8	36.9	6.4	27.9	28.8
Total costs in 1989–90								
Less than \$4,000	76.1	5.2	11.2	7.5	23.9	7.9	35.7	32.5
\$4,000–7,999	61.7	6.3	10.8	21.3	38.3	7.3	24.0	30.3
\$8,000–11,999	54.9	11.4	8.7	25.0	45.1	4.3	25.4	25.2
\$12,000 or more	39.4	16.7	6.0	37.9	60.6	2.9	16.5	19.9
Total aid amount in 1989–90								
None	70.2	5.5	10.7	13.6	29.8	8.0	30.2	32.0
Less than \$2,000	62.8	7.9	12.5	16.7	37.2	4.7	32.2	25.9
\$2,000–4,999	56.2	12.7	8.0	23.1	43.8	4.9	25.4	25.8
\$5,000–6,999	44.0	19.6	7.1	29.3	56.0	4.9	17.8	21.4
\$7,000 or more	38.3	8.4	3.9	49.5	61.8	2.2	13.2	22.9
Total federal aid amount in 1989–90								
None	66.2	5.3	10.8	17.6	33.8	7.3	28.5	30.5
Less than \$2,000	67.1	8.6	9.2	15.1	32.9	5.5	33.5	28.1
\$2,000–4,999	52.7	15.3	7.4	24.6	47.3	4.4	24.3	23.9
\$5,000–6,999	39.6	30.1	6.9	23.5	60.4	2.0	17.1	20.4
\$7,000 or more	33.1	22.3	6.9	37.6	66.9	1.3	12.6	19.2
Total loan amount in 1989–90								
None	66.1	6.3	10.7	16.9	33.9	7.2	29.1	29.8
Less than \$1,000	59.2	4.0	8.3	28.6	40.8	4.2	28.2	26.8
\$1,000–1,999	60.2	6.4	5.9	27.5	39.8	4.3	30.0	25.9
\$2,000–2,999	47.4	19.4	7.1	26.0	52.6	3.1	20.3	24.0
\$3,000 or more	43.9	24.5	5.8	25.9	56.1	1.8	18.3	23.8
Total grant amount in 1989–90								
None	67.9	6.7	10.5	14.9	32.1	7.2	29.4	31.2
Less than \$1,000	64.1	10.0	11.7	14.2	35.9	5.7	32.0	26.4
\$1,000–1,999	57.4	13.6	8.9	20.1	42.6	4.4	29.4	23.5
\$2,000–2,999	56.8	15.0	9.9	18.3	43.2	6.2	24.5	26.1
\$3,000 or more	42.5	4.8	5.1	47.5	57.5	4.3	15.0	23.3
Aid package at first institution in 1989–90								
No aid	70.3	5.4	10.7	13.6	29.7	8.0	30.1	32.1
Grants, no loans	55.1	6.3	12.0	26.6	44.9	5.8	25.5	23.9
Grants and loans	49.6	15.0	6.7	28.8	50.4	4.1	22.3	23.2
Loans, no grants	48.4	19.9	7.9	23.9	51.6	0.8	24.9	22.8
Other aid	64.6	8.8	8.3	18.3	35.4	5.6	31.8	27.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 6**

### **Persistence and Attainment of a Bachelor's Degree**

**Table 6.1—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor’s degree according to persistence and attainment of a bachelor’s degree as of spring 1994, by institution where they began working toward the degree and type of degree attained**

	Attained bachelor’s degree	Still enrolled toward bachelor’s degree	No bachelor’s degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	44.5	21.2	24.8	9.6
Level and control of institution where began working toward degree				
4-year				
Public	47.7	23.5	22.1	6.8
Private, not-for-profit	67.7	9.8	17.4	5.1
Private, for-profit	—	—	—	—
2-year				
Public	9.1	30.1	40.0	20.8
Private, not-for-profit	11.2	23.9	44.2	20.6
Private, for-profit	0.0	11.4	54.8	33.8
Less-than-2-year				
Public	—	—	—	—
Private, not-for-profit	—	—	—	—
Private, for-profit	—	—	—	—
Level of institution where began working toward degree				
4-year	53.9	19.3	20.6	6.2
2-year	8.8	29.4	40.6	21.2
Less-than-2-year	—	—	—	—
Control of institution where began working toward degree				
Public	36.3	25.4	27.4	11.0
Private, not-for-profit	66.5	10.1	18.0	5.4
Private, for-profit	1.7	18.6	52.0	27.6

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 6.2—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor's degree according to persistence and attainment of a bachelor's degree as of spring 1994, by demographic characteristics**

	Attained bachelor's degree	Still enrolled toward bachelor's degree	No bachelor's degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	44.5	21.2	24.8	9.6
Gender				
Male	39.8	24.4	27.0	8.9
Female	49.1	18.0	22.6	10.3
Age when began working toward degree				
18 years or younger	51.2	17.4	22.1	9.2
19 years	30.3	26.6	32.9	10.2
20–29 years	25.9	35.4	28.4	10.3
30 years or older	13.3	16.7	53.4	16.6
Socioeconomic status				
Lowest quartile	23.6	21.7	39.5	15.2
Middle quartiles	38.2	24.7	27.4	9.8
Highest quartile	51.3	18.6	21.2	8.8
Race–ethnicity of student				
American Indian/Alaskan Native	—	—	—	—
Asian/Pacific Islander	46.1	23.8	23.4	6.8
Black, non-Hispanic	35.2	24.0	32.5	8.4
Hispanic	33.3	25.6	22.8	18.3
White, non-Hispanic	46.4	20.0	24.5	9.1
Marital status when began working toward degree				
Not married	46.2	20.7	23.7	9.4
Married	18.4	28.3	43.0	10.3
Separated	—	—	—	—
Parental education				
Less than high school diploma	32.4	14.4	34.9	18.3
High school diploma	37.3	20.6	31.4	10.7
Some postsecondary	44.3	22.1	25.3	8.3
Bachelor's or higher	50.6	21.7	19.3	8.4
Dependency status in 1989–90				
Dependent	47.0	20.8	23.2	9.0
Independent	20.6	25.0	39.0	15.3
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	37.2	22.1	31.1	9.6
\$20,000–39,999	42.7	24.3	24.3	8.8
\$40,000–59,999	47.8	17.7	25.0	9.5
\$60,000 or more	58.0	19.0	14.7	8.2
Independent				
Less than \$10,000	22.6	24.8	34.4	18.1
\$10,000–19,999	20.9	32.2	26.8	20.1
\$20,000 or more	16.5	19.8	57.6	6.2

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 6.3—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a bachelor's degree according to persistence and attainment of a bachelor's degree as of spring 1994, by persistence risk factors when they began working toward the degree**

	Attained bachelor's degree	Still enrolled toward bachelor's degree	No bachelor's degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	44.5	21.2	24.8	9.6
Number of risk factors when began working toward degree <sup>3</sup>				
None	53.6	19.7	19.4	7.3
One	42.2	23.5	25.2	9.1
Two	20.9	22.9	43.5	12.7
Three or more	12.7	24.1	40.4	22.8
High school diploma or equivalency status				
High school diploma	45.1	21.2	24.4	9.3
GED or high school equivalent <sup>4</sup>	17.2	18.6	41.5	22.8
Delayed postsecondary enrollment				
Did not delay	49.1	20.4	22.1	8.4
Delayed	17.0	25.7	40.5	16.8
Attendance status when began working toward degree				
Full time	51.5	18.0	21.6	8.8
Part time	12.2	20.7	43.6	23.5
Dependency status when began working toward degree				
Dependent	51.5	18.9	21.5	8.1
Independent	21.5	28.0	34.9	15.5
Number of children when began working toward degree				
None	45.4	21.1	24.0	9.4
One or more	16.3	24.3	39.5	20.0
Single parent status when began working toward degree				
Not a single parent	45.7	21.1	24.1	9.2
Single parent	21.0	16.7	32.5	29.8
Worked full time while enrolled when began working toward degree				
Did not work full time	45.7	22.0	23.3	8.9
Worked full time	29.4	18.2	31.5	10.9

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

<sup>3</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>4</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 7**

### **Persistence and Attainment of an Associate's Degree**

**Table 7.1—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by institution where they began working toward the degree and type of degree attained**

	Attained associate's degree	Still enrolled toward associate's degree	No associate's degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	35.5	8.7	38.7	17.2
Level and control of institution where began working toward degree				
4-year				
Public	23.6	15.2	45.3	15.9
Private, not-for-profit	32.9	10.9	36.9	19.3
Private, for-profit	—	—	—	—
2-year				
Public	28.4	9.9	42.4	19.4
Private, not-for-profit	42.8	6.1	21.7	29.5
Private, for-profit	37.9	1.9	49.3	10.9
Less-than-2-year				
Public	—	—	—	—
Private, not-for-profit	—	—	—	—
Private, for-profit	—	—	—	—
Level of institution where began working toward degree				
4-year	27.0	13.9	42.3	16.8
2-year	29.6	9.1	42.1	19.1
Less-than-2-year	—	—	—	—
Control of institution where began working toward degree				
Public	28.0	10.3	42.7	19.1
Private, not-for-profit	37.7	8.4	29.8	24.1
Private, for-profit	34.7	2.4	51.6	11.3

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 7.2—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by demographic characteristics**

	Attained associate's degree	Still enrolled toward associate's degree	No associate's degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	35.5	8.7	38.7	17.2
Gender				
Male	33.4	7.0	38.1	21.5
Female	37.1	10.0	39.1	13.8
Age when began working toward degree				
18 years or younger	41.4	6.7	31.0	20.9
19 years	25.5	4.8	47.4	22.3
20–29 years	20.1	14.2	49.3	16.5
30 years or older	17.2	14.4	57.4	11.0
Socioeconomic status				
Lowest quartile	23.7	11.3	52.7	12.3
Middle quartiles	31.1	10.3	40.9	17.8
Highest quartile	47.3	5.2	29.0	18.5
Race–ethnicity of student				
American Indian/Alaskan Native	—	—	—	—
Asian/Pacific Islander	41.4	13.2	29.0	16.4
Black, non-Hispanic	25.8	11.0	44.1	19.1
Hispanic	34.7	11.7	37.6	16.0
White, non-Hispanic	36.6	7.8	38.4	17.1
Marital status when began working toward degree				
Not married	33.1	8.7	37.5	20.7
Married	19.0	13.7	57.4	9.9
Separated	—	—	—	—
Parental education				
Less than high school diploma	19.6	14.8	51.2	14.4
High school diploma	32.5	7.0	44.4	16.0
Some postsecondary	39.1	12.5	36.7	11.7
Bachelor's or higher	45.9	6.6	23.6	23.9
Dependency status in 1989–90				
Dependent	42.1	7.4	32.2	18.3
Independent	19.2	11.9	54.2	14.6
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	39.3	9.2	32.8	18.8
\$20,000–39,999	37.9	6.0	35.3	20.8
\$40,000–59,999	46.3	6.7	32.4	14.7
\$60,000 or more	49.0	8.7	24.7	17.6
Independent				
Less than \$10,000	23.4	10.4	53.6	12.6
\$10,000–19,999	17.2	10.0	60.3	12.5
\$20,000 or more	15.9	15.3	50.0	18.9

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

Total includes cases where level and control of the institution where began working toward the degree is unknown

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students, Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System



**Table 7.3—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward an associate's degree according to persistence and attainment of an associate's degree as of spring 1994, by persistence risk factors when they began working toward the degree**

	Attained associate's degree	Still enrolled toward associate's degree	No associate's degree, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	35.5	8.7	38.7	17.2
Number of risk factors when began working toward degree <sup>3</sup>				
None	47.8	8.1	24.8	19.4
One	32.7	6.8	37.9	22.5
Two	22.0	7.9	51.5	18.5
Three or more	14.2	13.4	57.1	15.3
High school diploma or equivalency status				
High school diploma	37.1	9.0	37.0	16.8
GED or high school equivalent <sup>4</sup>	14.8	4.8	59.0	21.4
Delayed postsecondary enrollment				
Did not delay	45.6	7.7	28.5	18.2
Delayed	19.1	10.3	54.9	15.6
Attendance status when began working toward degree				
Full time	38.5	6.2	34.6	20.7
Part time	18.4	12.6	52.3	16.7
Dependency status when began working toward degree				
Dependent	40.7	7.1	31.3	20.8
Independent	18.9	12.0	52.1	17.0
Number of children when began working toward degree				
None	32.5	9.1	38.5	19.9
One or more	17.0	12.5	57.3	13.2
Single parent status when began working toward degree				
Not a single parent	31.4	9.4	40.0	19.2
Single parent	12.8	9.5	62.8	14.9
Worked full time while enrolled when began working toward degree				
Did not work full time	35.7	7.0	37.3	19.9
Worked full time	19.0	13.9	50.4	16.8

<sup>1</sup>Student enrolled in a different degree or certificate program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

<sup>3</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>4</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 8**

### **Persistence and Attainment of a Certificate**

**Table 8.1—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by institution where they began working toward the degree and type of degree attained**

	Attained certificate	Still enrolled toward certificate	No certificate, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	55.8	4.5	31.0	8.7
Level and control of institution where began working toward degree				
4-year				
Public	32.7	12.2	36.0	19.0
Private, not-for-profit	31.5	12.0	40.9	15.6
Private, for-profit	—	—	—	—
2-year				
Public	34.3	10.2	42.7	12.7
Private, not-for-profit	67.9	0	22.0	10.1
Private, for-profit	51.5	3.0	31.4	14.2
Less-than-2-year				
Public	66.5	0	30.3	3.2
Private, not-for-profit	58.3	3.9	26.7	11.0
Private, for-profit	68.5	0.2	25.6	5.8
Level of institution where began working toward degree				
4-year	32.3	12.1	37.7	17.8
2-year	38.2	8.7	40.3	12.9
Less-than-2-year	67.7	0.2	26.7	5.4
Control of institution where began working toward degree				
Public	40.5	8.4	39.9	11.3
Private, not-for-profit	51.1	5.8	30.6	12.5
Private, for-profit	65.4	0.7	26.7	7.3

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of institution where began working toward the degree is unknown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 8.2—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by demographic characteristics**

	Attained certificate	Still enrolled toward certificate	No certificate, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	55.8	4.5	31.0	8.7
Gender				
Male	53.1	5.5	32.3	9.1
Female	57.7	3.8	30.1	8.4
Age when began working toward degree				
18 years or younger	45.2	4.9	35.9	14.0
19 years	54.2	2.3	29.8	13.8
20–29 years	52.4	6.7	31.5	9.3
30 years or older	56.8	2.0	40.8	0.3
Socioeconomic status				
Lowest quartile	51.7	0.5	44.3	3.5
Middle quartiles	56.1	6.6	28.1	9.3
Highest quartile	60.1	4.4	21.6	13.9
Race–ethnicity of student				
American Indian/Alaskan Native	—	—	—	—
Asian/Pacific Islander	72.1	0	16.4	11.6
Black, non-Hispanic	46.4	2.1	39.2	12.3
Hispanic	61.7	7.4	22.9	8.0
White, non-Hispanic	55.9	4.8	31.2	8.1
Marital status when began working toward degree				
Not married	52.3	5.0	31.5	11.2
Married	53.0	2.3	38.5	6.2
Separated	39.8	0	60.2	0
Parental education				
Less than high school diploma	56.5	0.6	39.6	3.2
High school diploma	57.0	4.3	29.4	9.3
Some postsecondary	53.0	5.3	31.4	10.4
Bachelor's or higher	55.5	9.7	21.8	13.0
Dependency status in 1989–90				
Dependent	56.4	5.3	26.5	11.7
Independent	55.0	3.6	36.3	5.2
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	52.0	6.1	35.2	6.7
\$20,000–39,999	57.9	3.8	27.5	10.8
\$40,000–59,999	62.8	4.2	17.0	15.9
\$60,000 or more	51.7	9.4	20.3	18.6
Independent				
Less than \$10,000	57.7	3.7	33.2	5.4
\$10,000–19,999	52.1	4.5	37.3	6.1
\$20,000 or more	52.9	2.5	40.9	3.7

—Too few cases for a reliable estimate.

<sup>1</sup>Student enrolled in a different degree program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 8.3—Percentage distribution of 1989–90 beginning postsecondary students who were ever working toward a certificate according to persistence and attainment of a certificate as of spring 1994, by persistence risk factors when they began working toward the degree**

	Attained certificate	Still enrolled toward certificate	No certificate, no longer enrolled	Changed degree working toward <sup>1</sup>
Total <sup>2</sup>	55.8	4.5	31.0	8.7
Number of risk factors when began working toward degree <sup>3</sup>				
None	58.7	5.2	24.7	11.4
One	52.2	8.7	25.4	13.9
Two	55.5	7.1	25.7	11.6
Three or more	47.4	2.3	44.2	6.1
High school diploma or equivalency status				
High school diploma	57.0	5.2	28.4	9.4
GED or high school equivalent <sup>4</sup>	48.2	0	47.6	4.2
Delayed postsecondary enrollment				
Did not delay	56.6	7.9	22.7	12.8
Delayed	55.1	1.7	37.9	5.3
Attendance status when began working toward degree				
Full time	52.9	3.8	32.3	10.9
Part time	43.7	1.9	43.9	10.4
Dependency status when began working toward degree				
Independent	51.0	5.3	36.2	7.4
Dependent	54.6	3.8	28.0	13.6
Number of children when began working toward degree				
None	51.0	6.7	30.0	12.3
One or more	50.4	1.8	43.1	4.7
Single parent status when began working toward degree				
Not a single parent	51.7	5.0	32.4	10.9
Single parent	49.3	0.7	44.2	5.8
Worked full time while enrolled when began working toward degree				
Did not work full time	58.4	3.6	29.7	8.4
Worked full time	39.8	6.4	41.1	12.7

<sup>1</sup>Student enrolled in a different degree program before the spring of 1994.

<sup>2</sup>Total includes cases where level and control of the institution where began working toward the degree is unknown.

<sup>3</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>4</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 9**

### **Persistence and Attainment During the First Spell of Continuous Enrollment – Total**

**Table 9.1—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	32.0	3.1	30.3	12.4	22.2
Intensity of enrollment during first spell					
Exclusively part time	8.0	2.4	31.3	20.7	37.6
Mixed	45.1	7.6	21.6	10.3	15.4
Exclusively full time	36.6	2.1	34.0	11.1	16.1
Level and control of first institution					
4-year					
Public	36.5	7.1	30.5	11.7	14.1
Private, not-for-profit	49.8	1.2	31.4	8.6	9.0
Private, for-profit	—	—	—	—	—
2-year					
Public	17.7	2.2	33.4	16.9	29.8
Private, not-for-profit	35.7	0.3	42.2	8.1	13.7
Private, for-profit	39.3	0	21.9	5.1	33.7
Less-than-2-year					
Public	39.8	0	19.9	7.0	33.4
Private, not-for-profit	59.4	0	23.7	0	17.0
Private, for-profit	59.0	0	11.4	1.5	28.1
Level of first institution					
4-year	40.9	5.2	30.8	10.7	12.4
2-year	20.0	2.0	32.8	15.7	29.6
Less-than-2-year	54.9	0	13.7	2.6	28.8
Control of first institution					
Public	25.5	4.0	32.0	14.7	23.9
Private, not-for-profit	48.5	1.0	32.4	8.4	9.7
Private, for-profit	51.7	0	15.3	2.8	30.2
Degree working toward when began first spell					
None	3.2	0	33.1	23.4	40.3
Certificate	42.9	0.5	13.4	9.1	34.0
Associate's degree	24.2	1.9	31.3	14.5	28.0
Bachelor's degree	36.9	5.0	34.8	11.8	11.5
First type of degree attained					
None	†	6.2	32.5	17.1	44.3
Certificate	55.6	0	37.0	7.4	†
Associate's degree	62.4	0.1	28.0	9.5	†
Bachelor's degree	69.8	0.1	23.2	7.0	†
Highest degree attained					
None	†	6.2	32.5	17.1	44.3
Certificate	55.5	0	36.8	7.7	†
Associate's degree	57.2	0.1	32.2	10.5	†
Bachelor's degree	71.2	0.1	22.1	6.6	†

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System

**Table 9.2—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	32.0	3.1	30.3	12.4	22.2
Gender					
Male	27.2	3.8	33.1	14.2	21.7
Female	36.1	2.5	27.9	10.9	22.5
Age when began first spell					
18 years or younger	37.5	3.3	34.1	11.2	13.9
19 years	22.8	2.9	33.5	16.2	24.6
20–29 years	24.2	3.5	22.0	14.9	35.4
30 years or older	22.0	1.8	17.4	10.8	48.1
Socioeconomic status					
Lowest quartile	27.0	3.9	17.4	11.1	40.5
Middle quartiles	29.1	3.2	29.4	14.2	24.0
Highest quartile	37.0	2.8	36.1	10.8	13.3
Race–ethnicity of student					
American Indian/Alaskan Native	39.9	11.0	22.3	11.2	15.7
Asian/Pacific Islander	39.8	6.7	29.1	12.3	12.1
Black, non-Hispanic	23.5	3.4	32.4	13.4	27.3
Hispanic	24.8	5.8	33.7	14.7	21.0
White, non-Hispanic	33.3	2.6	29.8	12.1	22.3
Marital status when began first spell					
Not married	33.5	3.4	32.9	12.3	17.9
Married	24.2	1.5	13.5	15.0	45.8
Separated	27.8	0	14.1	5.8	52.3
Parental education					
Less than high school diploma	26.5	3.4	22.5	10.5	37.1
High school diploma	28.3	2.2	28.0	15.1	26.4
Some postsecondary	35.3	3.6	29.5	12.3	19.3
Bachelor's or higher	36.2	3.8	37.1	11.6	11.3
Dependency status in 1989–90					
Dependent	34.7	3.4	33.8	12.4	15.8
Independent	24.2	2.4	20.4	12.4	40.6
Income and dependency status in 1989–90					
Dependent					
Less than \$20,000	29.5	4.9	31.2	11.2	23.2
\$20,000–39,999	30.9	2.6	34.4	14.1	18.0
\$40,000–59,999	39.8	3.6	31.0	13.5	12.2
\$60,000 or more	39.3	2.7	38.8	9.8	9.4
Independent					
Less than \$10,000	26.0	3.5	26.7	9.8	34.0
\$10,000–19,999	29.2	0	13.9	15.7	41.2
\$20,000 or more	17.5	3.0	17.5	13.1	48.8

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 9.3—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when they began first spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	32.0	3.1	30.3	12.4	22.2
Number of risk factors when began first spell <sup>2</sup>					
None	42.1	4.2	32.5	9.4	11.8
One	29.7	2.0	36.8	12.9	18.7
Two	24.1	1.4	30.1	15.9	28.5
Three or more	20.2	2.9	21.0	15.7	40.2
High school diploma or equivalency status					
High school diploma	32.5	3.2	30.9	12.4	21.0
GED or high school equivalent <sup>3</sup>	24.2	1.5	22.4	13.0	38.9
Delayed postsecondary enrollment					
Did not delay	36.4	3.3	34.3	11.7	14.2
Delayed	22.9	2.7	22.0	13.8	38.6
Attendance status when began first spell					
Full time	39.0	3.3	30.8	10.9	16.1
Part time	12.6	3.5	31.2	19.3	33.4
Dependency status when began first spell					
Dependent	37.9	3.6	33.8	10.9	13.8
Independent	22.6	2.5	25.2	15.1	34.6
Number of children when began first spell					
None	33.4	3.4	32.4	12.3	18.5
One or more	24.1	1.7	18.6	13.4	42.2
Single parent status when began first spell					
Not a single parent	32.8	3.2	30.7	12.6	20.5
Single parent	24.3	2.6	22.9	10.8	39.5
Worked full time while enrolled when began first spell					
Did not work full time	35.8	3.3	31.9	10.5	18.5
Worked full time	23.1	2.8	26.3	17.0	30.8

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 9.4—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	32.0	3.1	30.3	12.4	22.2
Index of social integration in 1989–90					
Low	17.9	2.1	21.6	15.1	43.3
Moderate	28.6	3.6	32.6	13.3	21.8
High	42.3	3.1	31.2	9.7	13.7
Index of academic integration in 1989–90					
Low	14.6	1.1	26.7	21.6	35.9
Moderate	27.8	3.2	28.3	12.7	28.0
High	36.9	3.5	31.8	11.5	16.4
Local residence in 1989–90					
Campus housing	47.4	4.3	31.6	8.4	8.4
Off-campus	25.5	2.0	25.0	12.1	35.4
With parents	25.5	3.1	33.2	15.6	22.6
Educational aspirations in 1989–90					
Trade school	42.5	0	12.9	7.3	37.4
2-year degree	21.6	2.2	21.8	17.8	36.6
Bachelor's degree	26.0	3.6	36.0	12.9	21.5
Advanced degree	38.5	3.5	33.2	10.9	13.9
Satisfaction with first institution in 1989–90					
Low	27.8	0	48.4	5.1	18.6
Moderate	29.7	3.0	39.6	12.4	15.3
High	33.9	3.6	28.3	13.1	21.1
Average hours worked while enrolled in 1989–90					
Less than 5 hours	36.7	2.6	28.1	9.6	22.9
5–15 hours	42.2	3.5	33.5	10.9	9.9
16–25 hours	35.0	3.0	34.3	9.8	17.9
26–34 hours	30.7	4.8	33.2	12.5	18.9
More than 34 hours	23.3	2.7	26.9	16.8	30.4
Grade point average in 1989–90					
Less than C's	15.2	4.3	41.8	14.6	24.0
Mostly C's	24.1	3.1	33.5	19.5	19.8
B's and C's	35.3	5.0	33.0	10.7	16.1
Mostly B's	38.0	2.2	30.0	9.9	19.8
A's and B's	48.7	4.0	23.0	9.3	15.0
Mostly A's	41.8	3.2	19.5	11.1	24.5
Number of types of remedial instruction received in 1989–90					
None	33.2	3.0	29.9	12.1	21.9
One	29.7	2.5	32.7	15.5	19.6
Two or more	19.5	5.3	33.1	13.1	29.0

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 9.5—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	32.0	3.1	30.3	12.4	22.2
Total costs in 1989–90					
Less than \$4,000	19.7	3.0	33.5	15.1	28.6
\$4,000–7,999	33.0	4.3	31.2	13.3	18.1
\$8,000–11,999	40.3	2.8	28.2	8.1	20.5
\$12,000 or more	54.2	1.1	23.1	7.3	14.3
Total aid amount in 1989–90					
None	24.6	3.2	33.8	14.9	23.6
Less than \$2,000	31.9	3.3	26.4	11.9	26.5
\$2,000–4,999	40.5	3.3	27.1	8.0	21.0
\$5,000–6,999	52.1	3.3	22.0	8.2	14.4
\$7,000 or more	54.0	0.8	27.5	9.1	8.7
Total federal aid amount in 1989–90					
None	28.3	3.2	32.4	14.0	22.1
Less than \$2,000	29.5	3.9	27.0	10.5	29.1
\$2,000–4,999	43.1	3.0	26.0	8.8	19.2
\$5,000–6,999	57.6	0.1	21.7	5.6	15.0
\$7,000 or more	60.7	0	21.3	5.4	12.6
Total loan amount in 1989–90					
None	28.8	3.4	31.3	13.5	23.0
Less than \$1,000	32.2	2.7	32.3	10.3	22.5
\$1,000–1,999	34.8	3.0	26.8	10.9	24.6
\$2,000–2,999	49.6	2.0	24.4	7.1	16.9
\$3,000 or more	51.8	0.3	26.9	6.3	14.7
Total grant amount in 1989–90					
None	26.7	3.0	32.9	14.3	23.1
Less than \$1,000	31.7	3.3	27.4	10.6	27.0
\$1,000–1,999	39.6	3.3	24.2	10.0	23.0
\$2,000–2,999	40.2	4.2	27.8	7.3	20.5
\$3,000 or more	50.5	2.9	25.6	9.0	12.0
Aid package at first institution in 1989–90					
No aid	24.5	3.2	33.8	14.8	23.5
Grants, no loans	40.1	3.8	25.1	10.1	20.8
Grants and loans	45.9	2.4	25.0	8.1	18.5
Loans, no grants	47.3	0.7	22.6	8.6	20.8
Other aid	29.0	4.8	27.7	15.6	23.0

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 10**

### **Persistence and Attainment During the First Spell of Continuous Enrollment – By Institution Type**

**Table 10.1a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year public institution					
Total	36.5	7.1	30.5	11.7	14.1
Intensity of enrollment during first spell					
Exclusively part time	2.8	0	47.0	8.1	42.0
Mixed	48.8	12.8	17.0	7.6	13.9
Exclusively full time	36.1	5.4	33.6	13.7	11.1
Degree working toward when began first spell					
None	—	—	—	—	—
Certificate	—	—	—	—	—
Associate's degree	25.4	1.7	29.3	13.9	29.7
Bachelor's degree	38.5	7.8	29.6	11.9	12.1
First type of degree attained					
None	†	15.6	35.3	17.9	31.1
Certificate	18.2	0	79.7	2.1	†
Associate's degree	36.6	0.9	57.8	4.7	†
Bachelor's degree	73.8	0	19.0	7.3	†
Highest degree attained					
None	†	15.6	35.3	17.9	31.1
Certificate	17.5	0	80.3	2.2	†
Associate's degree	28.3	1.1	65.2	5.4	†
Bachelor's degree	73.8	0	19.1	7.1	†

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.1b—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year private, not-for-profit institution					
Total	49.8	1.2	31.4	8.6	9.0
Intensity of enrollment during first spell					
Exclusively part time	5.8	0	42.2	13.1	38.9
Mixed	72.8	2.2	11.6	6.1	7.4
Exclusively full time	50.0	1.1	33.6	8.2	7.1
Degree working toward when began first spell					
None	—	—	—	—	—
Certificate	—	—	—	—	—
Associate's degree	34.5	3.1	35.9	6.3	20.3
Bachelor's degree	52.2	1.1	30.4	8.9	7.5
First type of degree attained					
None	†	3.7	53.0	11.4	31.9
Certificate	25.6	0	65.2	9.2	†
Associate's degree	34.6	0	62.6	2.9	†
Bachelor's degree	73.7	0.2	18.3	7.8	†
Highest degree attained					
None	†	3.7	53.0	11.4	31.9
Certificate	16.6	0	71.6	11.7	†
Associate's degree	34.2	0	62.5	3.3	†
Bachelor's degree	72.7	0.2	19.5	7.6	†

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 10.1c—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
2-year public institution					
Total	17.7	2.2	33.4	16.9	29.8
Intensity of enrollment during first spell					
Exclusively part time	4.2	3.0	30.1	24.3	38.3
Mixed	34.5	5.6	28.0	13.2	18.7
Exclusively full time	19.3	0.4	42.8	14.7	22.8
Degree working toward when began first spell					
None	1.1	0	27.9	26.1	44.9
Certificate	20.1	1.4	12.7	21.1	44.7
Associate's degree	21.6	2.2	32.0	15.8	28.5
Bachelor's degree	15.3	3.5	51.3	16.1	13.8
First type of degree attained					
None	†	3.4	29.2	20.2	47.2
Certificate	27.9	0	58.4	13.8	†
Associate's degree	66.7	0	22.4	11.0	†
Bachelor's degree	—	—	—	—	†
Highest degree attained					
None	†	3.4	29.2	20.2	47.2
Certificate	28.3	0	57.5	14.2	†
Associate's degree	59.7	0	28.1	12.2	†
Bachelor's degree	56.3	0	41.2	2.5	†

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.2a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year public institution					
Total	36.5	7.1	30.5	11.7	14.1
Gender					
Male	31.0	8.4	33.1	13.6	13.8
Female	41.3	5.9	28.3	10.1	14.3
Age when began first spell					
18 years or younger	39.8	7.2	30.9	11.5	10.6
19 years	25.4	8.0	31.2	14.1	21.3
20–29 years	15.4	5.8	28.7	14.5	35.6
30 years or older	14.7	2.1	19.7	5.5	57.9
Socioeconomic status					
Lowest quartile	20.7	11.5	17.3	6.4	44.1
Middle quartiles	31.9	7.8	30.9	13.3	16.2
Highest quartile	41.6	6.1	31.7	11.2	9.3
Race–ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	46.9	8.4	14.1	17.5	13.1
Black, non-Hispanic	26.6	9.4	31.0	15.6	17.4
Hispanic	32.4	13.1	34.8	8.3	11.3
White, non-Hispanic	37.3	6.5	31.1	11.2	13.9
Marital status when began first spell					
Not married	37.5	7.2	31.3	11.8	12.3
Married	21.5	2.3	17.9	12.1	46.3
Separated	—	—	—	—	—
Parental education					
Less than high school diploma	35.3	4.7	22.4	15.6	22.0
High school diploma	26.7	7.4	34.5	11.6	19.8
Some postsecondary	38.4	7.0	28.0	11.9	14.7
Bachelor's or higher	42.0	7.2	30.4	11.8	8.7
Dependency status in 1989–90					
Dependent	38.4	7.2	31.0	11.7	11.6
Independent	17.8	5.6	25.6	11.9	39.1
Income and dependency status in 1989–90					
Dependent					
Less than \$20,000	30.5	11.2	27.8	10.9	19.6
\$20,000–39,999	36.0	5.1	31.2	16.0	11.7
\$40,000–59,999	41.7	8.3	28.1	10.6	11.3
\$60,000 or more	42.6	5.8	36.1	8.8	6.7
Independent					
Less than \$10,000	18.2	10.1	29.5	10.9	31.3
\$10,000–19,999	—	—	—	—	—
\$20,000 or more	16.5	0	18.9	1.9	62.7

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 10.2b—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year private, not-for-profit institution					
Total	49.8	1.2	31.4	8.6	9.0
Gender					
Male	47.3	1.6	33.3	9.8	8.1
Female	52.3	0.8	29.6	7.5	9.8
Age when began first spell					
18 years or younger	53.1	1.0	31.3	8.1	6.6
19 years	41.1	2.6	33.7	12.7	9.9
20–29 years	22.3	0	35.5	10.2	32.0
30 years or older	17.4	4.4	22.9	11.2	44.1
Socioeconomic status					
Lowest quartile	29.4	1.1	24.7	6.8	38.0
Middle quartiles	44.6	1.3	34.7	9.6	9.9
Highest quartile	54.1	1.1	30.3	8.3	6.2
Race–ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	62.1	0	21.7	13.1	3.1
Black, non-Hispanic	44.5	1.0	36.6	10.0	7.8
Hispanic	42.6	2.5	30.6	8.1	16.1
White, non-Hispanic	50.0	1.2	31.4	8.4	9.0
Marital status when began first spell					
Not married	51.4	1.1	31.4	8.4	7.6
Married	19.9	1.8	27.6	14.8	35.9
Separated	—	—	—	—	—
Parental education					
Less than high school diploma	41.8	4.0	25.1	6.3	22.8
High school diploma	42.8	0.3	34.8	7.9	14.3
Some postsecondary	47.3	1.3	32.6	10.2	8.6
Bachelor's or higher	55.0	1.2	30.4	8.4	5.0
Dependency status in 1989–90					
Dependent	51.8	1.1	31.8	8.4	6.9
Independent	25.9	1.6	27.8	10.6	34.1
Income and dependency status in 1989–90					
Dependent					
Less than \$20,000	43.4	2.2	34.1	8.6	11.7
\$20,000–39,999	45.0	1.2	37.3	8.0	8.4
\$40,000–59,999	54.3	0.8	28.7	10.4	5.8
\$60,000 or more	59.7	0.8	28.3	7.2	4.0
Independent					
Less than \$10,000	38.9	0	27.8	11.2	22.2
\$10,000–19,999	20.4	0	42.0	11.5	26.1
\$20,000 or more	16.7	4.2	18.3	9.5	51.4

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.2c—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
	2-year public institution				
Total	17.7	2.2	33.4	16.9	29.8
Gender					
Male	13.8	2.6	36.3	18.5	28.8
Female	21.4	1.7	30.5	15.4	30.9
Age when began first spell					
18 years or younger	23.8	0.9	40.9	14.6	19.9
19 years	11.9	1.8	35.2	21.7	28.4
20–29 years	12.1	5.1	24.4	20.4	37.9
30 years or older	11.9	2.2	19.8	14.4	51.8
Socioeconomic status					
Lowest quartile	16.0	4.6	20.6	16.1	42.6
Middle quartiles	17.6	2.3	30.8	19.4	30.0
Highest quartile	18.9	0.4	45.7	13.3	21.7
Race-ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	—	—	—	—	—
Black, non-Hispanic	11.2	1.9	37.6	19.0	30.3
Hispanic	13.9	6.0	37.5	20.5	22.1
White, non-Hispanic	18.7	1.1	31.8	16.5	31.9
Marital status when began first spell					
Not married	18.8	2.4	37.9	17.0	23.9
Married	14.9	1.9	13.0	19.6	50.7
Separated	—	—	—	—	—
Parental education					
Less than high school diploma	10.9	4.7	28.3	12.0	44.1
High school diploma	20.0	0.9	26.9	22.1	30.1
Some postsecondary	22.2	2.7	32.3	16.5	26.4
Bachelor's or higher	16.2	2.4	49.0	15.1	17.3
Dependency status in 1989–90					
Dependent	20.8	1.7	38.9	17.1	21.4
Independent	11.7	3.1	22.9	16.5	45.7
Income and dependency status in 1989–90					
Dependent					
Less than \$20,000	20.8	3.5	33.7	15.0	26.9
\$20,000–39,999	19.1	1.8	37.9	17.3	23.8
\$40,000–59,999	26.7	0.8	37.3	19.6	15.6
\$60,000 or more	14.4	0	53.3	15.7	16.6
Independent					
Less than \$10,000	13.0	4.2	34.0	13.0	35.9
\$10,000–19,999	14.1	0	13.7	20.9	51.3
\$20,000 or more	8.7	4.1	18.1	17.1	51.9

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.3a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when began first spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
	4-year public institution				
Total	36.5	7.1	30.5	11.7	14.1
Number of risk factors when began first spell <sup>2</sup>					
None	42.2	8.0	29.9	10.3	9.6
One	33.9	6.0	33.2	14.3	12.6
Two	13.9	3.7	35.6	16.0	30.8
Three or more	16.2	6.0	21.8	10.9	45.1
High school diploma or equivalency status					
High school diploma	37.0	7.1	30.5	11.7	13.7
GED or high school equivalent <sup>3</sup>	—	—	—	—	—
Delayed postsecondary enrollment					
Did not delay	39.4	7.3	31.0	11.4	10.8
Delayed	16.0	5.6	27.0	14.1	37.3
Attendance status when began first spell					
Full time	39.9	7.6	29.2	11.9	11.4
Part time	12.7	2.7	37.7	12.8	34.2
Dependency status when began first spell					
Dependent	39.6	7.3	31.1	11.1	10.9
Independent	22.4	6.4	29.2	14.5	27.5
Number of children when began first spell					
None	37.1	7.1	31.3	11.9	12.7
One or more	18.3	7.6	7.0	9.3	57.8
Single parent status when began first spell					
Not a single parent	37.1	6.9	31.1	11.8	13.0
Single parent	—	—	—	—	—
Worked full time while enrolled when began first spell					
Did not work full time	38.1	7.9	30.2	11.5	12.3
Worked full time	30.9	4.8	31.2	13.2	19.8

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.3b—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when began first spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year private, not-for-profit institution					
Total	49.8	1.2	31.4	8.6	9.0
Number of risk factors when began first spell <sup>2</sup>					
None	54.3	1.1	30.4	7.9	6.3
One	49.1	1.0	33.5	8.6	7.7
Two	29.9	1.9	40.8	10.6	16.9
Three or more	17.5	2.0	28.2	15.2	37.1
High school diploma or equivalency status					
High school diploma	50.2	1.2	31.4	8.5	8.7
GED or high school equivalent <sup>3</sup>	28.6	0	33.3	14.1	24.1
Delayed postsecondary enrollment					
Did not delay	52.8	1.2	31.6	8.0	6.4
Delayed	23.5	1.2	29.6	14.2	31.5
Attendance status when began first spell					
Full time	53.6	1.3	30.2	7.8	7.2
Part time	16.5	0	36.9	13.6	33.0
Dependency status when began first spell					
Dependent	53.3	1.1	30.8	8.5	6.3
Independent	29.0	1.5	34.4	10.1	25.0
Number of children when began first spell					
None	51.1	1.1	31.5	8.6	7.7
One or more	17.9	1.8	24.6	7.3	48.4
Single parent status when began first spell					
Not a single parent	50.8	1.1	31.4	8.6	8.1
Single parent	—	—	—	—	—
Worked full time while enrolled when began first spell					
Did not work full time	51.1	1.0	31.5	7.8	8.5
Worked full time	45.2	1.8	31.9	10.9	10.3

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.3c—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by persistence risk factors when began first spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
2-year public institution					
Total	17.7	2.2	33.4	16.9	29.8
Number of risk factors when began first spell <sup>2</sup>					
None	28.8	2.4	39.7	11.1	18.1
One	18.1	0	43.3	15.4	23.2
Two	14.7	1.2	33.3	22.4	28.4
Three or more	10.2	3.7	22.9	20.3	43.0
High school diploma or equivalency status					
High school diploma	18.4	2.2	34.2	16.7	28.6
GED or high school equivalent <sup>3</sup>	9.2	2.1	24.0	20.0	44.8
Delayed postsecondary enrollment					
Did not delay	21.9	1.2	40.8	16.0	20.2
Delayed	12.3	3.5	24.0	18.1	42.2
Attendance status when began first spell					
Full time	23.8	1.3	37.8	14.4	22.7
Part time	8.9	4.2	30.9	22.1	33.9
Dependency status when began first spell					
Dependent	24.5	1.7	40.1	14.1	19.6
Independent	11.4	2.7	27.7	19.9	38.3
Number of children when began first spell					
None	18.9	2.3	36.8	16.5	25.5
One or more	11.6	2.0	21.9	18.8	45.7
Single parent status when began first spell					
Not a single parent	18.5	2.3	33.4	17.3	28.5
Single parent	6.6	3.4	32.2	16.0	41.8
Worked full time while enrolled when began first spell					
Did not work full time	21.3	1.8	38.7	13.4	24.7
Worked full time	11.7	2.8	24.1	22.3	39.1

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study--Second Follow-up (BPS-90/94), Data Analysis System.

**Table 10.4a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
	4-year public institution				
Total	36.5	7.1	30.5	11.7	14.1
Index of social integration in 1989–90					
Low	11.8	3.7	40.3	10.9	33.3
Moderate	34.8	7.4	31.4	11.8	14.7
High	41.5	7.5	29.2	11.3	10.5
Index of academic integration in 1989–90					
Low	18.1	3.1	39.0	13.4	26.5
Moderate	32.8	7.5	30.4	11.7	17.6
High	39.6	6.8	30.8	11.5	11.2
Local residence in 1989–90					
Campus housing	44.5	7.2	30.8	9.0	8.5
Off-campus	27.8	3.9	28.0	14.1	26.2
With parents	25.1	8.4	31.3	15.9	19.2
Educational aspirations in 1989–90					
Trade school	—	—	—	—	—
2-year degree	18.3	0	38.6	4.9	38.3
Bachelor's degree	29.6	9.3	33.2	13.2	14.7
Advanced degree	12.1	6.1	28.7	11.2	11.8
Satisfaction with first institution in 1989–90					
Low	—	—	—	—	—
Moderate	27.2	6.8	35.9	14.8	13.4
High	41.2	7.4	27.5	10.9	12.9
Average hours worked while enrolled in 1989–90					
Less than 5 hours	39.3	8.1	28.3	10.7	13.6
5–15 hours	39.1	5.8	33.7	13.5	8.0
16–25 hours	38.6	7.8	31.8	9.9	11.9
26–34 hours	34.1	10.4	25.3	15.4	14.8
More than 34 hours	31.9	4.5	32.4	11.2	20.0
Grade point average in 1989–90					
Less than C's	16.5	5.1	43.3	15.2	19.8
Mostly C's	28.7	8.9	31.9	16.1	14.3
B's and C's	42.5	9.3	29.0	10.1	9.0
Mostly B's	46.5	6.4	25.6	10.2	11.4
A's and B's	50.3	9.1	24.9	6.6	9.1
Mostly A's	52.0	8.0	20.3	5.1	14.6
Number of types of remedial instruction received in 1989–90					
None	38.1	6.8	30.3	11.3	13.5
One	28.1	7.4	31.5	17.5	15.3
Two or more	29.2	10.5	31.9	8.8	19.6

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.4b—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year private, not-for-profit institution					
Total	49.8	1.2	31.4	8.6	9.0
Index of social integration in 1989–90					
Low	15.1	0	35.5	12.9	36.5
Moderate	42.8	1.8	34.1	9.5	11.8
High	54.8	1.1	30.9	7.7	5.4
Index of academic integration in 1989–90					
Low	19.7	0	48.5	4.7	27.1
Moderate	39.8	1.2	34.8	10.8	13.4
High	52.3	1.2	30.6	8.5	7.4
Local residence in 1989–90					
Campus housing	54.8	0.8	30.4	7.8	6.1
Off-campus	26.7	1.5	30.5	8.3	33.1
With parents	37.0	2.7	36.7	12.9	10.7
Educational aspirations in 1989–90					
Trade school	—	—	—	—	—
2-year degree	19.9	0	34.6	6.3	39.2
Bachelor's degree	40.2	1.2	39.4	6.9	12.3
Advanced degree	55.1	1.2	28.1	9.3	6.3
Satisfaction with first institution in 1989–90					
Low	18.3	0	69.3	2.7	9.8
Moderate	41.7	2.0	41.4	6.8	8.1
High	55.4	1.0	25.8	9.0	8.8
Average hours worked while enrolled in 1989–90					
Less than 5 hours	52.2	0.8	28.8	9.1	9.1
5–15 hours	56.2	0.7	29.0	7.5	6.6
16–25 hours	47.8	1.3	34.7	9.4	6.8
26–34 hours	45.5	2.1	36.4	3.7	12.3
More than 34 hours	45.1	1.5	31.6	10.4	11.5
Grade point average in 1989–90					
Less than C's	27.1	0	52.8	5.8	14.3
Mostly C's	39.8	1.0	41.7	9.2	8.3
B's and C's	46.0	2.7	33.3	10.0	8.1
Mostly B's	56.1	1.4	28.7	6.9	6.8
A's and B's	60.1	1.0	20.6	10.2	8.1
Mostly A's	66.1	0	16.0	13.9	4.1
Number of types of remedial instruction received in 1989–90					
None	51.0	1.1	30.0	8.7	9.2
One	38.4	2.2	44.7	5.9	8.7
Two or more	42.7	0	42.1	11.8	3.5

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 10.4c—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by social, academic, and work experiences and measures of satisfaction during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
	2-year public institution				
Total	17.7	2.2	33.4	16.9	29.8
Index of social integration in 1989–90					
Low	12.9	2.7	17.2	19.6	47.7
Moderate	15.3	2.9	37.8	18.0	26.1
High	27.5	0	38.4	11.6	22.5
Index of academic integration in 1989–90					
Low	8.1	1.1	23.9	28.5	38.5
Moderate	16.4	2.4	29.9	15.7	35.7
High	21.2	2.6	37.5	16.5	22.3
Local residence in 1989–90					
Campus housing	—	—	—	—	—
Off-campus	13.7	2.4	28.1	15.4	40.4
With parents	19.8	2.1	36.2	18.5	23.4
Educational aspirations in 1989–90					
Trade school	17.5	0	15.5	13.0	54.0
2-year degree	14.1	3.1	20.9	22.9	39.0
Bachelor's degree	17.1	1.5	38.4	16.1	27.0
Advanced degree	20.8	2.4	43.9	13.4	19.6
Satisfaction with first institution in 1989–90					
Low	—	—	—	—	—
Moderate	14.6	0	51.5	18.2	15.8
High	18.4	2.9	32.3	17.8	28.7
Average hours worked while enrolled in 1989–90					
Less than 5 hours	19.4	0.7	37.0	12.8	30.2
5–15 hours	28.8	4.0	40.1	13.4	13.6
16–25 hours	21.3	0.6	41.5	11.7	25.0
26–34 hours	21.0	3.5	36.5	14.8	24.2
More than 34 hours	11.5	2.8	25.1	23.0	37.5
Grade point average in 1989–90					
Less than C's	9.7	5.1	38.7	17.4	29.1
Mostly C's	15.2	0	33.5	25.5	25.8
B's and C's	20.9	2.5	38.1	13.1	25.4
Mostly B's	21.9	0	35.8	12.2	30.1
A's and B's	27.2	2.0	27.1	15.0	28.8
Mostly A's	23.6	3.3	24.0	17.5	31.6
Number of types of remedial instruction received in 1989–90					
None	17.9	2.2	33.2	16.9	29.8
One	27.6	0	32.8	17.3	22.4
Two or more	4.0	4.4	35.8	16.5	39.3

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 10.5a—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
	4-year public institution				
Total	36.5	7.1	30.5	11.7	14.1
Total costs in 1989–90					
Less than \$4,000	30.5	8.0	34.3	10.4	16.8
\$4,000–7,999	39.3	6.9	28.7	13.3	11.8
\$8,000–11,999	39.1	5.4	31.8	7.9	15.7
\$12,000 or more	39.1	7.3	23.4	13.6	16.5
Total aid amount in 1989–90					
None	33.1	7.4	34.1	12.1	13.3
Less than \$2,000	40.3	4.9	24.3	12.4	18.0
\$2,000–4,999	38.4	7.8	28.0	10.1	15.7
\$5,000–6,999	46.7	8.6	26.5	11.3	6.9
\$7,000 or more	37.2	3.0	32.8	16.7	10.2
Total federal aid amount in 1989–90					
None	37.5	6.7	31.8	11.6	12.3
Less than \$2,000	32.5	8.7	26.8	10.8	21.3
\$2,000–4,999	35.1	8.1	27.8	12.9	16.1
\$5,000–6,999	42.9	0	34.5	12.9	9.7
\$7,000 or more	—	—	—	—	—
Total loan amount in 1989–90					
None	36.2	7.5	30.7	11.6	14.0
Less than \$1,000	39.9	3.9	33.2	8.9	14.1
\$1,000–1,999	35.8	6.1	25.1	14.7	18.3
\$2,000–2,999	37.4	7.5	31.8	10.3	13.0
\$3,000 or more	40.9	0	32.2	21.3	5.7
Total grant amount in 1989–90					
None	35.1	6.6	33.5	12.0	12.8
Less than \$1,000	36.4	4.2	24.7	11.3	23.4
\$1,000–1,999	41.0	7.3	23.9	13.6	14.2
\$2,000–2,999	32.1	12.0	31.0	7.4	17.4
\$3,000 or more	44.3	8.8	25.1	11.4	10.3
Aid package at first institution in 1989–90					
No aid	33.1	7.4	34.1	12.1	13.3
Grants, no loans	43.6	8.8	22.5	10.6	14.5
Grants and loans	35.4	7.2	28.4	12.1	16.8
Loans, no grants	46.8	1.9	30.5	12.5	8.3
Other aid	40.3	3.7	28.6	11.2	16.2

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 10.5b—Percentage distribution of 1989–90 beginning postsecondary students who began in 4-year private, not-for-profit institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
4-year private, not-for-profit institution					
Total	49.8	1.2	31.4	8.6	9.0
Total costs in 1989–90					
Less than \$4,000	13.4	0.8	42.2	13.5	30.2
\$4,000–7,999	32.1	1.5	43.7	9.3	13.4
\$8,000–11,999	48.5	1.9	33.3	8.0	8.3
\$12,000 or more	60.0	0.7	25.5	8.1	5.8
Total aid amount in 1989–90					
None	46.9	0.8	32.7	10.0	9.6
Less than \$2,000	43.6	2.5	28.3	12.1	13.5
\$2,000–4,999	48.0	1.4	36.2	5.9	8.5
\$5,000–6,999	46.6	1.8	34.8	7.8	9.0
\$7,000 or more	57.2	0.7	26.8	8.3	7.1
Total federal aid amount in 1989–90					
None	51.9	1.2	28.5	9.8	8.6
Less than \$2,000	43.3	0.6	40.8	5.5	9.8
\$2,000–4,999	48.1	1.5	32.7	7.9	9.8
\$5,000–6,999	45.5	0.4	38.8	7.0	8.2
\$7,000 or more	59.2	0	24.5	9.3	7.0
Total loan amount in 1989–90					
None	50.9	1.2	29.2	9.4	9.3
Less than \$1,000	38.0	5.2	34.6	13.7	8.4
\$1,000–1,999	41.3	2.0	39.2	7.2	10.3
\$2,000–2,999	52.3	0.3	33.8	6.4	7.2
\$3,000 or more	48.6	0.8	33.1	7.9	9.6
Total grant amount in 1989–90					
None	46.8	0.6	33.6	9.8	9.2
Less than \$1,000	36.5	5.7	32.0	11.2	14.6
\$1,000–1,999	46.6	1.0	36.3	6.5	9.6
\$2,000–2,999	46.5	1.5	35.6	8.1	8.3
\$3,000 or more	56.3	0.8	27.1	7.9	7.9
Aid package at first institution in 1989–90					
No aid	46.9	0.8	32.7	10.0	9.6
Grants, no loans	56.4	1.6	24.7	8.8	8.5
Grants and loans	50.1	1.3	32.2	7.5	8.9
Loans, no grants	45.6	0	38.3	9.4	6.8
Other aid	40.5	1.6	34.3	10.0	13.6

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 10.5c—Percentage distribution of 1989–90 beginning postsecondary students who began in 2-year public institutions according to persistence and attainment during the first spell of continuous enrollment, by education financing during the 1989–90 academic year**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
2-year public institution					
Total	17.7	2.2	33.4	16.9	29.8
Total costs in 1989–90					
Less than \$4,000	15.3	1.7	32.7	17.7	32.6
\$4,000–7,999	22.4	3.3	34.9	17.7	21.7
\$8,000–11,999	16.6	3.7	33.2	13.7	32.8
\$12,000 or more	22.0	0	39.6	7.5	30.9
Total aid amount in 1989–90					
None	15.8	2.0	34.5	18.1	29.5
Less than \$2,000	21.9	3.3	29.3	13.6	31.9
\$2,000–4,999	22.4	1.2	32.7	13.4	30.3
\$5,000–6,999	—	—	—	—	—
\$7,000 or more	—	—	—	—	—
Total federal aid amount in 1989–90					
None	16.9	2.2	34.2	17.4	29.3
Less than \$2,000	20.0	3.0	26.6	14.3	36.0
\$2,000–4,999	24.0	0	36.2	15.3	24.6
\$5,000–6,999	—	—	—	—	—
\$7,000 or more	—	—	—	—	—
Total loan amount in 1989–90					
None	17.6	2.3	33.3	17.0	29.8
Less than \$1,000	—	—	—	—	—
\$1,000–1,999	—	—	—	—	—
\$2,000–2,999	—	—	—	—	—
\$3,000 or more	—	—	—	—	—
Total grant amount in 1989–90					
None	15.7	2.0	34.5	18.4	29.3
Less than \$1,000	21.8	3.5	31.4	13.1	30.3
\$1,000–1,999	24.5	2.9	25.5	12.1	35.0
\$2,000–2,999	29.4	2.2	35.8	10.7	21.8
\$3,000 or more	—	—	—	—	—
Aid package at first institution in 1989–90					
No aid	15.8	2.0	34.5	18.1	29.5
Grants, no loans	28.2	1.9	28.7	11.4	29.8
Grants and loans	23.4	0	29.0	14.7	32.9
Loans, no grants	—	—	—	—	—
Other aid	7.7	7.5	29.5	23.8	31.5

—Too few cases for a reliable estimate.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 11**

### **Persistence and Attainment During the Longest Spell of Continuous Enrollment – Total**

**Table 11.1—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	36.8	7.3	17.4	11.9	26.6
Intensity of enrollment during longest spell					
Exclusively part time	8.0	5.3	16.2	22.0	48.6
Mixed	43.9	15.0	15.8	8.3	17.0
Exclusively full time	43.7	6.0	19.3	10.6	20.4
Level and control of longest institution					
4-year					
Public	42.9	14.2	16.1	10.3	16.5
Private, not-for-profit	57.5	4.7	17.4	8.8	11.6
Private, for-profit	—	—	—	—	—
2-year					
Public	19.7	5.4	21.3	17.3	36.3
Private, not-for-profit	39.0	1.3	31.4	9.3	19.0
Private, for-profit	45.5	1.0	7.4	5.1	41.0
Less-than-2-year					
Public	49.3	0.6	4.4	6.7	39.0
Private, not-for-profit	47.6	3.7	21.5	0	27.2
Private, for-profit	58.0	0.2	6.2	1.1	34.5
Level of longest institution					
4-year	47.1	11.4	16.5	9.8	15.2
2-year	22.4	4.9	20.5	16.0	36.1
Less-than-2-year	55.8	0.4	6.2	2.3	35.3
Control of longest institution					
Public	30.2	9.0	18.7	14.1	28.1
Private, not-for-profit	55.5	4.3	18.8	8.7	12.6
Private, for-profit	52.9	0.8	6.8	2.5	37.0
Degree working toward when began longest spell					
None	10.4	1.8	12.4	21.8	53.6
Certificate	44.8	2.2	8.1	7.6	37.4
Associate's degree	25.5	5.1	20.3	15.0	34.0
Bachelor's degree	43.9	10.9	19.8	11.4	14.0
First type of degree attained					
None	†	12.2	21.2	16.2	50.3
Certificate	61.1	3.9	21.4	7.3	6.4
Associate's degree	73.5	3.8	11.3	9.2	2.3
Bachelor's degree	81.0	0.9	10.3	6.9	0.9
Highest degree attained					
None	†	12.2	21.2	16.2	50.3
Certificate	62.0	3.8	20.4	7.6	6.3
Associate's degree	68.1	4.1	14.8	10.1	2.9
Bachelor's degree	81.9	1.1	9.6	6.5	0.9

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 11.2—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	36.8	7.3	17.4	11.9	26.6
Gender					
Male	32.0	8.0	19.7	13.9	26.5
Female	40.9	6.8	15.4	10.2	26.7
Age when began longest spell					
18 years or younger	44.9	4.4	20.9	12.2	17.6
19 years	34.6	6.6	19.2	13.7	25.9
20–29 years	27.2	15.0	12.2	10.7	34.9
30 years or older	24.4	3.2	10.7	10.7	51.0
Socioeconomic status					
Lowest quartile	29.5	6.0	9.5	10.6	44.5
Middle quartiles	32.8	7.5	17.5	13.7	28.5
Highest quartile	44.0	7.7	20.2	10.4	17.7
Race–ethnicity of student					
American Indian/Alaskan Native	41.8	11.0	8.9	11.2	27.2
Asian/Pacific Islander	45.1	9.3	19.3	12.3	14.0
Black, non-Hispanic	27.9	7.2	18.7	12.5	33.7
Hispanic	30.9	8.1	21.8	13.9	25.4
White, non-Hispanic	38.0	7.1	16.8	11.6	26.5
Marital status when began longest spell					
Not married	39.2	7.8	18.9	11.9	22.2
Married	26.0	4.6	7.3	14.0	48.1
Separated	26.1	0.8	12.9	5.8	54.4
Parental education					
Less than high school diploma	31.7	6.8	8.9	9.6	43.0
High school diploma	32.7	4.6	17.2	14.5	31.0
Some postsecondary	38.3	8.4	16.7	11.8	24.8
Bachelor's or higher	42.6	9.9	21.6	11.1	14.7
Dependency status in 1989–90					
Dependent	41.0	8.0	19.2	11.7	20.0
Independent	24.7	5.3	12.3	12.4	45.3
Income and dependency status in 1989–90					
Dependent					
Less than \$20,000	36.8	7.4	17.7	10.4	27.7
\$20,000–39,999	37.3	7.6	19.3	13.1	22.6
\$40,000–59,999	43.5	7.8	19.7	12.8	16.4
\$60,000 or more	47.7	9.7	19.9	9.6	13.0
Independent					
Less than \$10,000	26.2	7.6	15.1	9.8	41.3
\$10,000–19,999	28.9	2.6	10.0	15.7	42.8
\$20,000 or more	19.1	4.6	10.4	13.1	52.8

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 11.3—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the longest spell of continuous enrollment, by persistence risk factors when they began longest spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Spell ended with a transfer	Spell ended with a stopout	Left without return <sup>1</sup> at end of spell
Total	36.8	7.3	17.4	11.9	26.6
Number of risk factors when began longest spell <sup>2</sup>					
None	49.7	8.2	18.5	9.2	14.4
One	37.2	8.1	21.7	11.4	21.7
Two	25.1	7.3	16.7	13.6	37.4
Three or more	21.4	5.4	12.1	15.9	45.2
High school diploma or equivalency status					
High school diploma	37.5	7.7	17.6	11.8	25.4
GED or high school equivalent <sup>3</sup>	25.7	2.8	14.7	13.0	43.8
Delayed postsecondary enrollment					
Did not delay	42.8	8.3	19.6	11.2	18.0
Delayed	24.2	5.4	12.8	13.4	44.2
Attendance status when began longest spell					
Full time	47.5	5.3	17.9	10.5	18.8
Part time	14.6	5.5	18.2	21.1	40.6
Dependency status when began longest spell					
Dependent	45.9	7.4	19.3	10.5	16.9
Independent	24.4	7.4	14.8	14.2	39.2
Number of children when began longest spell					
None	39.2	7.6	18.8	11.8	22.7
One or more	26.3	4.2	10.4	13.1	46.1
Single parent status when began longest spell					
Not a single parent	38.4	7.2	17.6	12.3	24.6
Single parent	26.8	4.5	13.2	10.7	44.8
Worked full time while enrolled when began longest spell					
Did not work full time	42.3	7.2	18.3	10.3	21.9
Worked full time	26.2	6.6	15.0	15.8	36.3

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 12**

### **Persistence and Attainment During Last Spell of Continuous Enrollment – Total**



**Table 12.1—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by institution attended, intensity of enrollment, degree working toward, and type of degree attained**

	Attained degree at end of spell	Still enrolled in spring 1994	Left without return <sup>1</sup> at end of spell
Total	37.7	19.0	43.3
Intensity of enrollment during last spell			
Exclusively part time	11.2	17.9	70.8
Mixed	45.3	28.6	26.2
Exclusively full time	46.2	18.6	35.2
Level and control of last institution			
4-year			
Public, 4-year	42.7	29.6	27.7
Private, not-for-profit	61.6	16.4	22.0
Private, for-profit	—	—	—
2-year			
Public	19.3	16.9	63.9
Private, not-for-profit	50.8	12.3	36.9
Private, for-profit	43.9	3.3	52.8
Less-than-2-year			
Public	49.1	0.6	50.3
Private, not-for-profit	47.7	3.8	48.5
Private, for-profit	52.2	1.6	46.3
Level of last institution			
4-year	47.7	26.0	26.3
2-year	22.1	15.6	62.2
Less-than-2-year	51.4	1.4	47.2
Control of last institution			
Public	31.0	22.3	46.6
Private, not-for-profit	60.6	15.9	23.5
Private, for-profit	48.7	2.6	48.8
Degree working toward when began last spell			
None	5.2	7.9	87.0
Certificate	43.4	8.1	48.5
Associate's degree	27.1	13.9	59.0
Bachelor's degree	46.9	26.3	26.8
First type of degree attained			
None	†	26.5	73.5
Certificate	68.8	8.7	22.4
Associate's degree	60.4	23.1	16.4
Bachelor's degree	87.8	6.4	5.8
Highest degree attained			
None	†	26.5	73.5
Certificate	69.6	8.7	21.8
Associate's degree	58.3	23.9	17.8
Bachelor's degree	85.9	7.4	6.7

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 12.2—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by demographic characteristics**

	Attained degree at end of spell	Still enrolled in spring 1994	Left without return <sup>1</sup> at end of spell
Total	37.7	19.0	43.3
Gender			
Male	34.5	20.9	44.6
Female	40.5	17.3	42.2
Age when began last spell			
18 years or younger	62.3	7.3	30.4
19 years	42.2	10.2	47.6
20–29 years	24.7	30.2	45.1
30 years or older	23.8	8.8	67.4
Socioeconomic status			
Lowest quartile	30.3	10.9	58.9
Middle quartiles	33.7	20.0	46.3
Highest quartile	45.1	20.8	34.2
Race–ethnicity of student			
American Indian/Alaskan Native	31.9	37.9	30.2
Asian/Pacific Islander	43.0	28.2	28.8
Black, non-Hispanic	30.7	17.7	51.6
Hispanic	32.5	23.8	43.6
White, non-Hispanic	38.9	18.0	43.1
Marital status when began last spell			
Not married	41.3	18.9	39.8
Married	24.5	15.8	59.7
Separated	39.1	0.8	60.1
Parental education			
Less than high school diploma	33.6	10.6	55.8
High school diploma	35.0	15.7	49.2
Some postsecondary	37.6	20.1	42.3
Bachelor's or higher	43.3	25.5	31.3
Dependency status in 1989–90			
Dependent	41.6	21.0	37.4
Independent	26.5	13.2	60.4
Income and dependency status in 1989–90			
Dependent			
Less than \$20,000	36.9	19.7	43.5
\$20,000–39,999	37.9	22.0	40.1
\$40,000–59,999	44.0	19.7	36.3
\$60,000 or more	48.9	22.5	28.6
Independent			
Less than \$10,000	30.4	14.6	55.0
\$10,000–19,999	28.3	12.5	59.3
\$20,000 or more	19.8	11.9	68.4

<sup>1</sup>Without return as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 12.3—Percentage distribution of 1989–90 beginning postsecondary students according to persistence and attainment during the last spell of continuous enrollment, by persistence risk factors when they began last spell**

	Attained degree at end of spell	Still enrolled in spring 1994	Left without return <sup>1</sup> at end of spell
Total	37.7	19.0	43.3
Number of risk factors when began last spell <sup>2</sup>			
None	56.5	18.8	24.8
One	38.7	23.6	37.6
Two	25.5	21.4	53.2
Three or more	21.4	14.2	64.4
High school diploma or equivalency status			
High school diploma	38.3	19.9	41.8
GED or high school equivalent <sup>3</sup>	28.6	6.2	65.2
Delayed postsecondary enrollment			
Did not delay	43.7	21.8	34.5
Delayed	25.3	13.1	61.5
Attendance status when began last spell			
Full time	57.5	11.5	31.0
Part time	17.8	16.0	66.2
Dependency status when began last spell			
Dependent	52.2	16.8	31.0
Independent	24.2	21.0	54.8
Number of children when began last spell			
None	40.8	20.2	39.0
One or more	26.7	12.4	61.0
Single parent status when began last spell			
Not a single parent	40.1	18.7	41.2
Single parent	26.4	13.4	60.2
Worked full time while enrolled when began last spell			
Did not work full time	46.1	18.9	35.0
Worked full time	25.4	16.7	57.9

<sup>1</sup>Without return as of spring 1994.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Passed tests of General Educational Development or high school equivalent, also includes a small number of cases with no high school diploma.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 13**

# **Annual Persistence and Attainment of Bachelor Degree Seekers at 4-year Institutions**

**Table 13.1.—Percentage distribution of annual persistence and attainment outcomes among 1989–90 beginning postsecondary bachelor's degree seekers in 4-year institutions: 1989–90**

	Attained certificate in 1989–90	Attained AA in 1989–90	Attained BA in 1989–1990	Persisted into 1990–91	Downward or delayed transfer in 1989–90	Stopout in 1989–90	Left without return in 1989–90
Bachelor's degree seekers at 4-year institutions: 1989–90							
Total	0.1	0	0	83.7	8.2	4.0	4.0
Gender							
Male	0.2	0	0	82.9	8.8	4.1	4.1
Female	0	0	0	84.5	7.6	3.9	4.0
Age when began at first institution							
18 years or younger	0.1	0	0	85.6	8.0	3.8	2.5
19 years	0.3	0	0	74.6	9.3	5.2	10.7
20–29 years	0	0	0	66.5	9.1	6.6	17.8
30 years or older	0	0	0	67.3	10.1	1.6	21.0
Intensity of enrollment in 1989–90							
Exclusively part time	0	0	0	47.7	26.0	7.4	18.9
Mixed	0	0	0	91.3	3.7	3.4	1.6
Exclusively full time	0.1	0	0	85.8	7.6	3.7	2.8
Financial aid receipt in 1989–90							
Did not receive aid	0.1	0	0	82.4	9.6	4.2	3.6
Received aid	0.1	0	0	84.7	7.1	3.8	4.3
Race–ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	0	0	0	93.8	1.4	2.7	2.1
Black, non-Hispanic	0	0	0	79.1	7.9	5.9	7.1
Hispanic	0	0	0	88.4	5.4	2.9	3.3
White, non-Hispanic	0.1	0	0	83.3	8.7	4.0	3.9
Control of first institution							
Public	0.1	0	0	82.3	8.6	4.3	4.7
Private, not-for-profit	0.1	0	0	86.7	7.2	3.3	2.7
Private, for-profit	—	—	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 13.2—Percentage distribution of annual persistence and attainment outcomes among persisting bachelor's degree seekers in 4-year institutions: 1990-91**

	Attained certificate in 1990-91	Attained AA in 1990-91	Attained BA in 1990-91	Persisted into 1991-92	Downward or delayed transfer in 1990-91	Stopout in 1990-91	Left without return in 1990-91
Bachelor's degree seekers at 4-year institutions: 1990-91							
Total	0.2	0.2	0	90.6	1.5	5.1	2.5
Gender							
Male	0.2	0.2	0	89.7	1.6	6.3	2.1
Female	0.1	0.2	0	91.3	1.4	4.1	2.9
Age when began at first institution							
18 years or younger	0.1	0.1	0	92.0	1.5	4.7	1.6
19 years	0	0.9	0	83.4	1.3	8.7	5.7
20-29 years	1.1	0	0	74.2	1.4	8.9	14.3
30 years or older	0	2.4	0	70.4	2.7	1.3	23.1
Intensity of enrollment in 1990-91							
Exclusively part time	0.9	0	0	65.9	5.3	11.4	16.5
Mixed	0	0.3	0	92.1	0.6	6.1	1.0
Exclusively full time	0.1	0.1	0	91.9	1.5	4.6	1.8
Financial aid receipt in 1990-91							
Did not receive aid	0.1	0	0	90.0	1.3	5.9	2.8
Received aid	0.3	0.3	0	91.2	1.8	4.2	2.3
Race-ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	0	0	0	94.6	0	4.1	1.3
Black, non-Hispanic	0	0.4	0	90.4	0.5	5.0	3.7
Hispanic	0	0	0	85.9	4.1	5.1	5.0
White, non-Hispanic	0.2	0.2	0	90.6	1.5	5.1	4
Control of 1990-91 institution							
Public	0.1	0.1	0	89.2	1.6	6.0	3.0
Private, not-for-profit	0.2	0.3	0	93.8	1.3	2.9	1.5
Private, for-profit	—	—	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 13.3.—Percentage distribution of annual persistence and attainment outcomes among persisting bachelor's degree seekers in 4-year institutions: 1991–92**

	Attained certificate in 1991–92	Attained AA in 1991–92	Attained BA in 1991–92	Persisted into 1992–93	Downward or delayed transfer in 1991–92	Stopout in 1991–92	Left without return in 1991–92
Bachelor's degree seekers at 4-year institutions: 1991–92							
Total	0.2	0.3	4.5	79.5	6.3	4.8	4.4
Gender							
Male	0.2	0.1	4.2	79.1	5.8	5.8	4.8
Female	0.2	0.5	4.8	79.8	6.8	3.9	4.1
Age when began in 1989–90							
18 years or younger	0.2	0.3	3.9	80.4	6.4	4.8	4.0
19 years	0.8	0	10.2	69.1	7.6	5.8	6.5
20–29 years	0	0	10.7	77.2	2.9	1.8	7.4
30 years or older	—	—	—	—	—	—	—
Intensity of enrollment in 1991–92							
Exclusively part time	0	0	3.3	36.9	31.4	12.1	16.3
Mixed	0.4	0.9	6.1	80.5	4.4	3.5	4.2
Exclusively full time	0.2	0.2	4.3	81.8	5.2	4.6	3.7
Financial aid receipt in 1991–92							
Did not receive aid	0.3	0.3	4.8	78.3	6.6	5.1	4.6
Received aid	0.1	0.3	4.2	80.8	6.0	4.5	4.2
Race-ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	1.1	0	2.5	76.8	8.3	7.6	3.8
Black, non-Hispanic	0	0	3.6	73.2	11.8	5.5	5.8
Hispanic	0	0	5.2	73.7	10.9	7.0	3.2
White, non-Hispanic	0.2	0.4	4.7	80.6	5.3	4.4	4.4
Control of 1991–92 institution							
Public	0.2	0.4	4.2	77.8	7.3	4.9	5.2
Private, not-for-profit	0.1	0.1	5.0	83.4	4.1	4.7	2.7
Private, for-profit	—	—	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 13.4—Percentage distribution of annual persistence and attainment outcomes among persisting bachelor's degree seekers in 4-year institutions: 1992-93**

	Attained certificate in 1992-93	Attained AA in 1992-93	Attained BA in 1992-93	Persisted into 1993-94	Downward or delayed transfer in 1992-93	Stopout in 1992-93	Left without return in 1992-93
Bachelor's degree seekers at 4-year institutions: 1992-93							
Total	0.3	0.6	40.4	50.7	2.6	2.3	3.0
Gender							
Male	0.4	0.6	34.4	55.0	3.3	2.4	3.9
Female	0.2	0.6	45.5	46.9	2.1	2.3	2.3
Age when began at first institution							
18 years or younger	0.3	0.5	41.5	50.3	2.4	2.0	3.0
19 years	0	0	31.5	56.9	4.4	4.3	2.8
20-29 years	4.2	5.3	27.6	49.9	0	8.4	4.5
30 years or older	—	—	—	—	—	—	—
Intensity of enrollment in 1992-93							
Exclusively part time	0	3.3	11.2	42.5	17.4	6.5	19.2
Mixed	0.3	0	26.2	69.5	0.5	2.4	1.1
Exclusively full time	0.3	0.6	43.9	47.8	2.4	2.2	2.8
Financial aid receipt in 1992-93							
Did not receive aid	0.2	1.2	37.3	52.0	3.3	2.5	3.5
Received aid	0.5	0	43.3	49.5	2.0	2.2	2.5
Race-ethnicity of student							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	0	0	47.4	44.4	1.4	5.1	1.6
Black, non-Hispanic	0.6	0	24.2	63.7	4.3	5.7	1.4
Hispanic	0	0	25.6	66.2	5.0	0.9	2.3
White, non-Hispanic	0.3	0.7	41.8	49.4	2.5	2.0	3.3
Control of 1992-93 institution							
Public	0.1	0.8	27.5	63.2	2.7	2.7	3.0
Private, not-for-profit	0.5	0.2	65.5	25.7	0.5	1.9	2.7
Private, for-profit	—	—	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 13.5—Percentage distribution of annual persistence and attainment outcomes among persisting bachelor's degree seekers in 4-year institutions: 1993-94**

	Attained certificate in 1993-94	Attained AA in 1993-94	Attained BA in 1993-94	Still enrolled in spring 1994	Downward transfer in 1993-94	Left without return in 1993-94
Bachelor's degree seekers at 4-year institutions: 1993-94						
Total	0.1	0.3	66.9	26.3	1.0	5.4
Gender						
Male	0	0	63.7	30.6	1.3	4.3
Female	0.3	0.5	70.1	21.9	0.6	6.6
Age when began at first institution						
18 years or younger	0.1	0.2	68.1	25.0	0.8	5.8
19 years	0	0	59.5	36.9	3.7	0
20-29 years	—	—	—	—	—	—
30 years or older	—	—	—	—	—	—
Intensity of enrollment in 1993-94						
Exclusively part time	0	1.0	62.3	24.8	0	11.9
Mixed	0	0	62.4	31.0	1.5	5.1
Exclusively full time	0.2	0.2	68.7	25.1	1.0	4.7
Financial aid receipt in 1993-94						
Did not receive aid	0	0.3	65.1	26.9	1.1	6.7
Received aid	0.3	0.2	68.8	25.7	0.9	4.1
Race-ethnicity of student						
American Indian/Alaskan Native	—	—	—	—	—	—
Asian/Pacific Islander	0	0	67.5	22.8	0	9.8
Black, non-Hispanic	0	0	57.6	30.4	5.0	7.0
Hispanic	0	0	57.0	37.0	0	6.1
White, non-Hispanic	0.2	0.3	68.5	25.4	0.7	4.9
Control of 1993-94 institution						
Public	0.2	0.2	65.3	27.9	1.2	5.3
Private, not-for-profit	0	0.5	74.1	19.1	0	6.3
Private, for-profit	—	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 13.6—Percentage distribution of persistence and attainment outcomes as of spring 1994 among bachelor's degree seekers in 4-year institutions who left the persistence track**

	Attained Bachelor's degree	Enrolled at 4-year institution	Not enrolled at 4-year		
			Attained associate's,	Attained certificate,	No degree,
Bachelor's degree seekers at 4-year institutions who left the persistence track					
Total	20.6	15.7	3.9	4.0	55.8
Gender					
Male	20.4	17.1	3.6	2.9	55.9
Female	20.8	14.3	4.2	5.1	55.6
Age when began at first institution					
18 years or younger	22.6	16.6	4.4	3.9	52.5
19 years	15.5	11.7	1.5	5.8	65.5
20–29 years	6.9	13.4	2.2	3.5	73.9
30 years or older	8.7	8.8	2.1	2.0	78.4
Financial aid receipt in 1989–90					
Did not receive aid	19.0	16.8	5.6	4.0	54.7
Received aid	22.1	14.8	2.4	4.1	56.7
Attendance status when began at first institution					
Full time	21.1	15.9	4.1	4.1	54.9
Part time	14.6	13.3	7.7	2.9	61.5
Grade point average in 1989–90					
Less than C's	8.6	9.3	7.3	6.3	68.5
Mostly C's	14.1	20.0	0	4.0	61.8
B's and C's	24.3	19.9	5.3	1.9	48.6
Mostly B's	27.8	15.7	3.0	4.8	48.7
A's and B's	33.6	17.8	0	1.8	46.8
Mostly A's	40.7	13.2	0	0	46.0
Race–ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	30.0	28.3	0	0	41.7
Black, non-Hispanic	16.5	20.0	2.8	6.4	54.3
Hispanic	21.0	14.9	2.6	2.5	59.0
White, non-Hispanic	20.6	14.5	4.3	4.0	56.5
Control of first institution					
Public	17.0	4.2	17.1	4.5	57.3
Private, not-for-profit	30.0	3.2	12.3	2.8	51.8
Private, for-profit	—	—	—	—	—

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Part II**  
**Supplemental Descriptive Summary**  
**Tables**

## **Section 14**

### **Student Characteristics**

## Section 14

### Student Characteristics

#### *Gender*

- 54 percent of all beginning postsecondary students are female. (table 14.1)
- Students from the lowest (63 percent) and middle socioeconomic quartiles (56 percent) were more likely to be female than those from the highest quartiles (48 percent). (table 14.1)
- Financially independent students were more likely to be female (61 percent) than were dependent students (52 percent). (table 14.1)
- Two-thirds (69 percent) of the students who began postsecondary education at age 30 or older were female. (table 14.1)

#### *Socioeconomic Status*

- About one quarter of black, non-Hispanic (25 percent) and Hispanic (26 percent) students came from the lowest socioeconomic quartiles, compared to only 12 percent of white, non-Hispanic students. (table 14.3)
- White, non-Hispanic (44 percent) and Asian/Pacific Islander (41 percent) students were more likely than black, non-Hispanic (17 percent), and Hispanic (20 percent) students to come from the highest socioeconomic quartiles. (table 14.3)

#### *Parental Education Levels*

- A negative relationship existed between age of entry into postsecondary education and parental education levels. Specifically, students who entered at the age of 18 or younger were three times more likely than their counterparts ages 20–29, (43 percent compared with 16 percent) and more than six times as likely as those 30 and older (43 percent compared with 7 percent) to have one or more parents who had attained a bachelor's degree. (table 14.6) In part, this reflects lower levels of educational attainment of earlier generations.
- Hispanic students (28 percent) were more likely to have parents who had not graduated from high school than American Indian/Alaskan Native (3 percent), black, non-Hispanic (9 percent), and white, non-Hispanic students (8 percent). Both Asian/ Pacific Islander (45 percent) and white, non-Hispanic (35 percent) students were more likely than black, non-Hispanic (25 percent) and Hispanic students (20 percent) to have one or more parents who had attained a bachelor's degree. (table 14.6)

### ***Risk Factors***

- A negative relationship existed between parental education and the likelihood of a student delaying entry into postsecondary education. Students whose parents had not graduated from high school were twice as likely (66 percent) as students whose parents had some postsecondary education (24 percent), and four times as likely as students whose parents had attained a bachelor's degree (16 percent) to delay enrollment. (table 14.8)
- Students who entered postsecondary education at age 20 or older were more likely not to have finished high school or to have obtained a GED (20–29—16 percent, 30 or older—22 percent) than those who entered when they were less than 20 (18 years or younger—2 percent, 19 years—5 percent). (table 14.8)
- The likelihood of working full time while enrolled generally increased with age of entry into postsecondary education. For instance, one-fifth (20 percent) of students who began at age 18 or younger worked full time while enrolled in 1989–90, compared to about half (46 percent) of those who started at age 20 or older. (table 14.8)
- The overall proportion of students initially attending part time increased with age, with only 11 percent of those who began at age 18 or younger enrolled part time, while 62 percent of students who began at age 30 or older had done so. (table 14.8)

**Table 14.1—Percentage distribution of 1989–90 beginning postsecondary students according to gender, by demographic characteristics**

	Male	Female
Total	46.0	54.0
Age when began at first institution		
18 years or younger	45.9	54.1
19 years	56.2	43.8
20–29 years	50.6	49.4
30 years or older	31.2	68.8
Socioeconomic status		
Lowest quartile	37.2	62.8
Middle quartiles	43.9	56.1
Highest quartile	51.7	48.3
Race–ethnicity of student		
American Indian/Alaskan Native	72.4	27.6
Asian/Pacific Islander	40.6	59.4
Black, non-Hispanic	37.3	62.7
Hispanic	45.9	54.1
White, non-Hispanic	47.1	52.9
Marital status when began at first institution		
Not married	48.2	51.8
Married	35.6	64.4
Separated	23.3	76.8
Parental education		
Less than high school diploma	32.2	67.8
High school diploma	45.8	54.3
Some postsecondary	45.6	54.4
Bachelor's or higher	51.8	48.2
Dependency status in 1989–90		
Dependent	48.4	51.6
Independent	39.3	60.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.2—Percentage distribution of 1989–90 beginning postsecondary students according to age when began at first institution, by demographic characteristics**

	18 years or younger	19 years	20–29 years	30 years or older
Total	61.2	12.1	17.2	9.5
Gender				
Male	60.3	14.6	18.7	6.4
Female	61.9	9.9	15.9	12.3
Socioeconomic status				
Lowest quartile	19.9	9.6	41.3	29.1
Middle quartiles	55.5	13.2	20.3	11.0
Highest quartile	82.8	11.8	4.8	0.7
Race–ethnicity of student				
American Indian/Alaskan Native	56.8	11.5	28.5	3.1
Asian/Pacific Islander	60.8	15.9	19.4	3.9
Black, non-Hispanic	52.5	16.6	22.2	8.7
Hispanic	56.0	13.9	23.1	7.0
White, non-Hispanic	62.8	11.1	15.8	10.3
Marital status when began at first institution				
Not married	69.9	13.6	13.7	2.8
Married	6.3	1.7	37.3	54.7
Separated	6.1	1.7	64.5	27.7
Parental education				
Less than high school diploma	29.6	10.3	32.7	27.3
High school diploma	55.2	12.8	23.8	8.3
Some postsecondary	66.7	14.4	14.6	4.3
Bachelor's or higher	79.2	11.5	8.0	1.3
Dependency status in 1989–90				
Dependent	79.2	14.6	6.1	0
Independent	9.1	4.8	49.0	37.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 14.3—Percentage distribution of 1989–90 beginning postsecondary students according to socio-economic status, by demographic characteristics**

	Lowest quartile	Middle quartiles	Highest quartile
Total	14.7	45.7	39.7
Gender			
Male	11.8	43.6	44.6
Female	17.1	47.4	35.5
Age when began at first institution			
18 years or younger	4.8	41.3	53.9
19 years	11.7	49.6	38.8
20–29 years	35.1	53.8	11.1
30 years or older	44.6	52.6	2.7
Race–ethnicity of student			
American Indian/Alaskan Native	27.1	55.0	17.9
Asian/Pacific Islander	22.8	36.1	41.2
Black, non-Hispanic	25.3	57.9	16.9
Hispanic	26.2	54.0	19.8
White, non-Hispanic	11.8	43.9	44.3
Marital status when began at first institution			
Not married	10.6	44.0	45.4
Married	37.3	59.1	3.6
Separated	55.1	42.5	2.4
Parental education			
Less than high school diploma	48.8	45.8	5.5
High school diploma	16.0	62.0	22.0
Some postsecondary	8.2	53.6	38.2
Bachelor's or higher	2.2	24.1	73.7
Dependency status in 1989–90			
Dependent	5.5	42.7	51.8
Independent	40.8	53.9	5.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.4—Percentage distribution of 1989–90 beginning postsecondary students according to race–ethnicity of student, by demographic characteristics**

	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic
Total	0.7	4.0	8.8	7.6	78.8
Gender					
Male	1.1	3.6	7.2	7.6	80.6
Female	0.4	4.4	10.3	7.6	77.3
Age when began at first institution					
18 years or younger	0.6	3.7	7.8	7.4	80.5
19 years	0.6	4.9	12.6	9.3	72.4
20–29 years	1.1	4.2	11.8	10.9	72.0
30 years or older	0.2	1.5	8.3	5.9	84.0
Socioeconomic status					
Lowest quartile	1.4	6.3	15.2	13.6	63.6
Middle quartiles	0.9	3.2	11.2	9.0	75.8
Highest quartile	0.3	4.2	3.8	3.8	87.9
Marital status when began at first institution					
Not married	0.7	3.5	9.4	8.1	78.2
Married	0.3	3.7	6.2	7.3	82.5
Separated	0.9	1.5	7.6	10.4	79.7
Parental education					
Less than high school diploma	0.3	7.2	7.8	21.8	63.0
High school diploma	1.2	2.5	9.6	7.2	79.5
Some postsecondary	0.2	2.9	10.7	6.4	79.9
Bachelor's or higher	0.8	5.3	6.3	4.4	83.1
Dependency status in 1989–90					
Dependent	0.7	4.6	8.5	7.6	78.5
Independent	0.7	2.3	9.9	7.5	79.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.5—Percentage distribution of 1989–90 beginning postsecondary students according to marital status when began at first institution, by demographic characteristics**

	Not married	Married	Separated
Total	86.7	12.1	1.2
Gender			
Male	90.1	9.3	0.6
Female	83.7	14.6	1.7
Age when began at first institution			
18 years or younger	98.6	1.3	0.1
19 years	98.2	1.7	0.2
20–29 years	69.2	26.4	4.4
30 years or older	25.7	70.9	3.5
Socioeconomic status			
Lowest quartile	63.9	31.6	4.5
Middle quartiles	83.3	15.6	1.1
Highest quartile	98.8	1.1	0.1
Race–ethnicity of student			
American Indian/Alaskan Native	93.4	5.0	1.6
Asian/Pacific Islander	86.7	12.8	0.5
Black, non-Hispanic	90.7	8.3	1.0
Hispanic	87.4	11.1	1.5
White, non-Hispanic	86.1	12.7	1.2
Parental education			
Less than high school diploma	66.7	30.9	2.5
High school diploma	84.2	14.3	1.5
Some postsecondary	91.5	7.5	1.0
Bachelor's or higher	96.6	3.2	0.1
Dependency status in 1989–90			
Dependent	99.5	0.5	0
Independent	49.4	46.0	4.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.6—Percentage distribution of 1989–90 beginning postsecondary students according to parental education, by demographic characteristics**

	Less than high school diploma	High school diploma	Some postsecondary	Bachelor's or higher
Total	9.6	33.8	22.9	33.7
Gender				
Male	6.7	33.2	22.5	37.6
Female	12.2	34.2	23.3	30.3
Age when began at first institution				
18 years or younger	4.5	28.4	24.3	42.8
19 years	8.0	33.6	26.7	31.7
20–29 years	18.5	45.6	19.8	16.1
30 years or older	38.8	39.8	14.8	6.6
Socioeconomic status				
Lowest quartile	36.9	42.5	14.8	5.8
Middle quartiles	9.6	45.8	26.8	17.8
Highest quartile	1.3	17.9	21.1	59.8
Race–ethnicity of student				
American Indian/Alaskan Native	3.3	52.3	6.7	37.7
Asian/Pacific Islander	17.4	21.3	16.5	44.8
Black, non-Hispanic	8.8	37.7	28.6	24.9
Hispanic	28.0	32.6	19.5	20.0
White, non-Hispanic	7.7	33.9	23.1	35.3
Marital status when began at first institution				
Not married	7.3	31.1	24.1	37.6
Married	28.4	44.4	16.7	10.5
Separated	23.5	49.1	22.5	4.9
Dependency status in 1989–90				
Dependent	4.9	30.9	24.0	40.2
Independent	25.0	43.0	19.3	12.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.7—Percentage distribution of 1989–90 beginning postsecondary students according to dependency status in 1989–90, by demographic characteristics**

	Dependent	Independent
Total	74.0	26.0
Gender		
Male	77.8	22.2
Female	70.7	29.3
Age when began at first institution		
18 years or younger	96.1	3.9
19 years	89.8	10.2
20–29 years	26.5	73.5
30 years or older	0	100.0
Socioeconomic status		
Lowest quartile	27.6	72.4
Middle quartiles	69.3	30.7
Highest quartile	96.5	3.5
Race–ethnicity of student		
American Indian/Alaskan Native	74.9	25.1
Asian/Pacific Islander	85.2	14.9
Black, non-Hispanic	71.0	29.0
Hispanic	74.2	25.8
White, non-Hispanic	73.7	26.3
Marital status when began at first institution		
Not married	85.4	14.6
Married	2.9	97.1
Separated	0	100.0
Parental education		
Less than high school diploma	38.7	61.3
High school diploma	69.9	30.1
Some postsecondary	80.2	19.9
Bachelor's or higher	91.1	8.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.8—Percentage of 1989–90 beginning postsecondary students with component persistence risk factors when they began at first institution, by demographic characteristics**

	Persistence risk factors when began at first institution						
	GED, cert. of completion <sup>1</sup>	Delayed post-secondary entry	Financially <sup>2</sup> independent	Had children	Single parent	Enrolled part time	Worked full time while enrolled
Total	6.4	33.0	37.7	13.9	5.4	23.9	28.3
Gender							
Male	5.5	31.2	35.3	7.8	2.0	22.8	34.5
Female	7.2	34.4	39.7	19.1	8.3	24.9	23.0
Age when began at first institution							
18 years or younger	1.7	3.1	14.4	1.3	0.8	11.1	20.4
19 years	4.7	40.0	37.3	2.6	1.5	25.4	28.9
20–29 years	15.8	94.8	87.7	32.6	16.6	49.7	47.0
30 years or older	21.8	100.0	98.3	77.7	20.0	62.0	45.0
Socioeconomic status							
Lowest quartile	19.0	75.4	83.7	42.8	21.7	43.8	39.8
Middle quartiles	7.1	38.8	42.6	15.8	4.6	29.5	29.6
Highest quartile	1.0	10.5	15.4	1.4	0.5	11.0	22.8
Race–ethnicity of student							
American Indian/Alaskan Native	22.5	52.0	46.7	3.8	0	0	33.8
Asian/Pacific Islander	6.7	29.2	34.7	9.1	1.4	21.5	18.6
Black, non-Hispanic	6.2	37.2	42.5	17.7	12.0	23.7	21.2
Hispanic	8.4	37.0	46.8	14.1	6.3	42.6	27.9
White, non-Hispanic	6.1	32.1	36.3	13.7	4.7	22.2	29.6
Marital status when began at first institution							
Not married	4.2	22.8	28.6	5.6	5.6	18.5	25.5
Married	18.7	94.1	94.3	70.6	†	59.8	48.1
Separated	32.3	91.0	92.5	53.3	53.3	45.8	27.8
Parental education							
Less than HS diploma	15.9	65.7	76.1	38.4	15.8	41.2	39.5
High school diploma	6.6	40.0	44.2	15.5	5.6	29.8	31.3
Some postsecondary	4.3	24.2	30.0	9.4	3.7	19.9	23.9
Bachelor's or higher	2.8	15.6	19.5	3.3	1.3	12.6	23.4
Dependency status in 1989–90							
Dependent	2.2	13.3	19.3	0.1	0.1	14.5	22.2
Independent	18.4	88.9	90.8	55.3	20.9	51.9	46.2

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Includes a few students with no high school credential.

<sup>2</sup>For federal tax purposes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 14.9—Percentage distribution of 1989–90 beginning postsecondary students according to age when began at first institution, by first institution attended, first degree working toward, and highest degree attained**

	18 years or younger	19 years	20–29 years	30 years or older
Total	61.2	12.1	17.2	9.5
Level and control of first institution				
4-year				
Public	83.0	9.2	5.3	2.5
Private, not-for-profit	84.8	8.2	4.3	2.8
Private, for-profit	—	—	—	—
2-year				
Public	48.2	14.1	23.4	14.2
Private, not-for-profit	73.1	12.5	11.9	2.5
Private, for-profit	35.1	17.9	34.0	12.9
Less-than-2-year				
Public	26.4	20.4	28.1	25.1
Private, not-for-profit	9.1	9.0	60.9	21.0
Private, for-profit	25.1	14.3	42.0	18.6
Level of first institution				
4-year	83.6	8.9	4.9	2.6
2-year	48.1	14.4	23.8	13.7
Less-than-2-year	24.7	15.4	39.8	20.1
Control of first institution				
Public	61.0	12.4	16.6	10.0
Private, not-for-profit	81.8	8.7	6.3	3.1
Private, for-profit	28.8	15.6	39.1	16.5
Degree working toward at first institution				
None	32.3	17.6	23.2	27.0
Certificate	30.2	12.3	38.0	19.5
Associate's degree	49.3	15.1	23.1	12.5
Bachelor's degree	80.9	10.0	6.8	2.2
Highest degree attained				
None	51.5	14.3	21.4	12.8
Certificate	34.0	14.7	32.9	18.4
Associate's degree	68.4	13.6	12.6	5.5
Bachelor's degree	90.4	5.8	3.1	0.6

—Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 14.10—Percentage distribution of 1989–90 beginning postsecondary students according to level of first institution, by selected demographic and institutional characteristics**

	4-year	2-year	Less-than- 2-year
Total	42.2	49.2	8.6
Gender			
Male	42.8	50.4	6.8
Female	41.6	48.2	10.2
Age when began at first institution			
18 years or younger	57.7	38.8	3.5
19 years	30.8	58.2	10.9
20–29 years	12.1	68.0	19.9
30 years or older	11.5	70.5	18.0
Socioeconomic status			
Lowest quartile	16.2	63.1	20.7
Middle quartiles	34.2	56.2	9.7
Highest quartile	60.8	36.2	3.0
Control of first institution			
Public	38.4	59.1	2.5
Private, not-for-profit	86.9	10.9	2.2
Private, for-profit	0	36.9	63.1
Degree working toward at first institution			
None	15.0	82.3	2.6
Certificate	3.2	45.2	51.6
Associate's degree	9.1	89.9	1.0
Bachelor's degree	76.5	23.2	0.3
Race–ethnicity of student			
American Indian/Alaskan Native	29.3	52.5	18.2
Asian/Pacific Islander	50.7	45.2	4.0
Black, non-Hispanic	36.0	49.6	14.4
Hispanic	24.0	67.2	8.8
White, non-Hispanic	44.4	47.6	8.0
Dependency status in 1989–90			
Dependent	52.0	43.3	4.7
Independent	13.9	66.2	19.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 14.11—Percentage distribution of 1989–90 beginning postsecondary students according to control of first institution, by selected demographic and institutional characteristics**

	Public	Private, not-for-profit	Private, for-profit
Total	74.0	15.8	10.2
Gender			
Male	76.5	16.2	7.2
Female	71.8	15.4	12.7
Age when began at first institution			
18 years or younger	74.0	21.2	4.8
19 years	75.5	11.3	13.1
20–29 years	71.1	5.8	23.1
30 years or older	77.3	5.2	17.5
Socioeconomic status			
Lowest quartile	71.4	6.7	21.8
Middle quartiles	75.6	12.0	12.4
Highest quartile	73.2	23.5	3.4
Level of first institution			
4-year	67.4	32.5	0
2-year	88.9	3.5	7.7
Less-than-2-year	21.4	4.0	74.6
Degree working toward at first institution			
None	93.3	5.2	1.5
Certificate	49.0	4.5	46.5
Associate's degree	85.3	6.8	7.9
Bachelor's degree	73.3	25.7	1.0
Race–ethnicity of student			
American Indian/Alaskan Native	65.1	13.9	21.1
Asian/Pacific Islander	79.5	15.4	5.1
Black, non-Hispanic	68.4	11.4	20.2
Hispanic	77.3	9.8	13.0
White, non-Hispanic	74.2	17.0	8.9
Dependency status in 1989–90			
Dependent	74.7	19.1	6.1
Independent	72.1	6.1	21.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Section 15**  
**Education Financing**

## Section 15

### Education Financing

- A majority (58 percent) of 1989–90 beginning postsecondary students received financial aid to help meet educational costs at some time during the 5-year period. Almost half (47 percent) received grants or scholarships, and about one-third (31 percent) had student loans. (table 15.1)
- Black, non-Hispanic students were more likely to take out student loans to finance their education (42 percent) than either Hispanic (27 percent), white, non-Hispanic (31 percent), or Asian (26 percent) students. (table 15.1)
- Among dependent students, 83 percent ever received financial contributions from their parents to attend postsecondary education, while 19 percent of independent students did so. Nearly one-quarter (24 percent) of all students borrowed from their parents at some time to help meet educational costs. (table 15.2)
- Although those attending private, for-profit institutions represented only 10 percent of all first-time beginners in 1989–90, they made up 40 percent of those whose only source of financial aid was student loans in 1989–90. (table 15.3)
- Among students who began postsecondary education in 1989–90, those who received financial aid were more likely to have attained a degree by 1994 (58 percent) than those who did not receive any financial aid (39 percent). Those who received grants were more likely to have attained a degree (59 percent) than those who did not receive grants (42 percent). Moreover, those who took out student loans were more likely to have attained a degree (63 percent) than those who did not borrow (44 percent). (table 15.4)
- Nearly 70 percent of those who received financial aid had either attained a degree or were still enrolled after 5 years, compared with 54 percent of those who received no aid. Among those with three or more of the risk factors associated with high attrition, 53 percent of those with aid had attained a degree or were still enrolled, compared with 29 percent of those without financial aid. (table 15.5)
- Nearly half (49 percent) of the students borrowed at some time while enrolled to meet educational costs, including loans from parents and relatives as well as student loans. Those who last attended public less-than-4-year institutions were the least likely to borrow (33 percent). (table 15.6)
- The average amount borrowed from any source for undergraduate education was about \$7,300, but there was much variation according to the last type of institution attended, ranging from about \$11,800 at private, not-for-profit 4-year institutions to \$3,700 at public less-than-4-year institutions. The average amount borrowed by bachelor's degree recipients was \$8,900 for those who last attended public 4-year institutions, and \$12,800 for those who last attended private, not-for-profit 4-year institutions. (table 15.7)

- Almost one-fifth (18 percent) of the students who had left postsecondary education without attaining a credential owed money on an educational loan in 1994, compared with 36 percent of those who had attained a credential or were still enrolled. The average amount owed by those who had not attained a credential and were no longer enrolled was \$5,200 for those who last attended a 4-year institution, \$2,900 for those who last attended a 2-year institution, and \$2,000 for those who last attended a less-than-2 year institution. (tables 15.8a–15.8b)
- Of those students who had borrowed for their education, about half (52 percent) were repaying the loans in 1994. One-fifth (20 percent) of the dependent students in repayment were receiving help to do so. The average monthly loan payment for about half of the students (55 percent) was between \$50–\$99. (tables 15.9a–15.9b)

**Table 15.1—Percentage of 1989–90 beginning postsecondary students ever receiving financial aid as of spring 1994 according to type of aid received, by selected demographic and institutional characteristics**

	Any financial aid	Grants	Loans	Employer aid
Total	57.6	47.1	31.2	7.1
Gender				
Male	54.8	43.5	29.0	7.6
Female	60.0	50.3	33.1	6.6
Age when began at first institution				
18 years or younger	59.5	49.4	35.3	4.9
19 years	56.7	43.9	31.6	8.6
20–29 years	58.1	45.7	29.0	9.6
30 years or older	55.6	45.5	17.1	14.8
Number of risk factors when began at first institution*				
None	63.4	52.9	37.8	5.6
One	55.6	44.7	31.6	4.7
Two	53.5	41.1	31.6	4.5
Three or more	55.0	44.7	22.9	12.9
Socioeconomic status				
Lowest quartile	68.9	60.8	30.9	8.8
Middle quartiles	61.2	50.3	36.7	8.0
Highest quartile	49.3	38.4	25.0	5.3
Race–ethnicity of student				
American Indian/Alaskan Native	66.3	56.9	38.1	0.5
Asian/Pacific Islander	58.6	51.8	26.3	4.8
Black, non-Hispanic	65.2	58.6	41.9	3.8
Hispanic	55.3	47.4	26.8	7.3
White, non-Hispanic	56.8	45.5	30.6	7.5
Dependency status in 1989–90				
Dependent	57.1	47.1	33.0	4.9
Independent	59.0	47.2	25.9	13.1
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	73.3	70.4	44.3	4.8
\$20,000–39,999	63.4	52.4	40.6	5.4
\$40,000–59,999	52.1	37.5	28.6	6.0
\$60,000 or more	37.3	26.8	15.7	3.0
Independent				
Less than \$10,000	66.9	59.8	33.7	6.0
\$10,000–19,999	58.7	44.1	28.5	11.2
\$20,000 or more	49.3	34.1	14.1	23.6
Total costs in 1989–90				
Less than \$4,000	42.8	33.9	16.3	5.8
\$4,000–7,999	62.2	50.4	33.0	8.5
\$8,000–11,999	72.6	60.7	45.8	7.8
\$12,000 or more	72.4	62.2	53.2	6.3

**Table 15.1—Percentage of 1989–90 beginning postsecondary students ever receiving financial aid as of spring 1994 according to type of aid received, by selected demographic and institutional characteristics—Continued**

	financial aid	Any Grants	Loans	Employer aid
<b>Level and control of first institution</b>				
4-year				
Public	63.0	49.6	37.2	6.4
Private, not-for-profit	78.9	72.4	53.8	9.4
Private, for profit	—	—	—	—
2-year				
Public	42.9	34.7	14.3	7.6
Private, not-for-profit	66.6	62.5	40.7	6.1
Private, for-profit	83.7	58.4	69.1	5.5
Less-than-2-year				
Public	58.7	47.8	12.6	6.6
Private, not-for-profit	92.4	70.7	44.0	11.6
Private, for-profit	82.8	63.8	64.1	3.6
<b>Level of first institution</b>				
4-year	68.2	57.1	42.6	7.3
2-year	46.8	37.5	19.4	7.4
Less-than-2-year	78.0	60.6	52.3	4.6
<b>Control of first institution</b>				
Public	51.0	40.8	23.1	7.1
Private, not-for-profit	77.8	71.3	52.2	9.1
Private, for-profit	83.1	61.8	65.9	4.3
<b>Persistence and attainment as of spring 1994</b>				
Attained degree	67.3	55.9	40.6	6.7
No degree, enrolled	53.3	43.1	28.3	11.6
No degree, not enrolled	48.5	38.3	21.7	6.1
<b>Highest degree attained</b>				
None	49.8	39.6	23.4	7.5
Certificate	65.7	50.9	40.2	7.2
Associate's degree	60.6	50.1	32.0	6.0
Bachelor's degree	71.1	61.0	44.6	6.7

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.2—Percentage of 1989–90 beginning postsecondary students ever receiving assistance from family or using personal savings as of spring 1994 according to type of assistance received, by selected demographic and institutional characteristics**

	Spouse or other relative financial assistance	Parents' financial contribution	Personal savings	Loan from parents
Total	29.1	66.9	78.1	23.5
Gender				
Male	25.1	70.2	81.2	26.9
Female	32.5	64.0	75.5	20.7
Age when began at first institution				
18 years or younger	30.8	86.2	85.5	27.9
19 years	26.1	71.2	78.0	24.4
20–29 years	29.2	30.1	68.7	15.2
30 years or older	33.1	5.5	66.6	3.5
Number of risk factors when began at first institution*				
None	30.5	90.6	85.8	27.3
One	28.4	80.2	83.6	27.4
Two	27.3	59.5	75.7	29.6
Three or more	32.3	19.4	68.4	9.5
Socioeconomic status				
Lowest quartile	28.5	23.4	63.6	9.6
Middle quartiles	30.3	61.8	78.8	24.4
Highest quartile	28.0	88.1	82.8	27.0
Race–ethnicity of student				
American Indian/Alaskan Native	5.7	56.3	69.5	4.3
Asian/Pacific Islander	36.0	75.7	85.1	29.7
Black, non-Hispanic	32.3	61.6	65.7	19.4
Hispanic	28.3	59.7	79.4	23.9
White, non-Hispanic	28.7	67.8	79.2	23.8
Dependency status in 1989–90				
Dependent	28.1	83.3	82.8	27.3
Independent	32.1	18.7	64.8	11.1
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	28.9	70.4	81.4	24.3
\$20,000–39,999	28.6	80.1	81.7	28.8
\$40,000–59,999	28.9	90.9	85.8	30.3
\$60,000 or more	25.4	91.9	82.4	24.8
Independent				
Less than \$10,000	29.7	29.3	62.5	15.0
\$10,000–19,999	28.3	14.9	65.4	11.3
\$20,000 or more	38.3	8.8	67.1	5.6
Total costs in 1989–90				
Less than \$4,000	24.6	62.1	75.4	20.5
\$4,000–7,999	29.6	72.8	80.3	25.6
\$8,000–11,999	32.5	67.6	81.1	23.8
\$12,000 or more	37.5	68.1	79.8	26.1

**Table 15.2—Percentage of 1989–90 beginning postsecondary students ever receiving assistance from family or using personal savings as of spring 1994 according to type of assistance received, by selected demographic and institutional characteristics—Continued**

	Spouse or other relative financial assistance	Parents' financial contribution	Personal savings	Loan from parents
<b>Level and control of first institution</b>				
4-year				
Public	33.3	85.8	85.9	25.8
Private, not-for-profit	34.8	88.2	87.0	26.8
Private, for-profit	—	—	—	—
2-year				
Public	27.9	55.9	79.0	21.9
Private, not-for-profit	31.8	75.9	80.4	20.8
Private, for-profit	26.6	49.4	60.2	24.4
Less-than-2-year				
Public	26.8	37.1	66.3	16.9
Private, not-for-profit	13.8	15.2	59.4	34.9
Private, for-profit	26.3	39.0	59.3	16.1
<b>Level of first institution</b>				
4-year	33.8	86.6	86.3	26.1
2-year	28.0	56.1	77.6	22.1
Less-than-2-year	25.9	37.6	60.8	17.1
<b>Control of first institution</b>				
Public	30.0	66.9	81.4	23.4
Private, not-for-profit	34.0	85.3	85.7	26.3
Private, for-profit	26.4	42.8	59.6	19.2
<b>Persistence and attainment as of spring 1994</b>				
Attained degree	33.0	76.8	85.1	24.1
No degree, enrolled	33.1	76.4	91.9	24.7
No degree, not enrolled	25.2	51.4	68.5	21.9
<b>Highest degree attained</b>				
None	27.3	58.1	74.8	22.7
Certificate	32.9	50.8	74.3	19.9
Associate's degree	29.2	74.8	84.3	25.9
Bachelor's degree	34.7	90.7	90.7	25.3

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 15.3—Percentage distribution of 1989–90 beginning postsecondary students according to level and control of first institution, by education financing during the 1989–90 academic year**

	Public 4-year	Private, not-for- profit 4-year	Public less- than- 4-year	Private, not-for- profit less- than- 4-year	Private, for- profit less- than- 4-year
Total	28.5	13.7	45.6	2.1	10.2
Total costs in 1989–90					
Less than \$4,000	22.5	1.4	72.2	1.5	2.4
\$4,000–7,999	43.8	7.1	37.3	2.0	9.8
\$8,000–11,999	27.3	26.8	23.7	2.5	19.6
\$12,000 or more	11.4	48.2	16.0	3.2	21.2
Total aid amount in 1989–90					
None	27.0	7.0	60.0	1.6	4.3
Less than \$2,000	28.5	8.8	52.3	2.3	8.1
\$2,000–4,999	37.2	15.7	21.5	2.6	23.1
\$5,000–6,999	33.3	26.3	7.2	3.8	29.4
\$7,000 or more	10.2	70.1	6.0	2.3	11.4
Total federal aid amount in 1989–90					
None	28.2	10.5	55.4	1.8	4.1
Less than \$2,000	29.7	11.5	44.7	2.2	11.8
\$2,000–4,999	32.1	23.4	14.3	2.9	27.4
\$5,000–6,999	15.6	33.1	3.8	3.4	44.0
\$7,000 or more	7.3	52.1	0.8	3.4	36.3
Total loan amount in 1989–90					
None	28.2	10.3	54.1	2.0	5.4
Less than \$1,000	48.8	15.4	27.2	1.4	7.2
\$1,000–1,999	41.5	23.1	13.1	2.3	20.0
\$2,000–2,999	25.9	29.0	7.4	2.6	35.0
\$3,000 or more	12.4	37.4	7.1	2.7	40.4
Total grant amount in 1989–90					
None	28.5	7.5	55.4	1.6	7.1
Less than \$1,000	27.8	8.9	50.4	2.7	10.3
\$1,000–1,999	30.0	13.6	34.1	2.4	20.0
\$2,000–2,999	28.0	17.3	25.7	2.4	26.5
\$3,000 or more	27.7	55.4	7.1	3.8	6.0
Aid package at first institution in 1989–90					
No aid	27.1	7.0	60.2	1.5	4.2
Grants, no loans	31.6	19.5	40.5	3.1	5.3
Grants and loans	27.9	32.7	9.6	2.7	27.2
Loans, no grants	37.3	11.4	10.1	1.1	40.1
Other aid	30.7	10.9	50.4	1.7	6.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.4—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment as of spring 1994, by types of financial aid and family assistance used during postsecondary education**

	Attained or still enrolled			No degree, not enrolled
	Total	Attained degree	No degree, enrolled	
Total	63.2	50.0	13.3	36.8
Received financial aid				
Did not receive financial aid	54.3	39.3	14.9	45.7
Received financial aid	69.5	57.5	12.1	30.5
Grants				
Did not receive grant	56.6	42.1	14.4	43.4
Received grant	70.5	58.5	12.0	29.5
Loans				
Did not receive loan	57.6	43.6	14.0	42.4
Received loan	75.1	63.4	11.7	24.9
Employer aid				
Did not receive employer aid	62.8	50.2	12.6	37.2
Received employer aid	68.5	46.9	21.6	31.5
Parents' financial contribution				
Did not use parental contribution	45.7	36.0	9.7	54.3
Used parental contribution	72.4	57.3	15.1	27.6
Spouse or other relative financial assistance				
Did not use spouse or relative financial assistance	60.6	47.9	12.7	39.4
Used spouse or relative financial assistance	69.2	54.7	14.6	30.8
Personal savings				
Did not use personal savings	42.7	37.3	5.4	57.3
Used personal savings	68.7	53.3	15.3	31.3
Loan from parents				
Did not use parental loan	66.6	52.6	14.0	33.4
Used parental loan	69.5	54.5	15.0	30.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.5—Percentage of 1989–90 beginning postsecondary students who attained a degree or were still enrolled in 1994 according to financial aid receipt as of spring 1994 and level of first institution, by selected demographic characteristics**

	Level of first institution							
	Received aid				Did not receive aid			
	Total	4-year	2-year	Less than 2-year	Total	4-year	2-year	Less than 2-year
	Attained or still enrolled							
Total	69.5	77.6	59.9	66.8	54.3	71.3	45.1	56.2
Gender								
Male	68.6	75.3	59.7	67.2	53.0	70.5	44.1	50.6
Female	70.3	79.6	60.0	66.6	55.6	72.1	46.3	61.4
Age when began at first institution								
18 years or younger	76.8	81.3	66.7	73.1	66.0	76.3	57.2	57.5
19 years	66.1	67.7	65.8	63.4	43.7	57.9	37.4	—
20–29 years	55.7	48.2	51.9	67.0	37.1	45.7	34.9	49.6
30 years or older	50.0	45.7	45.4	62.7	28.0	18.8	26.5	55.0
Number of risk factors when began at first institution*								
None	79.7	83.5	70.6	73.8	73.6	77.7	67.9	80.0
One	69.5	74.4	63.7	54.6	56.5	73.7	47.0	—
Two	60.4	51.2	56.9	78.7	46.3	51.4	45.5	41.8
Three or more	53.4	51.0	49.7	63.0	29.3	27.6	27.6	51.6
Socioeconomic status								
Lowest quartile	54.5	53.3	50.6	61.3	29.9	—	28.5	34.2
Middle quartiles	66.3	73.8	57.9	67.6	49.1	58.8	46.0	59.6
Highest quartile	81.6	84.3	73.7	85.5	64.5	76.4	50.8	65.0
Race-ethnicity of student								
American Indian/Alaskan Native	—	—	—	—	—	—	—	—
Asian/Pacific Islander	83.0	86.2	—	—	62.6	85.9	—	—
Black, non-Hispanic	60.6	75.9	46.6	49.7	45.6	55.0	46.3	—
Hispanic	70.9	71.7	69.5	69.6	54.5	—	51.0	—
White, non-Hispanic	69.8	77.8	59.3	69.1	54.7	71.2	43.9	62.4
Marital status when began at first institution								
Not married	72.3	79.1	63.0	68.7	59.6	73.3	50.9	55.9
Married	55.3	55.5	51.0	63.9	28.3	—	26.6	63.5
Separated	54.9	—	—	62.2	—	—	—	—
Parental education								
Less than high school diploma	59.5	69.1	50.3	68.4	33.2	—	30.3	—
High school diploma	62.8	71.4	56.5	58.5	45.8	54.6	41.2	63.6
Some postsecondary	70.3	76.2	57.9	80.3	56.9	64.9	53.0	51.5
Bachelor's or higher	82.5	84.5	77.9	77.7	68.2	80.3	55.9	—
Dependency status in 1989–90								
Dependent	75.1	80.0	66.4	69.6	61.2	74.4	51.5	63.0
Independent	54.0	51.3	49.0	65.3	33.7	38.4	31.7	47.4

**Table 15.5—Percentage of 1989–90 beginning postsecondary students who attained a degree or were still enrolled in 1994 according to financial aid receipt as of spring 1994 and level of first institution, by selected demographic characteristics—Continued**

	Level of first institution							
	Received aid				Did not receive aid			
	Total	4-year	2-year	Less than 2-year	Total	4-year	2-year	Less than 2-year
Attained or still enrolled								
Income and dependency status in 1989–90								
Dependent								
Less than \$20,000	65.8	72.4	57.8	61.4	51.8	57.9	50.5	—
\$20,000–39,999	74.9	77.1	71.9	68.9	47.8	63.5	42.0	48.2
\$40,000–59,999	78.2	84.8	61.1	82.2	62.9	71.6	54.8	—
\$60,000 or more	88.3	87.3	90.8	—	74.7	82.0	63.0	—
Independent								
Less than \$10,000	56.1	52.2	54.5	61.2	44.7	58.4	42.6	—
\$10,000–19,999	53.1	63.5	40.2	67.8	31.8	—	28.3	—
\$20,000 or more	51.3	40.0	48.2	72.2	25.1	16.3	24.5	41.6
Total costs in 1989–90								
Less than \$4,000	64.1	72.7	59.3	60.0	46.3	59.8	43.5	32.5
\$4,000–7,999	69.0	74.9	61.5	62.9	62.4	72.6	53.4	61.2
\$8,000–11,999	70.2	80.2	50.5	69.6	59.8	76.2	40.2	—
\$12,000 or more	79.0	84.0	69.5	73.2	71.9	84.2	40.5	86.9

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.6—Percentage of 1989–90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics**

	Level and control of last institution					Total borrowed for undergraduate education
	Public 4-year	Private, not-for-profit 4-year	Public less-than-4-year	Private, not-for-profit less-than-4-year	Private, for-profit less-than-4-year	
Total	54.1	63.2	32.7	55.0	72.2	48.9
Gender						
Male	55.4	67.3	32.9	71.2	65.9	49.0
Female	53.0	59.5	32.5	44.3	76.1	48.8
Age when began at first institution						
18 years or younger	53.4	64.9	40.2	58.8	71.2	52.7
19 years	58.2	70.0	36.0	—	79.8	51.2
20–29 years	62.1	45.6	31.0	35.0	76.3	47.3
30 years or older	43.5	34.6	10.9	—	57.9	24.7
Number of risk factors when began at first institution						
None	51.9	65.1	39.8	61.0	69.8	53.0
One	56.1	64.5	34.6	59.4	78.1	50.8
Two	64.2	61.5	52.1	—	71.0	58.8
Three or more	56.0	45.1	21.0	52.0	71.8	36.1
Socioeconomic status						
Lowest quartile	64.8	67.4	24.2	45.6	69.8	42.6
Middle quartiles	63.2	72.1	33.6	62.8	79.8	53.0
Highest quartile	45.9	58.2	37.3	40.9	53.7	46.4
Race–ethnicity of student						
American Indian/Alaskan Native	—	—	—	—	—	58.7
Asian/Pacific Islander	51.7	59.0	—	—	—	47.5
Black, non-Hispanic	61.5	78.4	30.4	—	66.1	52.3
Hispanic	62.0	61.6	43.6	—	67.7	54.2
White, non-Hispanic	53.0	62.1	31.6	54.6	73.8	47.9
Dependency status in 1989–90						
Dependent	54.3	65.3	40.7	56.2	70.4	52.8
Independent	52.8	41.7	19.9	49.1	73.9	37.4
Income and dependency status in 1989–90						
Dependent						
Less than \$20,000	68.5	82.2	44.9	68.1	83.4	62.0
\$20,000–39,999	63.8	77.1	43.7	46.4	71.5	59.3
\$40,000–59,999	51.6	71.6	35.7	—	63.2	50.4
\$60,000 or more	34.6	43.0	35.6	—	45.2	37.4
Independent						
Less than \$10,000	52.3	59.9	21.7	46.4	76.9	43.6
\$10,000–19,999	65.2	—	27.2	—	83.6	45.4
\$20,000 or more	44.2	15.6	12.4	—	55.0	22.8

**Table 15.6—Percentage of 1989–90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics—Continued**

	Level and control of last institution					Total borrowed for undergraduate education
	Public 4-year	Private, not-for-profit 4-year	Public less-than-4-year	Private, not-for-profit less-than-4-year	Private, not-for-profit less-than-4-year	
<b>Total costs in 1989–90</b>						
Less than \$4,000	45.1	51.3	24.6	53.7	60.3	34.4
\$4,000–7,999	55.9	64.5	41.6	48.2	66.1	52.8
\$8,000–11,999	62.5	66.3	42.9	68.2	85.3	62.1
\$12,000 or more	66.3	64.7	53.4	58.8	79.2	65.8
<b>Academic year of last enrollment</b>						
1989–90	39.7	43.9	16.7	54.6	76.9	33.4
1990–91	45.1	67.0	29.7	37.8	71.7	47.3
1991–92	51.0	49.2	45.8	57.8	67.6	49.8
1992–93	48.8	61.2	47.0	—	72.0	54.0
1993–94	57.7	69.7	37.2	—	66.0	53.5
<b>Persistence and attainment as of spring 1994</b>						
Attained degree	55.3	64.4	37.3	51.8	72.6	55.3
No degree, enrolled	54.9	69.3	31.7	—	—	47.6
No degree, not enrolled	50.5	55.3	30.5	59.3	71.0	40.8
<b>Highest degree attained</b>						
None	52.6	59.9	30.7	60.8	71.4	42.5
Certificate	56.8	—	30.1	60.8	70.9	53.5
Associate's degree	64.3	41.8	43.1	42.6	83.4	52.8
Bachelor's degree	53.3	65.2	43.0	—	—	57.3

—Too few cases for a reliable estimate.

\* Risk factors include delayed enrollment, being GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.7—Average amount borrowed by 1989–90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics**

	Level and control of last institution					Total amount borrowed for undergraduate education
	Public 4-year	Private, not-for-profit 4-year	Public less-than-4-year	Private, not-for-profit less-than-4-year	Private, for-profit less-than-4-year	
Total	\$ 7,733	\$11,762	\$ 3,708	\$ 6,361	\$ 4,576	\$ 7,312
Gender						
Male	7,723	11,937	3,786	—	5,502	7,801
Female	7,740	11,591	3,650	6,140	4,111	6,935
Age when began at first institution						
18 years or younger	7,744	11,743	3,862	6,630	4,524	8,151
19 years	6,718	12,618	3,497	—	4,914	6,133
20–29 years	8,710	—	3,503	—	4,491	5,357
30 years or older	—	—	—	—	4,562	5,208
Number of risk factors when began at first institution*						
None	8,209	11,844	4,075	5,909	4,602	8,530
One	6,557	12,226	3,626	—	4,458	7,037
Two	8,528	—	3,027	—	5,280	5,958
Three or more	7,282	—	3,855	—	4,335	5,038
Socioeconomic status						
Lowest quartile	7,186	9,458	3,588	—	3,978	5,028
Middle quartiles	7,988	12,619	3,346	6,276	4,831	7,254
Highest quartile	7,480	11,340	4,744	—	4,633	8,307
Race–ethnicity of student						
American Indian/Alaskan Native	—	—	—	—	—	—
Asian/Pacific Islander	10,669	13,044	—	—	—	10,078
Black, non-Hispanic	7,894	10,928	3,459	—	4,850	6,963
Hispanic	6,456	10,823	—	—	4,571	6,211
White, non-Hispanic	7,576	11,884	3,679	6,882	4,567	7,335
Dependency status in 1989–90						
Dependent	7,644	11,730	3,701	6,314	4,844	7,811
Independent	8,512	12,393	3,722	—	4,311	5,425
Income and dependency status in 1989–90						
Dependent						
Less than \$20,000	7,368	12,168	3,624	—	4,377	7,029
\$20,000–39,999	8,073	12,098	3,081	—	4,700	7,969
\$40,000–59,999	7,800	11,633	4,455	—	6,112	8,509
\$60,000 or more	6,237	10,684	—	—	—	7,826
Independent						
Less than \$10,000	8,928	—	2,893	—	4,201	5,310
\$10,000–19,999	—	—	—	—	4,298	5,947
\$20,000 or more	—	—	—	—	4,722	4,880

**Table 15.7—Average amount borrowed by 1989–90 beginning postsecondary students who ever borrowed from any source as of spring 1994 according to level and control of last institution, by selected demographic and institutional characteristics—Continued**

	Level and control of last institution				Total amount borrowed for undergraduate education	
	Public 4-year	Private, not-for-profit 4-year	Public less-than-4-year	Private, not-for-profit less-than-4-year		
<b>Total costs in 1989–90</b>						
Less than \$4,000	6,850	—	3,435	—	4,543	5,832
\$4,000–7,999	7,759	9,294	3,422	—	3,936	6,614
\$8,000–11,999	7,670	11,462	3,759	—	4,753	7,380
\$12,000 or more	10,126	13,614	4,804	—	5,136	9,801
<b>Academic year of last enrollment</b>						
1989–90	—	—	—	—	3,990	3,487
1990–91	—	—	3,049	—	4,241	4,061
1991–92	6,468	9,657	3,195	—	5,453	5,368
1992–93	8,114	12,662	—	—	—	9,882
1993–94	8,128	11,871	4,476	—	5,970	8,289
<b>Persistence and attainment as of spring 1994</b>						
Attained degree	8,449	12,671	4,231	7,973	4,955	8,319
No degree, enrolled	8,184	11,002	4,417	—	—	8,174
No degree, not enrolled	4,770	7,429	3,025	—	3,677	4,276
<b>Highest degree attained</b>						
None	6,484	8,909	3,293	—	3,831	5,520
Certificate	—	—	2,913	7,717	4,436	4,301
Associate's degree	7,153	—	4,342	—	7,277	6,541
Bachelor's degree	8,929	12,814	—	—	—	10,584

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Table 15.8a—Percentage of 1989–90 beginning postsecondary students who owe on postsecondary loans as of spring 1994 according to overall persistence and attainment, by selected demographic and institutional characteristics**

	Total who owe on postsecondary loans	Overall persistence and attainment	
		Attained or still enrolled	No degree, no longer enrolled
Total	29.7	36.3	18.0
Gender			
Male	28.3	35.7	16.5
Female	30.9	36.7	19.4
Age when began at first institution			
18 years or younger	32.9	37.1	21.0
19 years	29.9	38.0	19.1
20–29 years	27.5	36.0	19.2
30 years or older	15.1	25.6	8.4
Number of risk factors when began at first institution*			
None	34.7	36.9	26.9
One	29.8	36.4	17.5
Two	33.6	46.5	18.0
Three or more	20.0	29.7	12.7
Socioeconomic status			
Lowest quartile	26.0	38.2	15.4
Middle quartiles	34.5	42.8	21.4
Highest quartile	25.5	29.4	13.9
Race–ethnicity of student			
American Indian/Alaskan Native	—	—	—
Asian/Pacific Islander	27.8	31.7	—
Black, non-Hispanic	34.2	44.4	21.6
Hispanic	30.0	36.3	17.0
White, non-Hispanic	29.1	35.5	17.7
Parental education			
Less than high school diploma	26.0	33.3	17.7
High school diploma	33.1	43.8	18.9
Some postsecondary	32.9	38.1	23.1
Bachelor's or higher	27.8	30.9	16.8
Dependency status in 1989–90			
Dependent	32.5	37.4	20.5
Independent	22.2	31.5	14.4
Income and dependency status in 1989–90			
Dependent			
Less than \$20,000	43.5	51.5	28.9
\$20,000–39,999	38.2	45.6	22.6
\$40,000–59,999	29.5	35.0	15.4
\$60,000 or more	16.6	18.4	8.6
Independent			
Less than \$10,000	27.6	33.0	21.6
\$10,000–19,999	26.5	38.3	16.9
\$20,000 or more	12.2	22.7	6.1

**Table 15.8a—Percentage of 1989–90 beginning postsecondary students who owe on postsecondary loans as of spring 1994 according to overall persistence and attainment, by selected demographic and institutional characteristics—Continued**

	Total who owe on postsecondary loans	Overall persistence and attainment	
		Attained or still enrolled	No degree, no longer enrolled
<b>Total costs in 1989–90</b>			
Less than \$4,000	15.4	22.2	7.5
\$4,000–7,999	32.8	35.9	26.4
\$8,000–11,999	42.6	49.5	27.0
\$12,000 or more	49.3	51.7	40.5
<b>Level and control of last institution</b>			
4-year			
Public	35.1	37.0	28.3
Private, not-for-profit	48.1	50.6	36.3
Private, for-profit	—	—	—
2-year			
Public	10.5	14.9	7.4
Private, not-for-profit	38.4	42.0	26.9
Private, for-profit	58.7	66.6	50.0
Less-than-2-year			
Public	16.1	15.3	17.1
Private, not-for-profit	18.8	—	—
Private, for-profit	50.8	55.0	39.6
<b>Level of last institution</b>			
4-year	38.8	41.0	30.0
2-year	15.8	21.9	11.0
Less-than-2-year	42.7	47.3	32.4
<b>Control of last institution</b>			
Public	22.3	28.7	12.9
Private, not-for-profit	46.9	49.6	34.8
Private, for-profit	52.9	57.6	43.7
<b>Academic year of last enrollment</b>			
1989–90	14.3	40.2	9.7
1990–91	25.5	38.3	15.2
1991–92	28.3	36.6	21.3
1992–93	38.4	38.5	37.5
1993–94	34.5	34.9	32.0
<b>Highest degree attained</b>			
None	20.4	27.4	18.0
Certificate	36.3	36.3	†
Associate's degree	32.0	32.0	†
Bachelor's degree	42.0	42.0	†

—Too few cases for a reliable estimate.

†Not applicable.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.8b—Average amount owed on postsecondary loans as of spring 1994 by 1989–90 beginning postsecondary students according to overall persistence and attainments of spring 1994, by selected demographic and institutional characteristics**

	Average amount owed on postsecondary loans in 1994	Overall persistence and attainment	
		Attained or still enrolled	No degree, no longer enrolled
Total	\$ 6,887	\$ 7,745	\$ 3,804
Gender			
Male	7,577	8,550	4,221
Female	6,366	7,147	3,471
Age when began at first institution			
18 years or younger	7,798	8,439	4,559
19 years	5,673	6,794	2,706
20–29 years	4,808	5,589	3,401
30 years or older	4,300	5,263	2,447
Number of risk factors when began at first institution			
None	8,032	8,762	4,352
One	6,997	7,693	4,326
Two	5,555	6,188	3,580
Three or more	4,271	5,109	2,812
Socioeconomic status			
Lowest quartile	4,577	4,936	3,803
Middle quartiles	6,690	7,732	3,442
Highest quartile	8,132	8,659	4,825
Race-ethnicity of student			
American Indian/Alaskan Native	—	—	—
Asian/Pacific Islander	10,074	10,185	—
Black, non-Hispanic	6,557	7,712	3,631
Hispanic	5,300	5,698	3,546
White, non-Hispanic	6,928	7,820	3,747
Parental education			
Less than high school diploma	4,845	5,834	2,730
High school diploma	6,184	6,924	3,896
Some postsecondary	6,792	7,804	3,689
Bachelor's or higher	8,597	9,219	4,565
Dependency status in 1989–90			
Dependent	7,424	8,165	4,101
Independent	4,865	5,767	3,219
Income and dependency status in 1989–90			
Dependent			
Less than \$20,000	6,607	7,519	3,603
\$20,000–39,999	7,499	8,277	4,210
\$40,000–59,999	8,083	8,681	4,552
\$60,000 or more	7,953	8,258	—
Independent			
Less than \$10,000	4,776	5,675	3,247
\$10,000–19,999	5,353	6,339	3,515
\$20,000 or more	4,313	5,111	—

**Table 15.8b—Average amount owed on postsecondary loans as of spring 1994 by 1989–90 beginning postsecondary students according to overall persistence and attainment, by selected demographic and institutional characteristics—Continued**

	Average amount owed on postsecondary loans in 1994	Overall persistence and attainment	
		Attained or still enrolled	No degree, no longer enrolled
Total costs in 1989–90			
Less than \$4,000	5,699	6,641	2,431
\$4,000–7,999	6,322	7,133	3,999
\$8,000–11,999	6,932	7,556	4,324
\$12,000 or more	8,761	9,668	4,396
Level and control of last institution			
4-year			
Public	7,507	8,147	4,434
Private, not-for-profit	11,337	11,980	7,021
Private, for-profit	—	—	—
2-year			
Public	3,229	3,657	2,612
Private, not-for-profit	5,820	6,602	—
Private, for-profit	4,234	4,729	3,517
Less-than-2-year			
Public	—	—	—
Private, not-for-profit	—	—	—
Private, for-profit	2,950	3,226	1,923
Level of last institution			
4-year	8,860	9,545	5,183
2-year	3,741	4,273	2,921
Less-than-2-year	2,915	3,194	1,996
Control of last institution			
Public	6,399	7,250	3,612
Private, not-for-profit	10,970	11,656	6,519
Private, for-profit	3,472	3,750	2,762
Academic year of last enrollment			
1989–90	2,312	2,573	2,118
1990–91	2,854	3,031	2,493
1991–92	4,710	5,409	3,712
1992–93	9,289	9,996	5,681
1993–94	7,995	8,357	5,054
Highest degree attained			
None	5,090	7,462	3,804
Certificate	3,250	3,250	†
Associate's degree	5,630	5,630	†
Bachelor's degree	10,355	10,355	†

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.9a—Percentage of 1989–90 beginning postsecondary students who borrowed for postsecondary education according to loan repayment arrangements as of spring 1994, by selected demographic and institutional characteristics**

	Currently repaying educational loans	Receiving help making payments
Total	51.6	16.9
Gender		
Male	49.8	17.1
Female	52.9	16.8
Age when began at first institution		
18 years or younger	46.4	20.2
19 years	55.6	19.1
20–29 years	68.6	10.0
30 years or older	71.6	8.7
Number of risk factors when began at first institution*		
None	46.7	21.3
One	47.3	19.0
Two	62.7	13.2
Three or more	69.0	9.1
Socioeconomic status		
Lowest quartile	61.3	7.1
Middle quartiles	54.3	15.8
Highest quartile	43.3	24.9
Race–ethnicity of student		
American Indian/Alaskan Native	—	—
Asian/Pacific Islander	37.5	26.5
Black, non-Hispanic	44.7	12.4
Hispanic	56.2	12.4
White, non-Hispanic	52.8	17.8
Dependency status in 1989–90		
Dependent	46.8	20.0
Independent	70.3	8.7
Income and dependency status in 1989–90		
Dependent		
Less than \$20,000	49.0	13.0
\$20,000–39,999	46.4	21.4
\$40,000–59,999	48.7	21.4
\$60,000 or more	39.6	32.5
Independent		
Less than \$10,000	65.9	8.6
\$10,000–19,999	76.2	5.9
\$20,000 or more	73.4	14.1
Total costs in 1989–90		
Less than \$4,000	40.6	16.1
\$4,000–7,999	45.0	18.1
\$8,000–11,999	56.7	17.2
\$12,000 or more	68.4	16.3

**Table 15.9a—Percentage of 1989–90 beginning postsecondary students who borrowed for postsecondary education according to loan repayment arrangements as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Currently repaying educational loans	Receiving help making payments
<b>Amount borrowed for postsecondary education</b>		
Less than \$5,000	56.7	14.9
\$5,000–9,999	54.2	16.4
\$10,000–14,999	45.9	17.0
\$15,000–19,999	38.2	22.3
\$20,000 or more	36.5	37.5
<b>Amount owed on postsecondary loans</b>		
Less than \$5,000	57.3	16.7
\$5,000–9,999	51.4	16.3
\$10,000–14,999	41.5	14.3
\$15,000–19,999	34.2	19.2
\$20,000 or more	29.8	35.8
<b>Level and control of last institution</b>		
4-year		
Public	34.3	22.4
Private, not-for-profit	50.4	19.3
Private, for-profit	—	—
2-year		
Public	69.0	12.4
Private, not-for-profit	51.6	4.3
Private, for-profit	76.8	15.3
Less-than-2-year		
Public	—	—
Private, not-for-profit	—	—
Private, for-profit	81.8	10.2
<b>Level of last institution</b>		
4-year	40.0	21.7
2-year	70.6	13.1
Less-than-2-year	81.9	12.1
<b>Control of last institution</b>		
Public	43.0	19.3
Private, not-for-profit	50.7	18.4
Private, for-profit	78.8	13.3
<b>Academic year of last enrollment</b>		
1989–90	78.6	10.1
1990–91	91.4	16.7
1991–92	76.0	12.0
1992–93	70.8	15.2
1993–94	28.8	25.1
<b>Persistence and attainment as of spring 1994</b>		
Attained degree	52.1	17.7
No degree, enrolled	25.5	29.1
No degree, not enrolled	69.1	13.1

**Table 15.9a—Percentage of 1989–90 beginning postsecondary students who borrowed for postsecondary education according to loan repayment arrangements as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Currently repaying educational loans	Receiving help making payments
Highest degree attained		
None	52.3	16.1
Certificate	80.2	10.8
Associate's degree	53.1	20.6
Bachelor's degree	41.1	21.7

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 15.9b—Percentage distribution of 1989–90 beginning postsecondary students who borrowed for postsecondary education and are currently repaying loans according to average monthly loan payment as of spring 1994, by selected demographic and institutional characteristics**

	Less than \$50	\$50–99	\$100–149	\$150–199	\$200 or more
Total	8.1	54.5	20.3	8.9	8.3
Gender					
Male	7.9	47.7	24.1	11.2	9.1
Female	8.2	59.4	17.6	7.2	7.6
Age when began at first institution					
18 years or younger	9.4	47.3	23.6	8.0	11.7
19 years	7.3	70.3	8.9	8.1	5.4
20–29 years	6.3	58.2	23.3	9.4	2.8
30 years or older	7.2	72.9	9.4	8.2	2.3
Number of risk factors when began at first institution*					
None	7.8	49.2	21.0	9.3	12.8
One	8.5	54.4	22.8	6.0	8.4
Two	12.5	57.0	20.5	7.6	2.4
Three or more	7.2	63.0	17.9	8.9	3.1
Socioeconomic status					
Lowest quartile	4.3	67.6	16.7	7.7	3.7
Middle quartiles	10.1	52.4	21.3	9.5	6.8
Highest quartile	6.4	50.5	20.5	8.4	14.1
Race-ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	9.6	33.0	19.2	11.0	27.2
Black, non-Hispanic	15.0	56.8	10.3	11.6	6.3
Hispanic	3.5	56.2	26.5	10.8	2.9
White, non-Hispanic	7.8	55.2	20.5	8.3	8.2
Dependency status in 1989–90					
Dependent	8.3	50.8	21.9	9.2	9.9
Independent	7.6	64.6	16.3	8.3	3.3



Table 15.9b—Percentage distribution of 1989-90 beginning postsecondary students who borrowed for postsecondary education and are currently repaying loans, according to average monthly loan payment as of spring 1994, by selected demographic and institutional characteristics—Continued

	Less than: \$50	\$50-99	\$100-149	\$150-199	\$200 or more
<b>Income and dependency status in 1989-90</b>					
Dependent					
Less than \$20,000	7.1	58.3	19.6	8.1	7.0
\$20,000-39,999	10.0	49.3	21.1	11.9	7.7
\$40,000-59,999	6.3	44.0	26.1	7.2	16.4
\$60,000 or more	10.2	49.3	22.5	6.3	11.7
Independent					
Less than \$10,000	10.2	56.0	21.7	8.9	3.2
\$10,000-19,999	3.0	75.5	10.8	6.4	4.2
\$20,000 or more	9.1	68.0	11.0	10.3	1.6
<b>Total costs in 1989-90</b>					
Less than \$4,000	11.0	48.8	26.4	9.6	4.3
\$4,000-7,999	8.2	63.0	18.1	5.8	4.8
\$8,000-11,999	7.0	57.3	20.3	6.2	9.1
\$12,000 or more	7.2	46.0	19.5	13.8	13.5
<b>Amount borrowed for postsecondary education</b>					
Less than \$5,000	9.6	74.8	9.4	3.8	2.4
\$5,000-9,999	8.0	49.2	34.1	6.0	2.7
\$10,000-14,999	4.7	25.3	25.8	21.1	23.2
\$15,000-19,999	5.5	23.2	20.8	22.0	28.5
\$20,000 or more	4.3	9.3	17.3	30.9	38.2
<b>Amount owed on postsecondary loans</b>					
Less than \$5,000	8.8	67.9	14.8	5.5	3.1
\$5,000-9,999	7.7	39.5	37.3	5.5	9.9
\$10,000-14,999	4.9	25.1	22.1	27.9	20.0
\$15,000-19,999	4.6	15.7	16.5	28.1	35.1
\$20,000 or more	6.9	9.8	13.9	25.8	43.5
<b>Level and control of last institution</b>					
4 year					
Public	9.1	50.3	24.0	8.3	8.3
Private, not-for-profit	8.2	33.1	24.6	14.4	19.6
Private, for-profit	—	—	—	—	—
2-year					
Public	10.1	74.4	9.2	3.0	3.4
Private, not-for-profit	0	55.3	10.2	2.6	31.9
Private, for-profit	8.5	55.8	25.4	8.1	2.3

**Table 15.9b—Percentage distribution of 1989–90 beginning postsecondary students who borrowed for postsecondary education and are currently repaying loans according to average monthly loan payment as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Less than \$50	\$50–99	\$100–149	\$150–199	\$200 or more
Less-than-2-year					
Public	—	—	—	—	—
Private, not-for-profit	—	—	—	—	—
Private, for-profit	5.2	67.6	21.3	4.9	1.0
Level of last institution					
4-year	8.7	42.9	24.2	10.9	13.4
2-year	9.0	66.4	15.4	4.9	4.2
Less-than-2-year	6.5	65.8	19.5	7.1	1.1
Control of last institution					
Public	19.0	58.9	17.7	7.2	6.2
Private, not-for-profit	7.6	34.7	23.7	13.7	20.3
Private, for-profit	6.4	63.3	22.6	6.0	1.7
Academic year of last enrollment					
1989–90	12.3	73.2	9.6	3.8	1.0
1990–91	8.9	66.6	19.8	4.1	0.7
1991–92	1.4	56.8	25.6	5.9	10.0
1992–93	2.8	35.7	30.1	13.3	18.1
1993–94	15.4	54.9	14.0	9.4	6.2
Persistence and attainment as of spring 1994					
Attained degree	5.0	51.0	23.3	10.0	10.6
No degree, enrolled	37.7	47.1	8.5	2.9	3.8
No degree, not enrolled	9.6	63.6	16.9	5.5	4.3
Highest degree attained					
None	14.7	60.6	15.4	5.1	4.3
Certificate	5.1	68.7	17.3	8.3	0.5
Associate's degree	6.2	63.4	15.8	4.7	10.0
Bachelor's degree	4.6	32.6	30.8	13.3	18.7

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## **Section 16**

### **Marriage, Family Formation, Civic Participation, and Further Education Activities**

## Section 16

### Marriage, Family Formation, Civic Participation, and Further Education

#### *Marriage*

- More than one-quarter (26 percent) of students who began their postsecondary education in 1989–90 were married in spring of 1994. Of these students, more than half (56 percent) had been married before entering postsecondary education, 20 percent had done so while enrolled; and 24 percent had married after they left postsecondary education. (tables 16.1a–16.1b)
- Women were more likely than men to report being married in spring 1994 (31 percent compared with 20 percent), as well as to be separated, divorced, or widowed (9 percent compared with 4 percent). (table 16.1a)
- Older students and those with lower socioeconomic status (SES) were more likely to report being married in spring 1994 and to have married before postsecondary education than their younger and higher socioeconomic counterparts. (tables 16.1a–16.1b)
- Bachelor's degree attainees were more likely to report being never married in spring 1994 (88 percent) than their counterparts who had not obtained a degree (61 percent) or those who had obtained an associate's degree (72 percent) or a certificate (48 percent). (table 16.1a)

#### *Family Formation*

- More than one-quarter (27 percent) of students reported having children by the spring of 1994. Of these more than half (57 percent) had their first child before entering postsecondary education, 15 percent had them while enrolled, and 28 percent after their last term. (tables 16.2a–16.2b)
- Female, older, and lower SES students were more likely to report having children, and more likely to report having had their first child before entering postsecondary education. (tables 16.2a–16.2b)
- Reflecting the different age distributions within institutional sectors, an inverse relationship existed between level of first institution and the likelihood of having children in 1994. Those who had enrolled in less-than-2-year institution in 1989–90 were five times as likely as those who began in 4-year institutions (59 percent compared with 11 percent) to have children and were also more likely to have had their first child before entering postsecondary education. (tables 16.2a–16.2b)

### ***Civic Participation***

- Nearly one-third of all 1989–90 beginning postsecondary students reported having participated in volunteer/community service in the past 2 years (32 percent), and a similar proportion reported having done so in the spring of 1994 (31 percent). (table 16.3)
- The types of volunteer/community organizations students most frequently reported working with in the past 2 years were community or social action groups (26 percent), church groups (21 percent), and youth organizations (21 percent). (table 16.3)
- Those who had attained a bachelor's degree were more likely to report participating in volunteer/community service in the past 2 years (48 percent) than their counterparts who did not obtain a degree (26 percent) or had attained an associate's degree (29 percent) or a certificate (26 percent). (table 16.3)
- Three-quarters (75 percent) of 1989–90 beginning postsecondary students reported being registered to vote as of spring 1994; 74 percent reported voting in a local, state, or national election; and 71 percent voted in the 1992 presidential election. (tables 16.4a–16.4b)

### ***Graduate School***

- Half (51 percent) of all students who had attained a bachelor's degree by June 1993 reported that they intended to apply or had applied to graduate school; 11 percent had been accepted and enrolled as of spring 1994. (table 16.5)
- A positive relationship existed between the likelihood of attending graduate school and SES, with 13 percent of bachelor's degree holders from the highest quartile attending, compared with 9 percent of those from the middle and 5 percent of those from the lowest quartile. (table 16.5)
- Twice as many bachelor's degree attainers who started in 4-year institutions went on to attend graduate school (12 percent) than those who started in 2-year institutions (6 percent). (table 16.5)

### ***Licensing Examinations***

- Fourteen percent of all 1989–90 beginning postsecondary students had taken licensing exams as of the spring 1994. Among the most common exams reported were teachers (21 percent) and medical licensing exams (22 percent). (table 16.6)
- Although men and women were just about as likely to take licensing exams (13 percent compared with 15 percent), they differed in the type of licensing exams taken. Specifically, women were more likely than men to report having taken teachers (29 percent compared with 11 percent), nursing (15 percent compared with 2 percent), medical (27 percent compared with 15 percent), and cosmetology (13 percent compared with 3 percent) licensing exams. On the other hand, men were more likely than women to take business (18 percent compared with 7 percent) and engineering exams (6 percent compared with 0.4 percent). (table 16.6)

**Table 16.1a—Percentage distribution of 1989–90 beginning postsecondary students according to marital status in spring 1994, by selected demographic and institutional characteristics**

	Never married	Married	Divorced, widowed, separated
Total	67.5	26.0	6.4
Gender			
Male	76.7	19.7	3.6
Female	59.7	31.4	8.9
Age in 1994			
24 years or younger	81.5	16.8	1.8
25–29 years	50.1	39.4	10.5
30–34 years	19.1	56.8	24.0
35 years or older	5.7	65.7	28.6
Number of risk factors when began at first institution*			
None	84.2	14.6	1.2
One	80.6	18.3	1.2
Two	63.7	27.2	9.1
Three or more	28.7	52.3	19.0
Socioeconomic status			
Lowest quartile	40.2	38.9	20.9
Middle quartiles	62.1	31.1	6.8
Highest quartile	83.6	15.6	0.9
Race–ethnicity of student			
American Indian/Alaskan Native	74.7	13.8	11.5
Asian/Pacific Islander	79.5	20.1	0.4
Black, non-Hispanic	80.6	12.7	6.7
Hispanic	75.7	19.4	4.9
White, non-Hispanic	64.5	28.7	6.8
Parental education			
Less than high school diploma	40.6	46.6	12.8
High school diploma	60.5	31.7	7.8
Some postsecondary	75.6	20.4	4.0
Bachelor's or higher	81.8	16.3	1.9
Level and control of first institution			
4-year			
Public	80.6	17.3	2.1
Private, not-for-profit	83.8	14.5	1.7
Private, for-profit	—	—	—
2-year			
Public	60.9	31.4	7.7
Private, not-for-profit	71.3	26.7	2.1
Private, for-profit	46.1	40.6	13.3
Less-than-2-year			
Public	35.1	44.2	20.7
Private, not-for-profit	53.2	37.8	9.1
Private, for-profit	39.5	40.2	20.3

**Table 16.1a—Percentage distribution of 1989–90 beginning postsecondary students according to marital status in spring 1994, by selected demographic and institutional characteristics—Continued**

	Never married	Married	Divorced, widowed, separated
Level of first institution			
4-year	81.6	16.4	2.0
2-year	60.2	31.9	7.9
Less-than-2-year	39.0	41.0	20.0
Control of first institution			
Public	67.9	26.3	5.8
Private, not-for-profit	81.8	16.3	1.9
Private, for-profit	42.0	40.3	17.7
Persistence and attainment as of spring 1994			
Attained degree	74.3	21.4	4.3
No degree, enrolled	78.6	16.8	4.6
No degree, not enrolled	54.1	35.8	10.1
Highest degree attained			
None	60.7	30.8	8.6
Certificate	48.4	39.8	11.8
Associate's degree	71.5	25.3	3.2
Bachelor's degree	88.3	10.7	1.0

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.1b—Percentage distribution of ever married 1989–90 beginning postsecondary students as of spring 1994 according to timing of marriage, by selected demographic and institutional characteristics**

	Before postsecondary education	While enrolled in postsecondary education	After last term
Total	55.7	19.9	24.4
Gender			
Male	53.5	19.4	27.1
Female	56.8	20.2	23.0
Age in 1994			
24 years or younger	9.7	41.3	49.0
25–29 years	59.2	17.3	23.5
30–34 years	85.3	2.7	12.0
35 years or older	99.6	0	0.3
Number of risk factors when began at first institution			
None	4.8	48.7	46.5
One	7.2	35.1	57.7
Two	46.2	23.4	30.5
Three or more	83.5	6.2	10.3
Socioeconomic status			
Lowest quartile	85.7	4.8	9.6
Middle quartiles	56.4	21.2	22.5
Highest quartile	10.8	38.3	50.8
Race–ethnicity of student			
American Indian/Alaskan Native	—	—	—
Asian/Pacific Islander	59.8	17.5	22.7
Black, non-Hispanic	61.9	13.1	25.1
Hispanic	61.2	22.6	16.2
White, non-Hispanic	55.0	20.4	24.6
Marital status in 1994			
Never married	†	†	†
Married	44.2	24.5	31.3
Divorced, widowed, separated	84.1	9.4	6.5
Parental education			
Less than high school diploma	77.7	11.1	11.3
High school diploma	53.0	16.8	30.1
Some postsecondary	45.5	26.6	27.9
Bachelor's or higher	28.7	38.1	33.2
Level and control of first institution			
4-year			
Public	24.3	44.8	30.9
Private, not-for-profit	28.7	43.6	27.8
Private, for-profit	—	—	—
2-year			
Public	62.7	13.5	23.8
Private, not-for-profit	23.2	38.0	38.8
Private, for-profit	52.6	15.6	31.8
Less-than-2-year			
Public	66.9	11.9	21.2
Private, not-for-profit	—	—	—
Private, for-profit	64.7	7.5	27.8



**Table 16.1b—Percentage distribution of ever married 1989–90 beginning postsecondary students as of spring 1994 according to timing of marriage, by selected demographic and institutional characteristics—Continued**

	Before postsecondary education	While enrolled in postsecondary education	After last term
Level of first institution			
4-year	25.6	44.4	30.0
2-year	60.7	14.4	25.0
Less-than-2-year	65.5	8.7	25.8
Control of first institution			
Public	54.0	20.7	25.3
Private, not-for-profit	30.3	41.0	28.7
Private, for-profit	60.5	10.3	29.2
Persistence and attainment as of spring 1994			
Attained degree	47.1	27.3	25.6
No degree, enrolled	43.8	56.2	0
No degree, not enrolled	59.3	9.5	31.2
Highest degree attained			
None	57.1	16.2	26.7
Certificate	64.0	14.1	22.0
Associate's degree	36.9	30.8	32.4
Bachelor's degree	20.2	53.2	26.6

—Too few cases for a reliable estimate.

†Not applicable.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

Table 16.2a—Percentage distribution of 1989–90 beginning postsecondary students according to the number of children in spring 1994, by selected demographic and institutional characteristics

	None	One or more
Total	73.1	26.9
Gender		
Male	81.2	18.8
Female	66.2	33.8
Age in 1994		
24 years or younger	87.2	12.8
25–29 years	55.6	44.4
30–34 years	27.3	72.7
35 years or older	10.8	89.2
Number of risk factors when began at first institution*		
None	90.5	9.5
One	87.2	12.8
Two	72.7	27.3
Three or more	31.4	68.6
Socioeconomic status		
Lowest quartile	38.7	61.3
Middle quartiles	68.4	31.6
Highest quartile	91.1	8.9
Race–ethnicity of student		
American Indian/Alaskan Native	81.7	18.3
Asian/Pacific Islander	84.6	15.4
Black, non-Hispanic	60.6	39.4
Hispanic	72.0	28.0
White, non-Hispanic	74.0	26.0
Marital status in 1994		
Never married	92.7	7.3
Married	36.0	64.0
Divorced, widowed, separated	19.8	80.2
Parental education		
Less than high school diploma	45.4	54.6
High school diploma	67.4	32.6
Some postsecondary	78.7	21.3
Bachelor's or higher	87.9	12.1
Level and control of first institution		
4-year		
Public	88.1	11.9
Private, not-for-profit	91.2	8.8
Private, for-profit	—	—
2-year		
Public	65.2	34.8
Private, not-for-profit	78.5	21.5
Private, for-profit	53.3	46.7
Less-than-2-year		
Public	42.6	57.4
Private, not-for-profit	52.1	47.9
Private, for-profit	40.4	59.6

**Table 16.2a—Percentage distribution of 1989–90 beginning postsecondary students according to the number of children in spring 1994, by selected demographic and institutional characteristics—Continued**

	None	One or more
<b>Level of first institution</b>		
4-year	89.1	10.9
2-year	64.8	35.2
Less-than-2-year	41.3	58.7
<b>Control of first institution</b>		
Public	73.5	26.5
Private, not-for-profit	89.1	10.9
Private, for-profit	45.3	54.7
<b>Persistence and attainment as of spring 1994</b>		
Attained degree	80.8	19.2
No degree, enrolled	83.9	16.1
No degree, not enrolled	58.6	41.4
<b>Highest degree attained</b>		
None	65.4	34.6
Certificate	51.6	48.4
Associate's degree	80.9	19.1
Bachelor's degree	95.2	4.8

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.2b—Percentage distribution of 1989–90 beginning postsecondary students who had children in spring 1994 according to the timing of first child, by selected demographic and institutional characteristics**

	Before postsecondary education	While enrolled in postsecondary education	After last term
Total	57.3	15.2	27.5
Gender			
Male	47.6	18.8	33.6
Female	61.9	13.4	24.7
Age in 1994			
24 years or younger	11.5	30.0	58.4
25–29 years	54.5	18.0	27.5
30–34 years	82.2	6.4	11.4
35 years or older	98.3	0.1	1.6
Number of risk factors when began at first institution*			
None	3.7	36.7	59.6
One	6.1	26.4	67.5
Two	44.0	21.6	34.5
Three or more	79.8	7.1	13.1
Socioeconomic status			
Lowest quartile	78.1	5.9	15.9
Middle quartiles	54.7	18.8	26.5
Highest quartile	15.1	23.9	61.0
Race–ethnicity of student			
American Indian/Alaskan Native	—	—	—
Asian/Pacific Islander	49.7	24.6	25.7
Black, non-Hispanic	52.2	21.3	26.4
Hispanic	48.5	27.6	23.9
White, non-Hispanic	59.5	12.6	27.9
Marital status in 1994			
Never married	33.2	31.6	35.2
Married	55.2	13.9	30.9
Divorced, widowed, separated	84.2	7.2	8.6
Parental education			
Less than high school diploma	72.9	6.0	21.1
High school diploma	53.5	14.2	32.3
Some postsecondary	46.6	21.5	31.9
Bachelor's or higher	33.2	32.6	34.2
Level and control of first institution			
4-year			
Public	30.3	35.7	34.0
Private, not-for-profit	36.3	33.1	30.6
Private, for-profit	—	—	—
2-year			
Public	62.3	12.4	25.3
Private, not-for-profit	33.1	27.0	39.9
Private, for-profit	57.4	7.3	35.3

**Table 16.2b—Percentage distribution of 1989–90 beginning postsecondary students who had children in spring 1994 according to the timing of first child, by selected demographic and institutional characteristics—Continued**

	Before postsecondary education	While enrolled in postsecondary education	After last term
Less-than-2-year			
Public	64.8	13.9	21.3
Private, not-for-profit	81.3	2.0	16.7
Private, for-profit	64.1	5.2	30.7
Level of first institution			
4-year	31.9	35.0	33.1
2-year	61.2	12.2	26.6
Less-than-2-year	64.8	6.9	28.3
Control of first institution			
Public	56.9	16.5	26.6
Private, not-for-profit	39.7	29.0	31.3
Private, for-profit	62.0	5.8	32.2
Persistence and attainment as of spring 1994			
Attained degree	58.7	18.6	22.7
No degree, enrolled	45.3	54.3	0.4
No degree, not enrolled	57.2	7.3	35.5
Highest degree attained			
None	55.8	13.1	31.1
Certificate	69.5	8.3	22.2
Associate's degree	47.5	23.9	28.6
Bachelor's degree	24.9	59.9	15.2

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.3—Percentage of 1989–90 beginning postsecondary students participating in volunteer/community service activities, and type of volunteer/community service organizations involved with within the past 2 years, by selected demographic and institutional characteristics**

	Participated in any volunteer/community service in last 2 years	Currently doing any volunteer work in 1994	Type of volunteer/community service organization					
			Service organization	Community center/social action/neighbor group	Church/church-related group	Hospital/nursing home	Youth organization	Educational organization
Total	32.4	31.2	12.6	26.3	20.9	11.7	20.9	10.2
Gender								
Male	30.1	28.2	13.1	23.1	18.8	9.2	23.8	7.9
Female	34.4	33.4	12.2	28.7	22.5	13.6	18.8	11.9
Age in 1994								
24 years or younger	34.0	27.1	13.5	26.7	18.1	12.9	20.6	9.6
25–29 years	20.2	37.1	14.2	27.6	22.2	12.8	20.9	5.7
30–34 years	27.1	57.8	13.3	25.4	39.1	13.1	31.7	20.5
35 years or older	36.8	43.6	3.6	20.8	35.5	5.6	23.2	12.0
Number of risk factors when began at first institution*								
None	35.9	26.0	13.5	27.5	19.2	12.4	18.2	9.4
One	30.8	27.4	15.8	26.4	14.7	18.3	19.7	10.7
Two	28.4	41.3	11.0	23.3	26.3	6.7	26.0	3.4
Three or more	28.8	40.8	8.9	23.7	29.6	7.8	28.0	13.4
Socioeconomic status								
Lowest quartile	26.1	47.9	10.6	22.3	26.2	10.1	25.9	10.4
Middle quartiles	28.1	31.3	10.6	26.1	24.4	10.6	18.7	9.9
Highest quartile	39.7	27.1	14.7	27.4	16.8	13.1	21.5	10.4
Race-ethnicity of student								
American Indian/Alaskan Native	40.6	—	—	—	—	—	—	—
Asian/Pacific Islander	34.1	48.0	8.2	24.1	14.7	10.0	12.5	25.0
Black, non-Hispanic	27.1	36.3	6.5	27.6	28.4	9.1	29.3	12.3
Hispanic	28.4	32.8	12.4	19.7	20.7	6.4	14.2	12.0
White, non-Hispanic	33.3	30.0	13.5	27.1	20.5	12.6	20.8	9.2
Marital status in 1994								
Never married	33.5	27.5	13.7	27.0	16.5	13.1	19.2	10.4
Married	30.5	37.3	10.3	23.8	33.7	6.8	24.3	9.6
Divorced, widowed, separated	29.6	46.3	9.8	30.2	15.9	17.5	26.1	7.8

**Table 16.3—Percentage of 1989–90 beginning postsecondary students participating in volunteer/community service activities, and type of volunteer/community service organizations involved within the past 2 years, by selected demographic and institutional characteristics—Continued**

	Participated in any volunteer/community service in last 2 years	Currently doing any volunteer work in 1994	Type of volunteer/community service organization							
			Service organization	Community ctr/social action/neighbor group	Church/church-related group	Hospital/nursing home	Youth organization	Educational organization		
<b>Parental education</b>										
Less than high school diploma	23.3	39.2	11.8	23.7	24.1	8.6	26.7	13.6		
High school diploma	26.4	30.6	12.7	22.4	22.6	13.2	19.5	9.2		
Some postsecondary	31.0	30.6	12.5	28.7	22.6	9.9	20.9	9.2		
Bachelor's or higher	42.4	29.0	13.6	28.7	17.1	13.1	21.9	9.9		
<b>Level and control of first institution</b>										
4-year										
Public	37.4	27.9	16.9	31.5	16.7	12.8	21.3	9.9		
Private, not-for-profit	50.0	26.6	14.0	29.6	19.8	11.0	20.0	8.0		
Private, for-profit	—	—	—	—	—	—	—	—		
2-year										
Public	26.6	36.1	8.3	19.3	24.7	13.5	21.3	11.7		
Private, not-for-profit	34.9	24.8	21.5	20.5	39.8	10.4	12.7	4.4		
Private, for-profit	19.6	28.4	8.2	17.2	17.4	12.4	28.7	10.3		
Less-than-2-year										
Public	10.3	38.6	1.3	15.8	20.5	11.3	22.1	20.4		
Private, not-for-profit	18.4	—	—	—	—	—	—	—		
Private, for-profit	21.0	40.5	7.3	29.7	30.2	3.1	32.2	9.9		
<b>Level of first institution</b>										
4-year	41.5	27.4	15.8	30.8	17.9	12.1	20.8	9.2		
2-year	26.3	35.1	8.9	19.2	25.0	13.3	21.3	11.3		
Less-than-2-year	18.5	39.3	6.3	27.3	29.7	4.0	29.8	10.9		
<b>Control of first institution</b>										
Public	30.3	32.2	12.4	25.1	20.9	13.1	21.3	11.0		
Private, not-for-profit	47.7	26.4	14.5	28.8	21.7	10.9	19.2	7.7		
Private, for-profit	20.5	36.1	7.6	25.2	25.5	6.5	31.0	10.1		
<b>Persistence and attainment as of spring 1994</b>										
-Attained degree	37.9	27.7	12.5	27.1	18.0	12.3	22.7	10.6		
No degree, enrolled	34.1	32.4	12.1	24.7	18.5	11.9	22.7	13.4		
No degree, not enrolled	23.5	37.6	13.7	24.5	30.0	12.0	17.8	6.9		

**Table 16.3—Percentage of 1989–90 beginning postsecondary students participating in volunteer/community service activities, and type of volunteer/community service organizations involved with within the past 2 years, by selected demographic and institutional characteristics—Continued**

	Participated in any volunteer/community service in last 2 years	Currently doing any volunteer work in 1994	Type of volunteer/community service organization						
			Community ctr/social action/neighbor group	Service organization	Church/church-related group	Hospital/nursing home	Youth organization	Educational organization	
Highest degree attained									
None	26.4	35.8	13.1	24.6	26.0	11.9	19.5	9.2	
Certificate	25.7	30.8	11.8	15.6	22.1	11.6	25.5	11.6	
Associate's degree	29.0	26.6	3.3	17.8	19.0	11.9	29.1	5.3	
Bachelor's degree	47.7	27.2	15.1	32.5	16.6	12.5	20.2	11.8	

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

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**Table 16.4a—Percentage distribution of 1989–90 beginning postsecondary students according to current voter registration status in spring 1994, by selected demographic and institutional characteristics**

	Currently registered	Previously registered, but not currently registered	Never registered	Not eligible to register
Total	75.3	8.0	13.8	2.9
Gender				
Male	76.0	8.8	12.1	3.1
Female	74.6	7.3	15.4	2.7
Age in 1994				
24 years or younger	76.9	7.1	13.7	2.3
25–29 years	64.7	10.7	19.5	5.2
30–34 years	71.0	11.7	8.5	8.8
35 years or older	82.2	9.9	5.9	2.0
Number of risk factors when began at first institution				
None	81.0	5.7	11.6	1.7
One	73.8	8.6	14.4	3.3
Two	63.9	10.2	19.8	6.1
Three or more	72.9	10.6	13.0	3.5
Socioeconomic status				
Lowest quartile	65.9	9.9	15.1	9.1
Middle quartiles	74.6	7.6	15.1	2.7
Highest quartile	79.5	7.8	11.9	0.9
Race–ethnicity of student				
American Indian/Alaskan Native	74.8	11.2	11.4	2.7
Asian/Pacific Islander	52.2	8.3	15.6	24.0
Black, non-Hispanic	80.7	4.4	11.9	3.0
Hispanic	60.9	6.8	19.3	12.9
White, non-Hispanic	77.3	8.5	13.5	0.8
Marital status in 1994				
Never married	77.2	7.3	12.6	3.0
Married	74.8	9.3	13.3	2.7
Divorced, widowed, separated	73.4	11.2	14.5	0.9
Parental education				
Less than high school diploma	65.4	10.7	15.9	8.0
High school diploma	71.9	9.2	16.7	2.2
Some postsecondary	79.1	6.2	13.3	1.4
Bachelor's or higher	78.8	7.2	11.0	2.9
Level and control of first institution				
4-year				
Public	80.1	6.9	11.0	2.0
Private, not-for-profit	80.9	6.1	10.5	2.5
Private, for-profit	—	—	—	—
2-year				
Public	74.1	8.5	14.2	3.3
Private, not-for-profit	76.5	5.5	14.3	3.8
Private, for-profit	65.0	8.9	22.8	3.3
Less-than-2-year				
Public	76.0	9.1	12.7	2.2
Private, not-for-profit	70.7	6.9	5.5	17.0
Private, for-profit	62.7	13.8	19.4	4.1

**Table 16.4a—Percentage distribution of 1989–90 beginning postsecondary students according to current voter registration status in spring 1994, by selected demographic and institutional characteristics—Continued**

	Currently registered	Previously registered, but not currently registered	Never registered	Not eligible to register
<b>Level of first institution</b>				
4-year	80.3	6.7	10.9	2.1
2-year	73.5	8.4	14.8	3.3
Less-than-2-year	65.9	12.5	17.5	4.1
<b>Control of first institution</b>				
Public	76.5	7.9	12.9	2.7
Private, not-for-profit	80.2	6.1	10.8	2.9
Private, for-profit	63.6	11.9	20.7	3.8
<b>Persistence and attainment as of spring 1994</b>				
Attained degree	78.0	6.8	12.6	2.6
No degree, enrolled	78.6	4.9	11.9	4.5
No degree, not enrolled	71.3	10.8	15.0	2.9
<b>Highest degree attained</b>				
None	73.2	9.3	14.2	3.3
Certificate	73.5	7.5	15.7	3.2
Associate's degree	75.6	7.0	15.1	2.3
Bachelor's degree	81.3	6.4	9.9	2.4

—Too few cases for a reliable estimate.

\*Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.4b—Percentage of 1989–90 beginning postsecondary students who recently voted, by selected demographic and institutional characteristics**

	Voted in local/state/ national election since 2/92	Voted in 1992 presidential election
Total	74.1	70.6
Gender		
Male	72.5	69.2
Female	75.4	71.9
Age in 1994		
24 years or younger	74.1	70.5
25–29 years	63.9	58.5
30–34 years	70.0	66.4
35 years or older	82.5	81.3
Number of risk factors when began at first institution*		
None	77.1	73.3
One	73.2	68.9
Two	66.0	65.2
Three or more	70.6	67.3
Socioeconomic status		
Lowest quartile	71.3	68.1
Middle quartiles	72.9	69.4
Highest quartile	76.1	72.8
Race–ethnicity of student		
American Indian/Alaskan Native	—	—
Asian/Pacific Islander	65.8	61.5
Black, non-Hispanic	73.9	70.2
Hispanic	66.3	59.0
White, non-Hispanic	75.0	72.1
Marital status in 1994		
Never married	75.6	71.7
Married	71.2	68.5
Divorced, widowed, separated	69.5	68.1
Parental education		
Less than high school diploma	70.2	64.6
High school diploma	68.2	64.6
Some postsecondary	77.1	73.9
Bachelor's or higher	77.1	74.1
Level and control of first institution		
4-year		
Public	79.7	76.1
Private, not-for-profit	79.6	76.0
Private, for profit	—	—
2-year		
Public	70.2	67.4
Private, not-for-profit	72.2	66.9
Private, for-profit	60.3	56.3
Less-than-2-year		
Public	62.5	57.2
Private, not-for-profit	84.9	82.4
Private, for-profit	63.6	57.8

**Table 16.4b—Percentage of 1989–90 beginning postsecondary students who recently voted, by selected demographic and institutional characteristics—Continued**

	Voted in local, state, national election since 2/92	Voted in 1992 presidential election
Level of first institution		
4-year	79.7	76.1
2-year	69.6	66.6
Less-than-2-year	64.3	58.7
Control of first institution		
Public	73.8	70.6
Private, not-for-profit	78.9	75.1
Private, for-profit	62.4	57.2
Persistence and attainment as of spring 1994		
Attained degree	76.9	73.7
No degree, enrolled	79.6	75.1
No degree, not enrolled	66.6	63.1
Highest degree attained		
None	70.1	66.4
Certificate	69.0	66.3
Associate's degree	74.1	71.5
Bachelor's degree	81.7	77.8

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.5—Percentage of 1989–1990 beginning postsecondary students who had attained a bachelor's degree by June 1993 according to graduate school application and attendance, as of spring 1994, by selected demographic and institutional characteristics**

	Applied or intended to apply to graduate school	Attended graduate school
Bachelor's degree attainers by June 1993		
Total	51.4	11.1
Gender		
Male	48.1	11.1
Female	54.0	11.1
Age in 1994		
24 years or younger	51.8	11.3
25–29 years	37.9	4.0
30–34 years	—	—
35 years or older	—	—
Number of risk factors when began at first institution*		
None	50.8	11.6
One	54.5	10.8
Two	53.4	7.3
Three or more	36.3	5.2
Socioeconomic status		
Lowest quartile	47.9	5.3
Middle quartiles	47.1	8.5
Highest quartile	53.8	12.8
Race-ethnicity of student		
American Indian/Alaskan Native	—	—
Asian/Pacific Islander	71.3	16.3
Black, non-Hispanic	68.1	6.6
Hispanic	59.9	12.0
White, non-Hispanic	48.4	11.0
Parental education		
Less than high school diploma	40.8	1.7
High school diploma	43.0	7.7
Some postsecondary	50.1	11.4
Bachelor's or higher	55.7	13.0
Level of first institution		
4-year	53.5	12.0
2-year	39.2	5.5
Less-than-2-year	—	—

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 16.6—Percentage of 1989–90 beginning postsecondary students who took licensing exams and percentage of exam takers according to the type of licensing exam taken as of spring 1994, by selected demographic and institutional characteristics**

	Taken any licensing exams	Type of licensing exam taken						
		Teachers	Nursing	Medical	Communication	Business	Cosmetology Engineering	
Total	13.9	20.9	9.4	21.8	1.3	12.0	8.7	3.0
Gender								
Male	13.0	10.6	2.3	15.0	1.9	18.3	2.8	6.4
Female	14.7	28.7	14.7	26.9	0.8	7.3	13.2	0.4
Age in 1994								
24 years or younger	14.0	26.1	7.3	22.0	1.1	13.9	7.4	3.3
25–29 years	12.3	3.0	13.2	11.4	0	11.5	9.7	0
30–34 years	14.2	6.0	9.1	25.2	0.7	4.6	18.7	0
35 years or older	15.2	7.1	21.5	25.8	4.7	5.2	14.2	0
Number of risk factors when began at first institution								
None	13.9	34.3	5.5	15.2	0.5	15.4	6.7	4.0
One	15.1	17.5	10.7	28.4	2.4	13.9	6.3	2.4
Two	11.3	8.5	10.2	20.6	0.4	14.5	12.0	0
Three or more	14.0	4.6	15.1	25.6	2.0	4.9	14.2	0.6
Socioeconomic status								
Lowest quartile	10.8	5.9	12.6	27.7	0.2	8.0	12.9	0.3
Middle quartiles	14.1	21.4	9.4	22.3	1.2	9.0	10.8	2.8
Highest quartile	14.9	24.3	8.4	19.7	1.6	16.4	5.3	4.0
Race-ethnicity of student								
American Indian/Alaskan Native	17.3	—	—	—	—	—	—	—
Asian/Pacific Islander	15.4	3.8	3.7	15.1	0	14.0	15.1	30.9
Black, non-Hispanic	8.3	21.1	1.9	31.8	0	11.6	16.0	0
Hispanic	9.9	14.0	1.2	4.6	0	30.4	0.9	1.6
White, non-Hispanic	14.9	22.4	10.8	22.8	1.5	10.8	8.5	1.9
Marital status in 1994								
Never married	12.9	27.0	6.1	19.8	1.3	13.1	5.7	4.9
Married	16.7	14.0	16.9	23.1	1.8	11.6	14.4	0.4
Divorced, widowed, separated	17.0	5.2	7.7	32.8	0	3.1	7.1	0

**Table 16.6—Percentage of 1989–90 beginning postsecondary students who took licensing exams and percentage of exam takers according to the type of licensing exam taken as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Taken any licensing exams	Type of licensing exam taken											
		Teachers	Nursing	Medical	Communication	Business	Cosmetology	Engineering					
<b>Total</b>													
Parental education													
Less than high school diploma	11.3	6.8	15.0	18.9	0	4.7	20.3	0					
High school diploma	13.9	15.4	9.1	24.3	0.3	9.4	9.8	0					4.0
Some postsecondary	13.6	19.6	8.6	22.2	0.2	13.8	7.6	0.2					2.9
Bachelor's or higher	14.6	32.5	7.2	19.5	2.0	15.1	5.6	2.0					3.4
Level and control of first institution													
4-year													
Public	13.6	40.1	4.8	21.0	0.4	10.3	4.0	0.4					5.2
Private, not-for-profit	15.4	32.8	6.9	10.5	0.2	26.1	0.4	0.2					6.2
Private, for-profit	—	—	—	—	—	—	—	—					—
2-year													
Public	12.8	10.9	12.1	26.7	2.5	11.2	6.2	2.5					0
Private, not-for-profit	17.4	8.1	36.5	22.8	2.9	5.0	17.5	2.9					1.6
Private, for-profit	12.1	1.7	4.5	30.7	3.9	13.4	5.1	3.9					0
Less-than-2-year													
Public	19.6	0	31.0	11.4	0	9.2	32.1	0					0
Private, not-for-profit	13.4	—	—	—	—	—	—	—					—
Private, for-profit	19.2	0	6.5	17.5	0	0.9	45.5	0					0
Level of first institution													
4-year	14.2	37.5	5.6	17.3	0.3	15.9	2.7	0.3					5.6
2-year	12.9	10.1	12.7	26.8	2.6	11.1	6.6	2.6					0.1
Less-than-2-year	19.1	0	11.9	16.3	0	3.2	41.3	0					0
Control of first institution													
Public	13.3	22.0	9.9	23.9	1.6	10.8	6.2	1.6					2.0
Private, not-for-profit	15.5	29.1	10.6	12.3	0.5	23.3	2.5	0.5					5.5
Private, for-profit	16.6	0.5	5.9	21.1	1.1	4.3	34.8	1.1					0
Persistence and attainment as of spring 1994													
Attained degree	20.5	23.9	11.9	18.7	1.6	10.5	10.0	1.6					3.3
No degree, enrolled	8.9	14.2	3.5	43.1	1.4	11.7	0	1.4					0
No degree, not enrolled	6.7	10.0	2.5	22.7	0.3	20.1	9.3	0.3					0

**Table 16.6—Percentage of 1989–90 beginning postsecondary students who took licensing exams and percentage of exam takers according to the type of licensing exam taken as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Taken any licensing exams	Type of licensing exam taken						
		Teachers	Nursing	Medical	Communication	Business	Cosmetology	Engineering
Total								
Highest degree attained								
None	7.3	11.4	2.8	29.3	0.7	17.4	6.3	0
Certificate	26.2	0	16.3	18.7	2.2	4.2	28.2	0
Associate's degree	19.9	1.4	22.2	40.7	3.7	3.2	0.7	0.6
Bachelor's degree	17.9	52.3	3.7	8.0	0.1	18.7	0.7	7.0

—Too few cases for a reliable estimate.

\*Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.



**Section 17**

**Employment Experiences**

## Section 17

### Employment Experiences

#### *Working While Enrolled*

- Ninety-two (92) percent of all students had worked at some time while enrolled in postsecondary education and one-fifth (21 percent) of enrolled students had held two or more jobs simultaneously. (table 17.1)
- The likelihood of working while enrolled increased as the level of the last institution attended progressed from less-than-2-year to 2-year to 4-year. Specifically, students who started in 4-year institutions were more likely to have worked while enrolled (96 percent) than those who started in 2-year (90 percent) or less-than-2-year institutions (76 percent). Similarly, students who started in 2-year institutions were more likely to have worked while enrolled than those who started in less than 2-year institutions. (table 17.1)

#### *Most recent job*

- In 1993, men and women were equally likely to report working in professional and sales occupations (11 percent and 9 percent, respectively, were in professional occupations, and 7 percent each in sales). However, men were more likely than women to be employed as craftsmen (10 percent compared with 1 percent), laborers (7 percent compared with 2 percent), skilled machinists (7 percent compared with 2 percent), and managers (17 percent compared with 13 percent). Women more commonly held clerical (36 percent compared with 14 percent) and service jobs than did men (19 percent compared with 13 percent). (table 17.2)
- As the level of the degree attained increased from none to a bachelor's degree, generally so did the likelihood of working in a professional occupation in 1993. (table 17.2)
- Eighty-two (82) percent of students reported overall satisfaction with their most recent job. When asked about satisfaction with particular aspects of their work, more than three-quarters reported that they were satisfied with the importance of the work (82 percent), the difficulty and challenge of the work (76 percent), and their perceived job security/permanence (77 percent). Less than two-thirds reported being satisfied with the promotion (63 percent) and further educational opportunities (60 percent) the job afforded them. (table 17.3)

#### *Unemployment Experiences*

- More than one-quarter (29 percent) of students reported experiencing at least one spell of unemployment since 1989-90. (table 17.4)

- Students were more likely to report being unemployed during 1992 than in any other year. Specifically, 12 percent of students reported experiencing a period of unemployment during that year as compared with 9 percent in 1990, 5 percent in 1991 and 8 percent in 1993. (table 17.5)
- Bachelor's degree attainers were less likely to report being unemployed during postsecondary education (23.3 percent) than those who did not attain any credential (31 percent) or who attained a certificate (32 percent). They were also less likely to report receiving unemployment compensation at some time since 1989-90 (BA/none—2 percent compared with 21 percent, BA/CT—2 percent compared with 25 percent). However, since bachelor's degree attainers were enrolled longer while working toward their degrees they spent less time in the labor market and thus were less likely to be at risk for unemployment. (table 17.4)

### *Employment After Postsecondary Education*

- Students who did not attain a postsecondary credential (5 percent) and those who attained a certificate (7 percent) were more likely to report delays of 12 or more months in obtaining employment after they left postsecondary education than their counterparts who attained an associate's (1 percent) or a bachelor's degree (0.4 percent). (table 17.6)
- More than one-quarter of postsecondary students (26 percent) had asked family, friends, or faculty for help in order to obtain their most recent principal job. Men were more likely to do so than women (31 percent compared with 22 percent). On the other hand, women more commonly looked through want ads (18 percent compared with 11 percent), went to the campus placement offices (6 percent compared with 4 percent), and submitted resumes and applications than did men (27 percent compared with 20 percent). (table 17.7)
- While more than three-quarters (77 percent) of all students reported that they were able to apply the skills they had learned in school in their most recent principal job, 43 percent reported that they could have obtained that job without their education. Furthermore, 35 percent reported that their most recent job was different from the one for which they had prepared during postsecondary education. Male students were more likely than female students to report holding a job that was different from the one for which they had prepared during postsecondary education (45 percent compared with 28 percent), as were bachelor's degree attainers (41 percent) compared with those who had attained an associate's degree or a certificate (26 percent each). (table 17.8)

**Table 17.1—Percentage of 1989–90 beginning postsecondary students who were employed while enrolled at some time during postsecondary education, by selected demographic and institutional characteristics**

	Ever worked while enrolled	Had at least one co-op/apprentice job	Had at least one on-campus job	Had at least one job related to studies	Held more than one job simultaneously
Total	92.1	10.4	14.8	17.6	20.5
Gender					
Male	93.6	10.1	13.3	15.8	20.1
Female	90.8	10.6	16.1	19.2	20.7
Academic year of last enrollment					
1989–90	80.0	1.7	1.4	2.1	6.4
1990–91	81.2	3.5	3.8	8.1	10.7
1991–92	94.0	7.5	8.3	9.7	15.4
1992–93	96.8	19.6	27.8	27.9	27.4
1993–94	96.8	14.1	19.3	24.2	25.7
Age when began at first institution					
18 years or younger	96.2	15.0	20.6	24.0	24.4
19 years	89.8	8.3	10.4	12.2	20.4
20–29 years	85.6	3.0	4.2	7.4	14.0
30 years or older	77.0	2.0	2.1	3.3	8.1
Number of risk factors when began at first institution <sup>1</sup>					
None	95.6	16.0	23.9	26.2	21.8
One	93.0	13.4	14.4	18.7	26.4
Two	90.2	6.5	5.9	10.6	20.3
Three or more	85.1	1.9	3.6	5.8	13.7
Socioeconomic status					
Lowest quartile	82.8	5.2	7.2	9.1	12.8
Middle quartiles	90.8	8.5	13.3	14.7	19.1
Highest quartile	97.1	14.4	19.2	23.8	24.7
Number of jobs held during PSE <sup>2</sup>					
None	—	—	—	—	—
One	84.5	1.5	2.4	3.4	0
Two	94.4	5.2	5.7	7.8	11.9
Three or more	97.4	15.4	22.5	26.1	30.7
Race-ethnicity of student					
American Indian/Alaskan Native	95.0	5.6	12.3	7.7	28.0
Asian/Pacific Islander	87.7	15.4	21.8	30.8	21.1
Black, non-Hispanic	86.3	12.3	16.6	12.6	16.0
Hispanic	90.9	9.4	12.2	14.8	20.8
White, non-Hispanic	93.1	10.1	14.5	17.8	19.9
Level of last institution					
4-year	96.2	18.1	26.7	27.5	26.2
2-year	90.2	4.7	4.8	9.5	17.0
Less-than-2-year	77.5	3.8	1.5	8.6	7.8

**Table 17.1—Percentage of 1989–90 beginning postsecondary students who were employed while enrolled at some time during postsecondary education, by selected demographic and institutional characteristics—Continued**

	Ever worked while enrolled	Had at least one co-op/apprentice job	Had at least one on-campus job	Had at least one job related to studies	Held more than one job simultaneously
<b>Control of last institution</b>					
Public	92.9	10.5	13.9	17.7	21.6
Private, not-for-profit	95.0	19.8	31.4	28.0	25.3
Private, for-profit	80.6	3.8	1.9	8.2	7.6
<b>Degree working toward at last institution</b>					
None	85.2	2.6	4.1	6.1	14.3
Certificate	81.8	4.1	3.0	7.1	10.8
Associate's degree	92.1	5.3	4.9	11.8	17.8
Bachelor's degree	96.5	17.1	25.5	26.1	26.4
<b>Persistence and attainment as of spring 1994</b>					
Attained degree	93.2	15.9	20.8	25.6	23.8
No degree, enrolled	96.4	9.3	18.8	20.0	25.7
No degree, not enrolled	88.2	4.8	5.5	6.7	14.6
<b>Highest degree attained</b>					
None	90.4	6.0	9.1	10.3	17.6
Certificate	83.4	4.9	3.7	11.1	12.6
Associate's degree	95.8	12.1	10.1	23.0	24.0
Bachelor's degree	97.1	23.0	33.8	33.7	29.2

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

Table 17.2—Percentage distribution of 1989–90 beginning postsecondary students according to their primary occupation in 1993, by selected demographic and institutional characteristics

	Clerical	Craftsman/ repair	Laborer	Manager/ administrator	Skilled machinist	Professional	Sales	Services including protective services	Technical/ computer	Other
Total	25.5	5.2	4.3	15.0	4.5	9.8	7.2	16.0	5.6	6.8
Gender										
Male	14.2	9.6	7.1	17.4	6.9	10.5	7.3	13.4	5.7	7.9
Female	35.8	1.2	1.8	12.8	2.3	9.3	7.1	18.5	5.4	5.8
Academic year of last enrollment										
1989–90	22.7	9.1	6.2	14.8	11.5	5.0	4.2	15.6	3.9	7.0
1990–91	29.5	6.3	5.3	12.2	4.7	5.9	6.2	18.3	4.9	6.7
1991–92	22.8	8.1	3.8	23.0	2.8	7.6	6.5	14.0	5.3	6.2
1992–93	22.8	2.5	2.2	16.4	2.5	19.6	7.5	10.8	5.1	10.8
1993–94	28.1	3.8	4.6	13.2	3.6	9.6	9.1	16.3	6.6	5.2
Age when began at first institution										
18 years or younger	27.5	2.9	4.5	15.2	2.7	10.9	8.4	15.6	5.7	6.7
19 years	22.0	7.9	3.4	15.8	2.8	9.1	9.4	19.1	4.8	5.7
20–29 years	20.7	11.3	5.0	12.1	11.0	5.9	4.7	16.7	6.5	6.1
30 years or older	24.4	6.8	3.6	19.0	8.4	10.7	1.4	13.8	5.0	6.9
Number of risk factors when began at first institution <sup>1</sup>										
None	26.4	2.0	4.6	14.5	2.6	11.1	9.7	16.3	6.3	6.6
One	24.8	5.3	4.6	14.7	5.1	10.8	6.8	16.5	5.0	6.4
Two	25.1	11.4	3.4	20.7	1.8	6.1	7.0	15.5	3.4	5.6
Three or more	24.5	8.3	4.2	14.3	8.9	8.1	3.6	15.3	6.1	6.6
Socioeconomic status										
Lowest quartile	25.0	6.0	3.8	14.3	8.9	8.5	5.6	17.1	4.7	6.2
Middle quartiles	25.6	6.5	5.4	14.6	4.4	8.0	6.9	15.9	5.9	6.8
Highest quartile	25.6	3.4	3.2	15.8	3.2	12.4	8.1	15.8	5.5	7.0
Number of jobs held during PSE <sup>2</sup>										
None	—	—	—	—	—	—	—	—	—	—
One	25.4	7.3	3.7	20.9	5.1	8.0	4.7	13.0	5.9	6.0
Two	25.5	6.8	4.4	14.1	5.3	8.9	6.5	15.4	5.8	7.2
Three or more	25.5	4.1	4.5	13.6	4.1	10.7	8.1	17.1	5.4	6.9

Table 17.2.—Percentage distribution of 1989–90 beginning postsecondary students according to their primary occupation in 1993, by selected demographic and institutional characteristics—Continued

	Services including protective services								
	Clerical	Craftsman/ repair	Laborer administrator	Manager/ administrator	Skilled machinist	Professional	Sales	Technical/ computer	Other
Race-ethnicity of student									
American Indian/Alaskan Native	—	—	—	—	—	—	—	—	—
Asian/Pacific Islander	29.3	3.9	3.5	10.4	5.1	17.6	7.6	10.3	6.2
Black, non-Hispanic	29.8	1.3	5.0	10.8	4.7	7.3	8.6	23.6	6.9
Hispanic	39.6	6.4	2.9	14.4	5.2	6.7	7.7	11.2	3.4
White, non-Hispanic	23.7	5.5	4.3	15.7	4.4	10.1	6.9	16.0	7.2
Level of last institution									
4-year	26.0	2.5	4.5	14.4	2.3	13.9	8.9	14.5	6.8
2-year	25.1	7.3	3.7	17.4	6.4	6.6	6.3	15.1	7.0
Less-than-2-year	25.8	9.6	7.2	7.8	8.4	4.7	4.2	24.4	3.3
Control of last institution									
Public	24.9	5.2	4.2	15.5	4.5	9.2	7.6	16.0	7.1
Private, not-for-profit	25.8	2.2	3.9	15.2	2.8	17.4	8.3	11.8	6.4
Private, for-profit	30.1	9.2	6.2	11.5	8.1	5.0	4.2	19.1	3.0
Degree working toward at last institution									
None	28.5	7.1	4.9	16.1	6.2	6.1	2.0	12.9	12.4
Certificate	25.8	7.6	5.9	11.8	9.4	5.2	4.2	21.2	3.7
Associate's degree	25.4	6.6	3.7	15.7	5.8	8.1	7.2	14.8	6.5
Bachelor's degree	25.2	2.9	4.2	15.8	2.1	12.5	9.2	15.2	6.9
Persistence and attainment as of spring 1994									
Attained degree	25.5	3.8	3.3	13.5	3.1	13.7	6.7	17.3	5.9
No degree, enrolled	28.9	3.5	5.1	13.3	4.0	6.3	10.5	17.7	4.5
No degree, not enrolled	24.2	7.7	5.6	18.0	6.8	5.8	6.9	13.7	7.9
Highest degree attained									
None	25.4	6.6	5.5	16.8	6.1	5.9	7.9	14.8	7.0
Certificate	23.8	10.2	5.2	8.6	5.8	6.7	4.6	25.0	3.3
Associate's degree	27.6	2.9	2.5	15.8	3.8	11.7	5.6	17.5	4.7
Bachelor's degree	25.5	1.1	2.7	14.9	1.5	18.0	8.2	13.4	7.7

—Too few cases for a reliable estimate.

<sup>1</sup>Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Postsecondary education.

NOTE: Includes all students employed in 1993.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

1223

1223

**Table 17.3—Percentage of 1989–90 beginning postsecondary students reporting satisfaction with aspects of their most recent job, by selected demographic and institutional characteristics**

	Pay & fringe benefits	Job security/permanence	Promotion opportunity	Further educational opportunities	Importance of work	Difficulty/challenge of work	Overall satisfaction
Total	72.2	77.4	63.1	60.0	81.5	76.0	82.3
<b>Gender</b>							
Male	74.1	77.2	65.6	60.0	79.4	77.8	82.0
Female	70.6	77.5	60.9	60.0	83.3	74.5	82.5
<b>Academic year of last enrollment</b>							
1989–90	73.4	77.8	67.1	60.5	83.7	78.2	82.5
1990–91	72.3	78.4	60.0	58.3	83.2	75.3	83.9
1991–92	72.0	75.6	61.6	57.3	80.6	74.0	82.9
1992–93	71.6	77.7	63.8	61.2	81.1	78.0	82.0
1993–94	73.0	79.2	63.2	61.8	80.1	77.5	81.8
<b>Age when began at first institution</b>							
18 years or younger	72.3	79.9	64.4	59.6	79.5	76.8	81.5
19 years	73.1	74.1	62.0	58.8	80.6	74.2	79.7
20–29 years	74.3	74.5	61.5	59.3	83.5	73.3	82.4
30 years or older	70.6	73.8	60.0	64.8	87.2	80.0	86.7
<b>Number of risk factors when began at first institution<sup>1</sup></b>							
None	73.6	78.6	65.7	61.0	78.9	75.1	82.3
One	70.4	77.3	62.6	61.1	80.7	75.4	80.8
Two	70.5	80.5	69.2	53.7	83.9	80.8	81.1
Three or more	73.9	74.4	57.8	60.8	83.8	75.7	83.1
<b>Socioeconomic status</b>							
Lowest quartile	68.2	73.6	57.7	60.3	83.3	75.9	81.2
Middle quartiles	72.9	76.8	63.3	60.2	82.1	76.7	80.8
Highest quartile	73.1	80.0	65.4	59.7	79.9	75.2	84.7
<b>Number of jobs held during PSE<sup>2</sup></b>							
None	—	—	—	—	—	—	—
One	82.1	87.0	72.7	68.0	85.8	77.7	86.1
Two	69.4	74.5	64.7	62.8	83.5	78.5	82.6
Three or more	69.6	74.9	58.8	55.8	79.1	74.4	80.7
<b>Race–ethnicity of student</b>							
American Indian/Alaskan Native	—	—	—	—	—	—	—
Asian/Pacific Islander	79.4	73.2	60.9	54.9	85.3	72.5	88.3
Black, non-Hispanic	61.8	66.6	61.5	56.8	80.2	70.6	76.0
Hispanic	79.5	80.3	56.8	58.4	81.2	71.2	81.4
White, non-Hispanic	72.2	78.4	63.9	60.7	81.7	77.3	82.9
<b>Level of last institution</b>							
4-year	69.6	76.1	61.0	57.6	75.4	71.4	78.9
2-year	73.9	79.9	65.4	62.7	84.1	78.8	83.9
Less-than-2-year	75.0	68.8	57.2	55.6	85.9	76.5	82.4
<b>Control of last institution</b>							
Public	72.5	78.1	63.1	60.0	81.4	75.9	82.4
Private, not-for-profit	72.1	78.3	64.5	62.6	76.2	73.7	80.1
Private, for-profit	73.2	70.9	59.9	58.0	85.4	77.6	81.4



Table 17.3—Percentage of 1989–90 beginning postsecondary students reporting satisfaction with aspects of their most recent job, by selected demographic and institutional characteristics—Continued

	Pay & fringe benefits	Job security/permanence	Promotion opportunity	Further educational opportunities	Importance of work	Difficulty/challenge of work	Overall satisfaction
Degree working toward at last institution							
None	80.1	78.9	65.9	68.8	84.6	78.5	82.2
Certificate	76.6	73.5	64.7	61.0	87.4	83.3	84.6
Associate's degree	72.2	78.8	61.4	61.1	81.5	75.8	83.3
Bachelor's degree	69.6	77.1	62.2	57.5	77.2	71.9	79.9
Persistence and attainment as of spring 1994							
Attained degree	73.2	75.0	62.3	62.1	82.5	77.2	82.4
No degree, enrolled	77.5	75.1	58.1	64.5	77.8	68.3	80.5
No degree, not enrolled	71.4	79.6	64.4	57.5	81.0	76.2	82.0
Highest degree attained							
None	72.2	79.0	63.5	58.4	80.6	75.2	81.8
Certificate	75.3	74.6	60.2	62.3	87.8	79.3	85.2
Associate's degree	73.9	75.9	64.5	67.8	86.5	82.4	85.5
Bachelor's degree	70.7	74.9	62.8	58.4	75.1	72.1	77.9

—Too few cases for a reliable estimate.

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance and working full time while enrolled.

<sup>2</sup>Postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94). Data Analysis System.

**Table 17.4—Percentage of 1989–90 beginning postsecondary students who were ever unemployed and average duration of unemployment as of spring 1994, by selected demographic and institutional characteristics**

	Total ever unemployed through 1994	Ever received unemployment compensation	Average duration of unemployment in weeks <sup>1</sup>
Total	28.7	16.1	9.4
Gender			
Male	28.5	15.8	9.0
Female	28.8	16.3	9.7
Academic year of last enrollment			
1989–90	36.4	22.6	12.1
1990–91	31.2	29.0	9.4
1991–92	32.2	14.0	9.1
1992–93	27.0	7.5	8.7
1993–94	26.5	17.3	7.5
Age when began at first institution			
18 years or younger	27.2	10.2	8.1
19 years	31.9	18.6	9.6
20–29 years	32.7	26.9	11.7
30 years or older	27.1	31.5	11.9
Number of risk factors when began at first institution <sup>2</sup>			
None	28.3	7.2	8.1
One	28.6	14.3	9.0
Two	28.6	27.8	10.1
Three or more	29.6	28.9	11.4
Socioeconomic status			
Lowest quartile	35.6	29.6	13.4
Middle quartiles	28.7	13.8	9.7
Highest quartile	26.2	12.3	7.1
Number of jobs held during PSE <sup>3</sup>			
None	30.8	1.3	35.1
One	18.6	19.9	15.4
Two	26.1	16.8	10.5
Three or more	32.8	15.7	7.0
Race-ethnicity of student			
American Indian/Alaskan Native	48.7	—	—
Asian/Pacific Islander	24.5	7.5	12.9
Black, non-Hispanic	40.0	14.1	13.6
Hispanic	28.4	16.3	11.0
White, non-Hispanic	27.4	16.4	8.3
Level of last institution			
4-year	25.5	9.2	8.5
2-year	29.4	19.9	8.8
Less-than-2-year	40.8	29.5	13.8

**Table 17.4—Percentage of 1989–90 beginning postsecondary students who were ever unemployed and average duration of unemployment as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Total ever unemployed through 1994	Ever received unemployment compensation	Average duration of unemployment in weeks <sup>1</sup>
<b>Control of last institution</b>			
Public	27.6	16.5	8.8
Private, not-for-profit	25.2	6.8	9.0
Private, for-profit	39.9	25.4	12.6
<b>Degree working toward at last institution</b>			
None	33.1	18.7	11.6
Certificate	35.8	27.1	11.0
Associate's degree	32.1	22.8	9.1
Bachelor's degree	24.4	7.2	8.3
<b>Persistence and attainment as of spring 1994</b>			
Attained degree	26.9	12.0	9.0
No degree, enrolled	23.6	14.1	8.8
No degree, not enrolled	33.1	22.1	9.9
<b>Highest degree attained</b>			
None	30.6	20.5	9.6
Certificate	32.4	24.5	10.4
Associate's degree	28.9	13.9	7.8
Bachelor's degree	23.3	2.3	8.7

—Too few cases for a reliable estimate.

<sup>1</sup>Includes only those who were unemployed. Unemployment is defined as having no job but actively seeking work.

<sup>2</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 17.5—Percentage of 1989–90 beginning postsecondary students who were ever unemployed during calendar years 1990 through 1993, by selected demographic and institutional characteristics**

	Unemployed during 1990	Unemployed during 1991	Unemployed during 1992	Unemployed during 1993
Total	9.1	4.9	12.1	8.0
Gender				
Male	9.4	5.1	12.0	7.2
Female	8.9	4.6	12.1	8.7
Academic year of last enrollment				
1989–90	21.7	9.9	12.3	5.3
1990–91	11.8	12.6	10.4	6.9
1991–92	10.6	3.2	17.2	6.4
1992–93	3.5	1.9	12.7	12.3
1993–94	5.6	2.8	9.3	10.2
Age when began at first institution				
18 years or younger	6.9	3.6	11.4	8.9
19 years	12.0	7.7	13.3	8.7
20–29 years	14.1	7.8	14.3	5.6
30 years or older	11.1	5.3	12.8	6.2
Number of risk factors when began at first institution <sup>1</sup>				
None	5.5	4.0	13.1	9.8
One	9.9	3.9	11.1	8.3
Two	14.2	5.6	8.8	5.6
Three or more	12.5	7.3	13.3	5.7
Socioeconomic status				
Lowest quartile	16.6	6.9	16.4	8.0
Middle quartiles	9.7	4.8	12.3	7.0
Highest quartile	5.9	4.2	10.3	9.1
Number of jobs held during PSE <sup>2</sup>				
None	10.4	0	20.4	0.0
One	8.6	0.5	6.7	2.7
Two	10.6	4.9	10.0	6.8
Three or more	8.8	6.5	14.3	10.5
Race–ethnicity of student				
American Indian/Alaskan Native	23.5	4.3	19.6	5.5
Asian/Pacific Islander	4.4	1.8	10.8	9.8
Black, non-Hispanic	15.8	7.5	20.2	9.2
Hispanic	8.9	3.3	14.8	6.7
White, non-Hispanic	8.5	4.9	10.9	7.9
Level of last institution				
4-year	4.3	2.8	12.3	8.9
2-year	11.3	6.1	10.9	7.3
Less-than-2-year	23.0	10.1	16.8	7.8
Control of last institution				
Public	8.4	4.4	12.0	8.1
Private, not-for-profit	4.7	2.9	10.7	9.2
Private, for-profit	19.2	10.8	15.1	7.1

**Table 17.5—Percentage of 1989–90 beginning postsecondary students who were ever unemployed during calendar years 1990 through 1993, by selected demographic and institutional characteristics—Continued**

	Unemployed during 1990	Unemployed during 1991	Unemployed during 1992	Unemployed during 1993
Degree working toward at last institution				
None	18.3	8.0	16.0	6.6
Certificate	16.6	8.1	14.9	6.9
Associate's degree	11.4	5.9	11.3	9.3
Bachelor's degree	4.5	2.7	11.6	8.3
Persistence and attainment as of spring 1994				
Attained degree	6.7	2.9	12.6	8.5
No degree, enrolled	4.6	3.9	12.7	7.9
No degree, not enrolled	14.1	8.2	11.5	7.4
Highest degree attained as of spring 1994				
None	11.6	7.0	11.8	7.5
Certificate	16.8	7.2	13.1	6.0
Associate's degree	4.6	2.7	15.0	9.7
Bachelor's degree	2.6	0.9	11.4	9.3

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Postsecondary education.

NOTE: Includes only those who were unemployed. Unemployment is defined as having no job but actively seeking work.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 17.6—Percentage distribution of 1989–90 beginning postsecondary students according to the number of months after leaving postsecondary education before obtaining first principal job, by selected demographic and institutional characteristics**

	Less than 1 month	1–3 months	3–6 months	6–9 months	9–12 months	More than 12 months <sup>1</sup>
Total	85.2	4.4	3.3	1.8	1.5	3.7
Gender						
Male	87.2	3.6	2.7	2.0	1.5	3.1
Female	83.6	5.1	3.9	1.6	1.5	4.3
Academic year of last enrollment						
1989–90	83.1	3.4	3.5	1.7	2.4	5.9
1990–91	71.3	6.2	6.2	3.2	3.1	10.2
1991–92	83.7	4.2	3.2	3.3	1.9	3.6
1992–93	86.5	7.9	3.9	1.2	0.4	0.2
1993–94	98.7	1.1	0.2	†	†	†
Age when began at first institution						
18 years or younger	87.0	5.1	3.6	1.2	1.2	2.0
19 years	77.6	5.1	3.3	4.6	1.7	7.6
20–29 years	85.3	3.4	1.4	1.6	2.9	4
30 years or older	80.6	3.4	5.9	2.7	0.9	5
Number of risk factors when began at first institution <sup>2</sup>						
None	85.2	5.9	4.4	1.6	0.3	2.6
One	85.9	3.7	1.8	2.3	2.2	4.0
Two	81.8	7.3	3.1	1.9	1.0	4.9
Three or more	84.5	2.5	3.4	1.9	2.8	4.9
Socioeconomic status						
Lowest quartile	79.3	2.4	3.9	2.0	2.6	9.7
Middle quartiles	84.3	4.7	3.9	2.1	1.7	3.3
Highest quartile	89.2	4.9	2.3	1.4	0.7	1.6
Number of jobs held during PSE <sup>3</sup>						
None	—	—	—	—	—	—
One	82.9	2.9	3.3	2.8	2.0	6.2
Two	82.8	4.3	3.0	2.1	3.5	4.4
Three or more	87.1	5.0	3.5	1.4	0.4	2.5
Race-ethnicity of student						
American Indian/Alaskan Native	—	—	—	—	—	—
Asian/Pacific Islander	84.6	4.1	2.3	0.4	0	8.6
Black, non-Hispanic	72.4	6.2	3.5	4.4	2.3	11.3
Hispanic	80.1	4.5	6.7	4.9	2.0	1.8
White, non-Hispanic	87.3	4.2	3.0	1.3	1.3	2.9
Level of last institution						
4-year	87.8	5.8	2.7	1.4	0.4	1.9
2-year	85.0	2.8	3.5	2.2	1.8	4.6
Less-than-2-year	74.7	7.3	5.0	2.0	3.8	7.2
Control of last institution						
Public	86.7	3.4	3.3	1.7	1.2	3.8
Private, not-for-profit	83.4	9.1	3.4	1.5	0.5	2.0
Private, for-profit	76.5	5.8	4.3	3.1	4.0	6.3

**Table 17.6—Percentage distribution of 1989–90 beginning postsecondary students according to the number of months after leaving postsecondary education before obtaining first principal job, by selected demographic and institutional characteristics—Continued**

	Less than 1 month	1–3 months	3–6 months	6–9 months	9–12 months	More than 12 months <sup>1</sup>
<b>Degree working toward at last institution</b>						
None	89.4	3.5	3.3	1.2	0.1	2.5
Certificate	79.0	5.4	3.0	1.9	3.0	7.8
Associate's degree	84.9	3.1	3.3	2.5	1.4	4.9
Bachelor's degree	86.9	5.7	3.5	1.7	0.8	1.4
<b>Persistence and attainment as of spring 1994</b>						
Attained degree	84.5	6.0	4.0	1.4	1.4	2.7
No degree, enrolled	†	†	†	†	†	†
No degree, not enrolled	85.0	3.2	2.8	2.3	1.7	4.9
<b>Highest degree attained</b>						
None	85.0	3.2	2.8	2.3	1.7	4.9
Certificate	76.0	6.3	5.6	1.8	3.4	6.9
Associate's degree	92.7	2.1	2.7	0.9	0.6	1.1
Bachelor's degree	87.3	7.5	3.3	1.3	0.2	0.4

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Includes students who have not obtained their first principal job.

<sup>2</sup>Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>3</sup>Postsecondary education.

NOTE: Does not include students who are still enrolled in postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 17.7—Percentage of 1989–90 beginning postsecondary students according to actions taken to obtain their most recent principal job as of spring 1994, by selected demographic and institutional characteristics**

	Looked through want ads	Asked family, friends, or faculty	Asked for interview to determine opportunity	Went to campus placement office	Sent resume, submitted application
Total	14.9	26.2	19.0	5.0	23.4
Gender					
Male	11.3	30.7	20.6	3.8	19.7
Female	18.0	22.2	17.6	6.0	26.7
Academic year of last enrollment					
1989–90	13.1	32.1	18.6	1.9	21.4
1990–91	17.8	23.2	17.8	5.7	23.3
1991–92	16.2	22.7	19.4	3.1	26.9
1992–93	14.6	26.7	21.9	8.4	25.9
1993–94	13.4	25.5	16.7	5.8	18.9
Age when began at first institution					
18 years or younger	15.0	28.4	19.7	6.3	23.5
19 years	17.8	26.9	21.3	4.1	28.2
20–29 years	15.3	24.3	20.0	3.3	19.9
30 years or older	11.2	21.6	11.5	1.6	24.1
Number of risk factors when began at first institution <sup>1</sup>					
None	16.3	29.1	18.6	6.5	23.6
One	17.2	27.8	22.5	6.5	28.0
Two	11.5	27.2	18.2	2.7	22.4
Three or more	13.2	13.2	22.4	17.3	2.6
Socioeconomic status					
Lowest quartile	17.6	25.1	16.2	2.9	25.1
Middle quartiles	13.0	26.5	18.9	4.3	22.6
Highest quartile	16.0	26.3	20.6	6.9	23.6
Number of jobs held during PSE <sup>2</sup>					
None	—	—	—	—	—
One	8.9	25.9	15.4	3.2	23.7
Two	13.0	26.4	17.9	4.7	23.8
Three or more	17.8	17.8	26.2	20.8	5.7
Race–ethnicity of student					
American Indian/Alaskan Native	—	—	—	—	—
Asian/Pacific Islander	20.2	26.3	15.9	11.3	10.3
Black, non-Hispanic	15.9	23.6	15.0	3.3	29.3
Hispanic	15.1	26.5	24.9	9.4	27.1
White, non-Hispanic	14.5	26.4	19.0	4.6	22.8
Level of last institution					
4-year	13.9	27.5	19.4	6.6	26.4
2-year	14.7	26.3	19.7	3.3	21.2
Less-than-2-year	19.0	25.1	16.3	5.9	23.7



**Table 17.7—Percentage of 1989–90 beginning postsecondary students according to actions taken to obtain their most recent principal job as of spring 1994, by selected demographic and institutional characteristics—Continued**

	Looked through want ads	Asked family, friends, or faculty	Asked for interview to determine opportunity	Went to campus placement office	Sent resume, submitted application
<b>Control of last institution</b>					
Public	14.8	26.6	19.5	3.7	22.3
Private, not-for-profit	14.3	27.4	18.2	8.9	27.4
Private, for-profit	16.8	25.5	18.4	6.5	24.6
<b>Degree working toward at last institution</b>					
None	15.8	24.1	21.8	2.4	21.7
Certificate	15.8	21.6	17.7	4.4	25.4
Associate's degree	15.6	26.7	18.3	4.0	21.8
Bachelor's degree	14.4	29.6	20.6	5.8	24.1
<b>Persistence and attainment as of spring 1994</b>					
Attained degree	15.4	25.0	18.7	9.0	24.2
No degree, enrolled	†	†	†	†	†
No degree, not enrolled	14.5	27.8	19.2	1.3	22.8
<b>Highest degree attained</b>					
None	14.5	27.8	19.2	1.3	22.8
Certificate	18.1	24.0	16.4	6.7	22.3
Associate's degree	15.1	23.3	19.2	9.1	22.0
Bachelor's degree	13.2	26.8	20.7	11.2	27.2

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Risk factors include delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Postsecondary education.

NOTE: Does not include students who are still enrolled or have not obtained a principal job as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

**Table 17.8—Percentage of 1989–90 beginning postsecondary students according to relationship between their most recent principal job and their postsecondary education, by selected demographic and institutional characteristics**

	Able to apply skills learned in PSE <sup>1</sup>	Could have obtained job without education	Job different from education and training	Job used tools and equipment trained to use
Total	77.0	43.1	35.2	85.2
Gender				
Male	73.3	47.0	45.4	79.1
Female	79.8	40.1	27.5	89.8
Academic year of last enrollment				
1989–90	73.8	53.5	36.3	85.1
1990–91	78.1	44.8	37.4	83.6
1991–92	73.2	43.5	30.0	79.5
1992–93	79.5	30.4	39.1	90.7
1993–94	79.8	48.0	29.7	83.8
Age when began at first institution				
18 years or younger	73.9	42.1	40.1	83.9
19 years	84.7	44.0	34.0	84.2
20–29 years	74.4	47.1	32.8	85.5
30 years or older	84.1	40.8	20.7	88.9
Number of risk factors when began at first institution <sup>2</sup>				
None	74.1	37.5	43.6	84.4
One	73.2	49.2	36.5	82.7
Two	86.7	37.4	23.6	86.8
Three or more	78.3	48.0	28.3	86.5
Socioeconomic status				
Lowest quartile	80.4	49.8	27.8	83.5
Middle quartiles	77.2	42.8	33.1	84.8
Highest quartile	74.9	40.0	41.8	86.6
Number of jobs held during PSE <sup>1</sup>				
None	—	—	—	—
One	79.3	54.8	33.3	84.3
Two	79.5	40.5	32.9	84.9
Three or more	74.9	39.1	37.1	85.8
Race–ethnicity of student				
American Indian/Alaskan Native	—	—	—	—
Asian/Pacific Islander	84.4	40.9	28.5	95.2
Black, non-Hispanic	70.7	53.8	28.1	83.3
Hispanic	83.5	36.7	36.9	83.8
White, non-Hispanic	76.7	42.6	36.1	85.2
Level of last institution				
4-year	72.4	40.0	41.8	85.0
2-year	76.6	47.9	32.3	83.0
Less-than-2-year	84.1	38.8	30.9	90.1

**Table 17.8—Percentage of 1989–90 beginning postsecondary students according to relationship between their most recent principal job and their postsecondary education, by selected demographic and institutional characteristics—Continued**

	Able to apply skills learned in PSE <sup>1</sup>	Could have obtained job without education	Job different from education and training	Job used tools and equipment trained to use
<b>Control of last institution</b>				
Public	75.8	46.8	35.2	82.7
Private, not-for-profit	74.6	32.3	38.4	89.2
Private, for-profit	79.4	41.6	34.3	89.1
<b>Degree working toward at last institution</b>				
None	86.7	72.0	51.4	80.7
Certificate	84.1	40.0	26.0	89.8
Associate's degree	75.3	42.1	30.3	82.8
Bachelor's degree	70.2	40.9	42.9	84.0
<b>Persistence and attainment as of spring 1994</b>				
Attained degree	81.4	29.6	32.1	91.1
No degree, enrolled	†	†	†	†
No degree, not enrolled	70.1	61.8	39.3	76.6
<b>Highest degree attained</b>				
None	70.1	61.8	39.3	76.6
Certificate	84.6	31.1	26.2	93.0
Associate's degree	89.5	28.5	25.8	94.8
Bachelor's degree	74.0	29.0	40.9	87.3

—Too few cases for a reliable estimate.

†Not applicable.

<sup>1</sup>Risk factors included delayed enrollment, being a GED recipient, being financially independent, having children, being a single parent, part time attendance, and working full time while enrolled.

<sup>2</sup>Postsecondary education.

NOTE: Does not include students who are still enrolled or have not obtained a principal job as of spring 1994.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94), Data Analysis System.

## Appendix A

### Persistence and Attainment Variables

The persistence and attainment variables used a variety of periods of analysis and each period of analysis utilized a different referent base (institution/degree attempted). Specifically, the following persistence and attainment variables were created:

- Overall persistence and attainment through the first degree (if any) or last enrollment (PERACUM)
- Persistence toward postsecondary awards (PERAAA, PERABA, PERACT)
- Persistence and attainment relative to the institution with the first, longest, and last continuous spell of enrollment (PERAFIRS, PERALONG, PERALAST)
- Persistence and attainment by academic year (PERA8990, PERA9091, PERA9192, PERA9293, PERA9394)

The variation in the referent institution or degree attempted which occurred among these methods is critical, because it resulted in different classification on the factors used to define persistence and attainment patterns. These factors included:

- present status—whether students had attained a degree or certificate, or if they did not attain a degree whether they are still working towards a degree;
- transfer—whether students had changed institutions permanently;
- continuity of enrollment—whether or not students had been continuously enrolled without a break of more than 4 months.

Attainment was given priority in the classification schemes. Students who expected to receive a degree by summer 1994 were classified as attainers if they were interviewed prior to having received a degree. Second follow-up interviews began in late March 1994.

Students were classified as transfers in these variables only if they transferred before receiving a degree during the particular period of analysis. Students who were enrolled in more than one institution, but did not permanently leave the referent institution, were not classified as transfers. Excluded from the definition of transfer were those students taking courses at two institutions simultaneously, attending summer school at a different institution, or attending a second institution temporarily and then returning to the referent institution.

The decision rules for creating the four major types of persistence and attainment variables used either in the essay or in the compendium tables of this report are described below.

**I. Overall persistence and attainment through the first degree (if any) or last enrollment (PERACUM)**

Overall persistence and attainment was examined for the entire sample by tracing students' persistence paths in the postsecondary education system from initial enrollment in the NPSAS institution until attainment of first degree (if any) or last enrollment as of spring 1994. For all students, status on three factors determined their persistence and attainment pattern. These were:

**attainment/enrollment**—attainment of first degree was given priority. If students had not attained a degree their enrollment status was examined. Students were defined as enrolled at the time of follow-up if they were still enrolled during the spring of 1994.

**transfer**—students were defined as having transferred if they left one postsecondary institution before attaining a degree and enrolled at a different postsecondary institution without returning to the first institution.

**continuity of enrollment**—students were considered continuously enrolled if they did not have any period of more than 4 months of nonenrollment at any postsecondary institution.

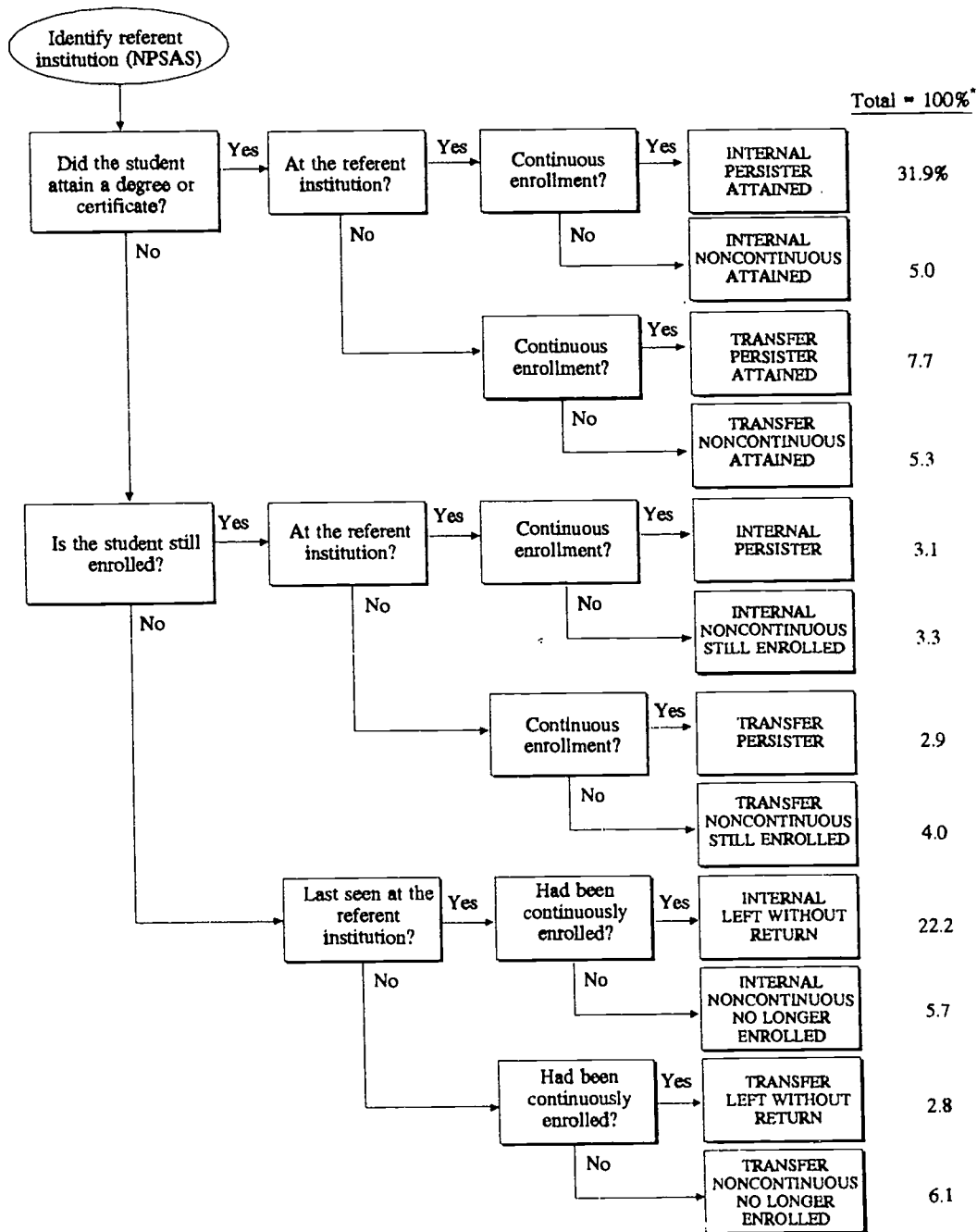
The 12 outcome categories of PERACUM were aggregated into a variety of combinations to create the categories discussed in the first part of the essay, including the following:

- Overall persistence and attainment (table 2);
- Attainment and retention at the first institution (table 3);
- Overall persistence and attainment including transfer status (table 4);
- Transfer status and enrollment continuity (tables 13 and 14).

The specific combination of categories used in each of these is described in the glossary, appendix B, in the section on Persistence and Attainment Patterns.

The flow chart on the following page illustrates the sequence of questions that determined a student's classification on the overall persistence and attainment through the first degree variable.

Figure A1—Overall persistence and attainment through the first degree



\*Percentage of 1989-90 beginning postsecondary students in each category as of spring 1994.

## II. Persistence toward and attainment of postsecondary awards (PERAAA, PERABA, PERACT)

The persistence and attainment patterns of students seeking vocational certificates, associate's degrees, and bachelor's degrees were examined separately. Students were categorized on the specific degree variable if they reported **ever** working toward the degree, therefore some students were classified on more than one of these variables.

Persistence toward and attainment of each degree was examined by tracing students' persistence paths in the postsecondary education system from the institution where they began working toward the specific postsecondary award until follow-up in 1994. For all students, status on three factors determined their persistence and attainment pattern. These were:

**attainment/enrollment**—attainment of the degree was given first priority. If students had not attained a degree their enrollment status was examined. Students were defined as enrolled at the time of follow-up if they were still enrolled toward the same degree during the spring of 1994.

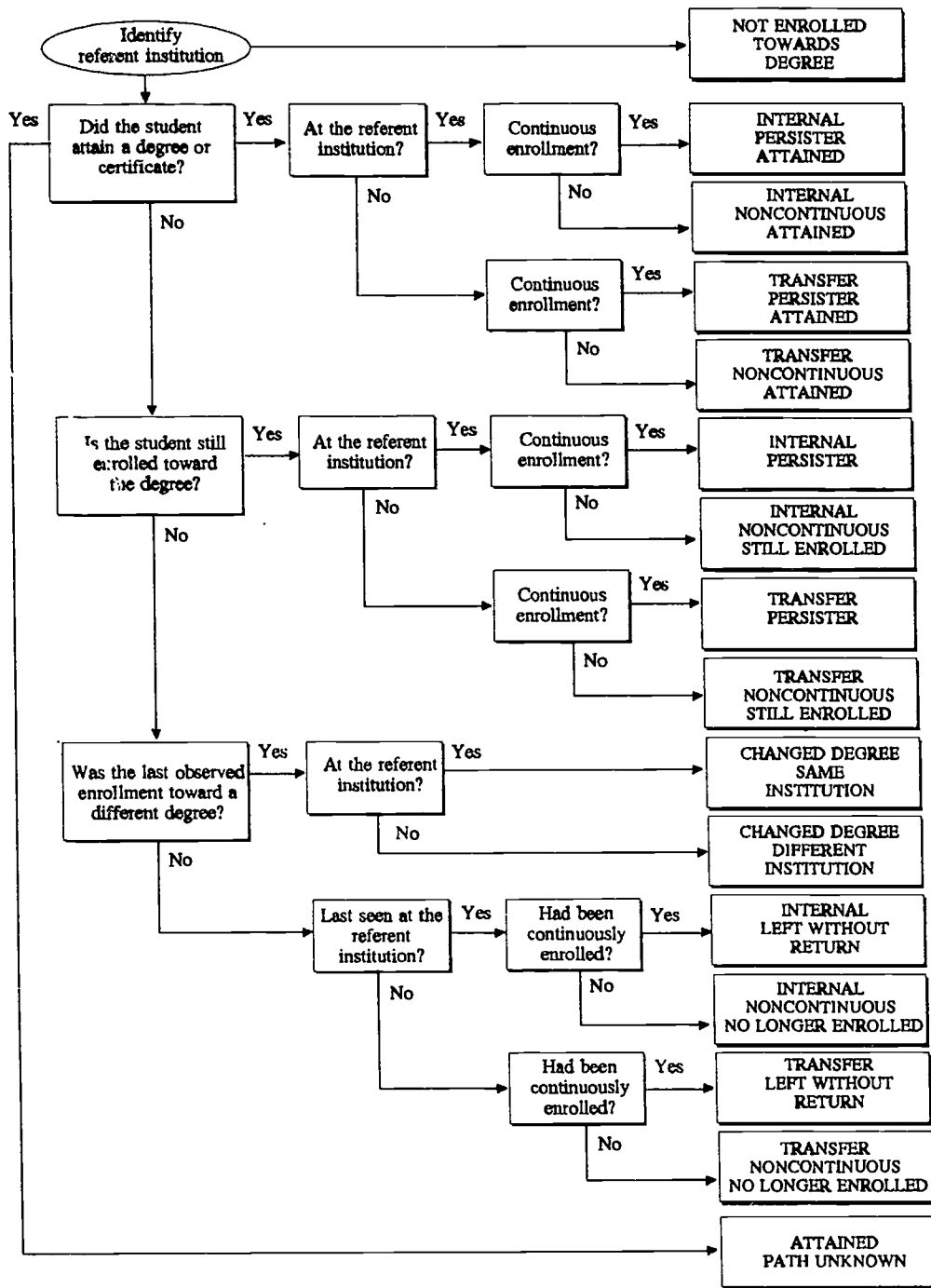
**transfer**—students were defined as having transferred if they left one postsecondary institution and enrolled at a different postsecondary institution without returning to that institution.

**continuity of enrollment**—students were considered continuously enrolled if they did not have any period of more than 4 months of nonenrollment towards the degree at any postsecondary institution.

If students **changed the degree** they reported working toward they were classified as having done so either at the same institution or a different institution. Students who changed their degree objective were then reclassified into PERAAA, PERABA, or PERACT according to the new objective. Finally, students who reported having attained the degree, but had no enrollment history toward the specific degree, were classified as attained path unknown.

The flow chart on the following page illustrates the sequence of questions that determined a student's classification on the three persistence patterns toward and attainment of postsecondary award variables (certificate, associate's, bachelor's).

Figure A2—Persistence toward and attainment of postsecondary awards



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### III. Persistence and attainment in relation to spells of continuous enrollment (PERAFIRS, PERALONG, PERALAST)

The persistence and attainment patterns of the sample were examined in relation to the institution they attended first (always the NPSAS institution), longest, and last by examining spells of continuous enrollment at these institutions. Spells were defined by the first, longest, and last period of continuous enrollment. Continuous enrollment was defined as no period of nonenrollment of more than 4 months at the referent institution.

The enrollment spell outcomes identified students' status relative to the referent institution at the end of the spell, taking future activity into account. The central issue was to determine whether students left the referent institution, and if so, how. The specific spell outcomes appear below:

**attained**—attained degree or certificate at the referent institution.

**still enrolled**—continuously enrolled at referent institution and still enrolled at follow-up.

**same-year transfer\***—left the referent institution and enrolled at a different institution during the same year.

**subsequent transfer\***—enrolled throughout the year at the referent institution but enrolled at a different institution the following fall, or left referent institution during the year, and enrolled at a different institution after the following summer or fall.

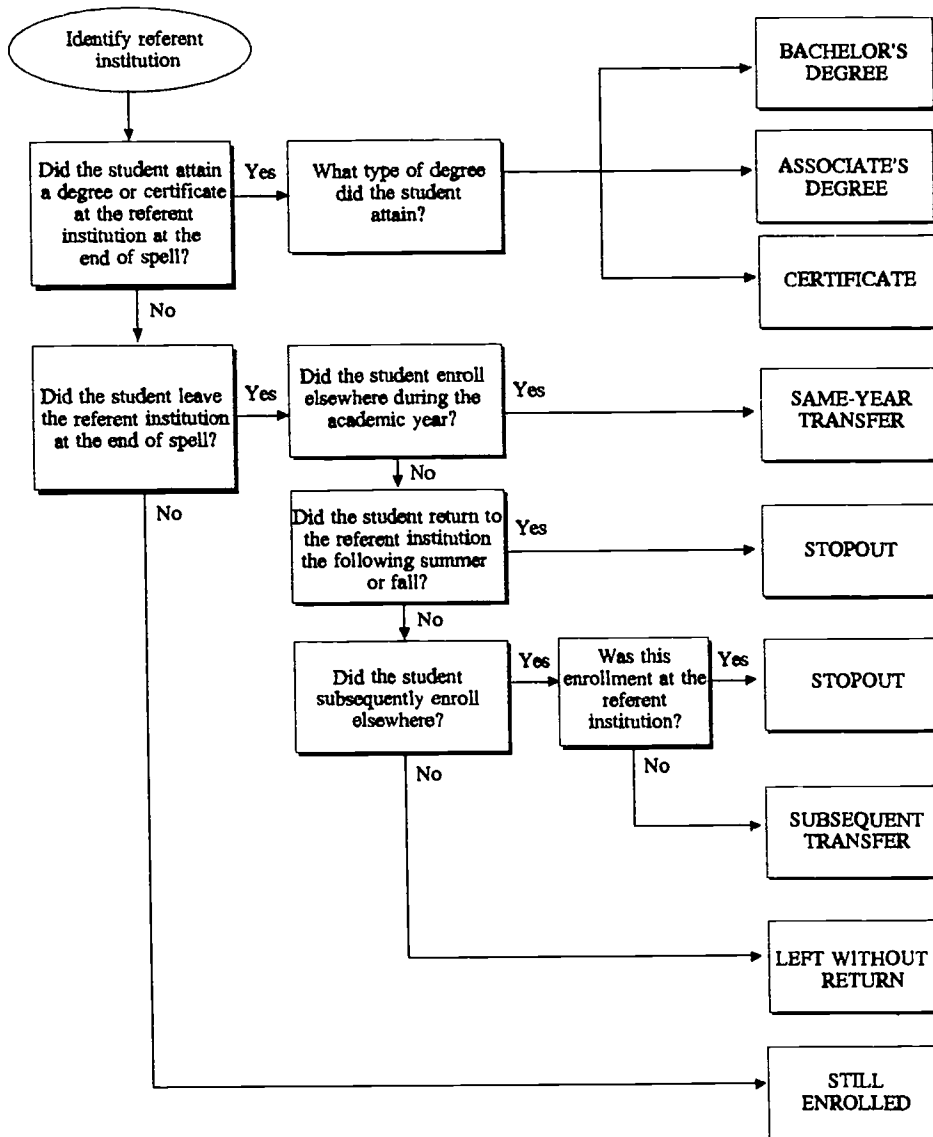
**stopout\***—left the referent institution during an academic year or did not return following fall, to enroll at any other institution, and later returned to the referent institution.

**left without return**—enrolled continuously at referent institution, left the institution, did not attain, with no subsequent return or enrollment elsewhere.

\*Note that for the last institution attended, since subsequent enrollment was not observed, the possible outcomes were limited to: attained, still enrolled, and left without return.

The flow chart on the following page illustrates the sequence of questions that determined a student's classification on the three persistence and attainment patterns in relation to spells of continuous enrollment variables.

**Figure A3—Persistence and attainment in relation to spells of continuous enrollment**



For the first continuous spell of enrollment, the choice of the referent institution was predetermined to be the NPSAS institution. However, because many students attended more than one institution during postsecondary education, it was necessary to establish a set of decision rules for identifying the longest and last referent institutions. These referent institutions were identified as follows:

- a. *Institution attended longest*—where more than one institution was attended for the same length of time, the following hierarchical decision rules determined the referent institution:
  - 1) The institution where the student attained a credential;
  - 2) The institution with the greatest enrollment intensity, where: full time > half time > less than half time;
  - 3) The highest level institution, where: 4-year doctoral > 4-year non-doctoral > 2–3 year > less than 2-year.
  
- b. *Institution attended last*—where the student attended more than one institution during the last spell of continuous enrollment, the following hierarchical decision rules determined the referent institution:
  - 1) The institution where the student attained a credential;
  - 2) The institution with the greatest enrollment intensity, where: full time > half time > less than half time;
  - 3) The highest level institution, where: 4-year doctoral > 4-year non-doctoral > 2–3 year > less than 2-year.
  - 4) The institution entered last.

#### IV. Academic year persistence and attainment (PERA8990, PERA9091, PERA9192, PERA9293, PERA9394)

##### A. General

Persistence and attainment were examined for each academic year relative to the institution attended in that year (the referent institution for that year). For each of the 5 academic years in BPS:90/94, variables identify students' status relative to the referent institution at the end of the academic year, taking future activity into account.

The central issue was to determine whether students left the referent institution, and if so, how (attained a certificate or degree from the institution; stopped out; transferred to another institution; or dropped out). The specific academic year outcomes appear below:

**attained**—attained degree or certificate at the referent institution during the AYyy.<sup>1</sup>

**persist\***—enrolled at the referent institution throughout the year and returned the following summer or fall.

**same-year transfer**—left the referent institution and enrolled at a different institution during the same year.

**subsequent transfer\***—enrolled throughout the year at the referent institution but enrolled at a different institution the following fall, or left referent institution during the year, and enrolled at a different institution after the following summer or fall.

**stopout**—left the referent institution during the year or did not return the following summer or fall, did not enroll at any other institution, and later returned to the referent institution.

**left without return**—enrolled for some or all of the year at referent institution, did not attain, with no subsequent return or enrollment elsewhere.

**not enrolled**—no enrollment in AYyy.

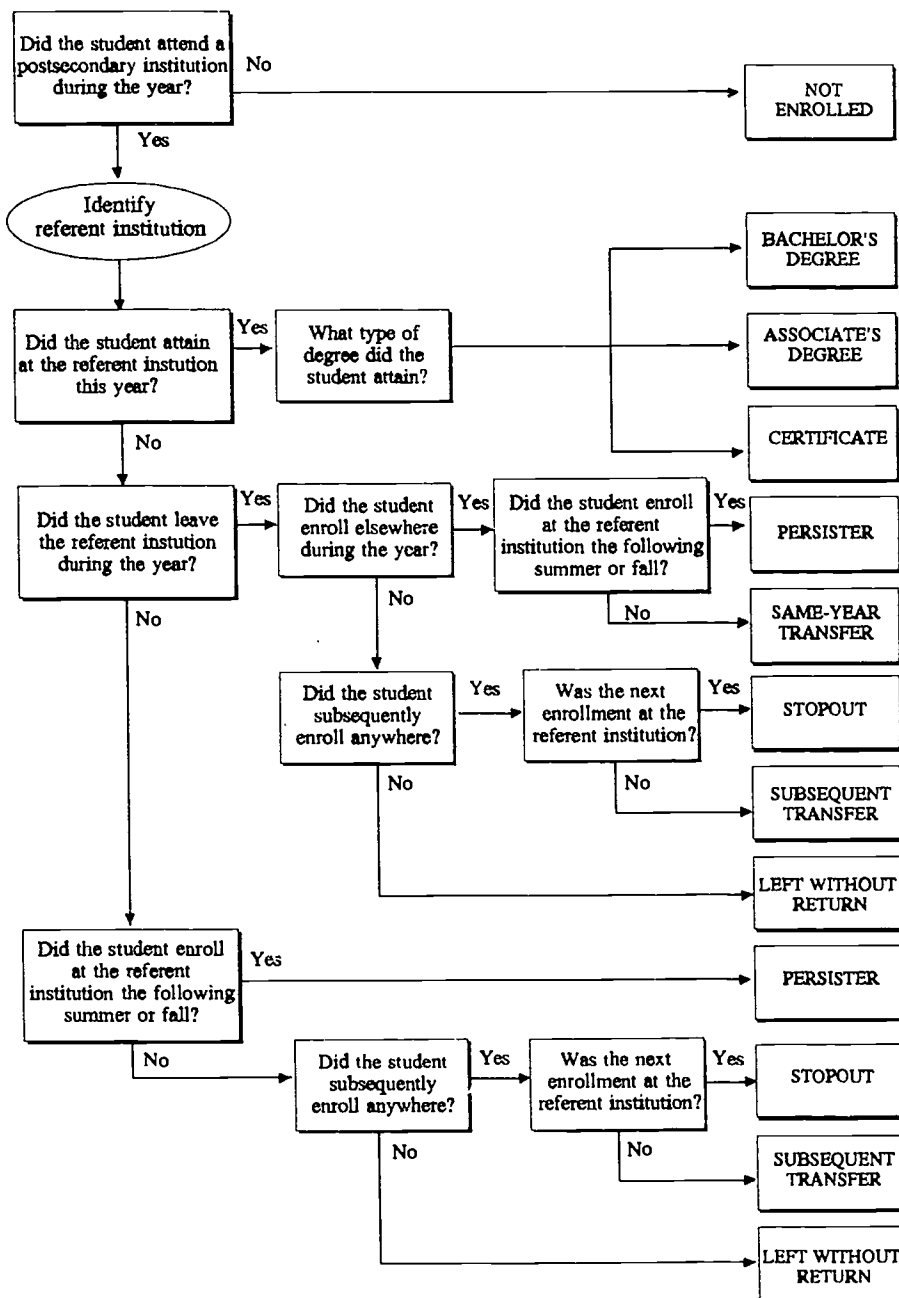
\*Note that for 1993–94, since subsequent enrollment was not observed, the possible outcomes were limited to: attained, still enrolled (replaced persist\*), stopout, same-year transfer, delayed transfer, left without return, and not enrolled.

The flow chart on the following page illustrates the sequence of questions that determined a student's classification on the academic year persistence and attainment variables.

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<sup>1</sup>AYyy refers to the academic year.

Figure A4—Academic year persistence and attainment



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If a student attended more than one institution in a year, it was necessary to establish a set of decision rules for identifying the referent institution; that is, the institution where a student's end-of-year status would be characterized on the academic year outcome variables. The referent institution for each academic year was identified as follows:

- a. Special case for 1989-90:
  - The NPSAS institution was the referent institution.
- b. Sequential precedence relations. For students classified as persisters or transfers in 1989-90 through 1992-93, the choice of referent institution for the subsequent year was predetermined.
  - If a student was classified as a persister in a given year (meaning the student returned to the same institution the following fall), the same institution was the referent institution for the following year.
  - Similarly, if a student transferred, the institution transferred to became the referent institution for the following year.
- c. The remaining cases of multiple attendance requiring arbitration were those for academic years 1990-91 through 1993-94 in which a student's prior year classification was attained, not enrolled, or dropout. In these cases, the following hierarchical decision rules determined the referent institution:
  - 1) Student's designation of principal institution for that year;
  - 2) Any institution where the student attained a credential that year;
  - 3) Institution attended the longest in that year;
  - 4) Institution with the greatest enrollment intensity, where: full time > half time > less than half time;
  - 5) Level of institution, where: 4-year doctoral > 4-year non-doctoral > 2-3 year > less than 2-year.

#### B. Persistence toward the bachelor's degree

After constructing this set of academic year persistence variables for all students, a second set of variables was created for tracing persistence toward the bachelor's degree.<sup>2</sup> These variables shifted the emphasis from persistence within an institution to persistence toward the bachelor's degree in the 4-year sector. Consequently, certain end-of-year outcomes were redefined. Students identified as transfers on the academic year variables were broken into two groups: those who transferred to another 4-year institution without any break in continuity, and those who transferred to a less-than-4-year institution or who transferred to a 4-year institution following an interruption in enrollment. Those who continued in the 4-year sector without interruption were classified among persisters. Associate's degree completers were also separated into two groups: those who enrolled for a bachelor's degree at a 4-year institution the following year, and those who did not. Associate's degree completers who went on to a 4-year institution in the next year were classified among persisters.

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<sup>2</sup>See Essay Persistence Toward the Bachelor's Degree at 4-year Institution, pp. 22-27.

## Appendix B

### Glossary

This glossary describes the variables used in this report, all of which come from the BPS:90/94 Data Analysis System (DAS) (see appendix C for a description of the DAS). These variables were either items taken directly from the 1990 National Postsecondary Student Aid Survey (NPSAS:90) which served as the base year for BPS, from the first BPS follow-up in 1992 or the second follow-up in 1994; or they were derived by combining one or more items in these surveys. For all variables in this glossary, the variable label is followed by the variable name contained in the DAS.

Variables are listed in the general order in which they are introduced in the report and related items are grouped together (i.e., demographic characteristics, institutional characteristics, etc.).

#### General Definitions

In the BPS survey, "beginning postsecondary students" included only students who enrolled in postsecondary education for the very first time in 1989-90, not all students who were in their first year of a postsecondary program. Thus, an individual who started postsecondary education earlier, left, and then returned was not included in BPS. Throughout this report the reference to "beginning postsecondary students" or "first-time students" refers to only those who enrolled in postsecondary education for the first time in the 1989-90 academic year.

It is important to remember that while BPS participants were all students in the 1989-90 academic year, they may or may not have been enrolled in subsequent years. For simplicity and ease of reading, this glossary refers to survey participants as "students." However, this term should always be interpreted as "1989-90 beginning postsecondary students."

## Appendix B Glossary Index

<b>Persistence and attainment patterns . . . . 5</b>	
Overall persistence and attainment . . . . 5	Enrollment continuity through first degree . . . . . 14
Overall persistence and attainment/student persistence in postsecondary education . . . 5	Transfer before first degree . . . . . 14
Attainment and retention at the first institution . . . . . 5	Transferred before or after first degree . . 15
Overall persistence and attainment—including transfer status . . . . . 6	<b>Institutional Characteristics . . . . . 15</b>
Persistence and attainment outcomes among bachelor's degree seekers at 4-year institutions . . . . . 7	Level of institution . . . . . 15
Date of bachelor's degree receipt . . . . . 7	Control of institution . . . . . 16
Persistence and attainment during the academic year . . . . . 8	Level and control of institution . . . . . 16
Departure from the persistence track . . . . 9	Level and control of first institution . . . 17
First type of departure from the persistence track . . . . . 9	Ever attend a public 2-year institution . . 18
Timing of departure from the persistence track . . . . . 9	Ever attend a public or private, not-for-profit 4-year institution . . . . . 18
Persistence and attainment during spells of continuous enrollment . . . . . 10	Ever attend a private, for-profit institution . . . . . 18
Persistence and attainment towards degree . . . . . 10	Control of transfer institutions . . . . . 18
Academic year of last enrollment . . . . . 11	<b>Degree Characteristics . . . . . 18</b>
Number of months enrolled . . . . . 12	Degree working toward . . . . . 18
Intensity of enrollment . . . . . 12	Degrees attempted at any time . . . . . 19
Attendance status . . . . . 13	Number of degrees attempted . . . . . 19
Number of institutions attended . . . . . 13	Type of degree attempted . . . . . 19
Transfer status and enrollment continuity through first degree . . . . . 13	Type of degree attained . . . . . 20
	Type of degree(s) attained . . . . . 20
	<b>Student Characteristics . . . . . 21</b>
	Number of children . . . . . 21
	Single parent status . . . . . 21
	Gender . . . . . 22



Race-ethnicity of student . . . . .	22	<b>Education financing characteristics . . . . .</b>	<b>30</b>
Age . . . . .	22	Total costs in 1989-90 . . . . .	30
Socioeconomic status . . . . .	23	Total aid amount in 1989-90 . . . . .	30
Marital status . . . . .	23	Total federal aid amount 1989-90 . . . . .	31
Type of high school diploma . . . . .	23	Total loan amount in 1989-90 . . . . .	31
Parental education . . . . .	24	Total grant amount in 1989-90 . . . . .	32
Dependency status in 1989-90 . . . . .	24	Aid package at first institution in 1989-90 . . . . .	32
Dependency status . . . . .	25	Financial aid receipt during the academic year . . . . .	32
Income and dependency status in 1989-90 . . . . .	25	Any financial aid . . . . .	33
Number of risk factors . . . . .	25	Grants . . . . .	33
Delayed postsecondary enrollment . . . . .	26	Loans . . . . .	33
Worked full time while enrolled . . . . .	26	Employer aid . . . . .	34
Attendance status . . . . .	27	Spouse or other relative financial assistance . . . . .	34
<b>Social, Academic, and Work Experiences . . . . .</b>	<b>27</b>	Parents' financial contribution . . . . .	34
Index of social integration in 1989-90 . . . . .	27	Personal savings . . . . .	34
Index of academic integration in 1989-90 . . . . .	27	Loan from parents . . . . .	35
Satisfaction with first institution in 1989-90 . . . . .	28	<b>Education borrowing activities . . . . .</b>	<b>35</b>
Local residence in 1989-90 . . . . .	28	Borrowed for undergraduate education . . . . .	35
Educational aspirations in 1989-90 . . . . .	28	Owe on postsecondary loans . . . . .	35
Average hours worked while enrolled in 1989-90 . . . . .	29	Amount borrowed for postsecondary education . . . . .	35
Grade point average in 1989-90 . . . . .	29	Amount owed on postsecondary loans . . . . .	36
Number of types of remedial instruction received . . . . .	30	Currently repaying educational loans . . . . .	36
		Paying by self . . . . .	36
		Average monthly loan payment . . . . .	36

<b>Marital status and family formation . . .</b>	<b>37</b>	<b>Most recent job . . . . .</b>	<b>41</b>
Marital status in 1994 . . . . .	37	Primary occupation in 1993 . . . . .	41
Timing of marriage . . . . .	37	Satisfaction with most recent job . . . . .	41
Current number of children . . . . .	37	<b>Unemployment experiences . . . . .</b>	<b>42</b>
Timing of first child . . . . .	37	Ever unemployed . . . . .	42
Age in 1994 . . . . .	38	Ever receive unemployment compensation . . . . .	42
<b>Graduate school and further education activities . . . . .</b>	<b>38</b>	Total duration of unemployment in weeks . . . . .	42
Applied or intended to apply to graduate school . . . . .	38	Unemployed during calendar year . . . . .	42
Attended graduate school . . . . .	38	<b>Most recent principal job . . . . .</b>	<b>42</b>
Type of licensing exam taken . . . . .	38	Months before obtained first principal job after PSE . . . . .	42
<b>Civic participation and voting activities . . . . .</b>	<b>38</b>	Activities to obtain most recent principal job . . . . .	43
Participate in volunteer/community service in last 2 years . . . . .	38	Relationship between most recent principal job and education . . . . .	43
Currently doing volunteer work in 1994 . . . . .	39		
Types of volunteer/community service organizations . . . . .	39		
Voter registration status . . . . .	39		
Voting activities . . . . .	39		
<b>Employment experiences . . . . .</b>	<b>39</b>		
Ever work while enrolled . . . . .	39		
Number of jobs held during PSE . . . . .	39		
Co-op/apprentice job . . . . .	40		
On-campus job . . . . .	40		
Job related to studies . . . . .	40		
Simultaneous jobs . . . . .	41		



## Persistence and attainment patterns

### *Overall persistence and attainment*

PERACUM

Aggregated version of overall persistence and attainment variable.

Attained or still enrolled                      Student had attained a degree or was still enrolled as of spring of 1994. Includes students coded as "internal" as well as "transfer" "attained" "non-continuous attained," "persisters," and "non-continuous still enrolled."

No degree, not enrolled                      Student had not attained a degree and was no longer enrolled as of spring 1994. Includes students coded as "internal" as well as "transfer" "non-continuous no longer enrolled" and "left without return."

For complete description see appendix A.

### *Overall persistence and attainment/student persistence in postsecondary education*

PERACUM

Aggregated version of overall persistence and attainment variable.

Attained degree                                      Student had attained a degree as of spring 1994. Includes students coded as "internal" as well as "transfer" "attained" and "non-continuous attained."

No degree, enrolled                                      Student had not attained a degree and was still enrolled as of spring 1994. Includes students coded as both "internal" as well as "transfer" "persisters" and "non-continuous still enrolled."

No degree, not enrolled                                      Student had not attained a degree and was no longer enrolled as of spring 1994. Includes students coded as "internal" as well as "transfer" "non-continuous no longer enrolled" and "left without return."

For complete description see appendix A.

### *Attainment and retention at the first institution*

PERACUM

Aggregated version of overall persistence and attainment variable.

Attained degree at the first institution

Student had attained a degree at the first institution as of spring 1994. Includes students coded as "internal attained" and "non-continuous internal attained."

No degree, enrolled at the first institution

Student had not attained a degree at the first institution and was enrolled at the first institution in spring 1994. Includes students coded as "internal persisters" and "non-continuous still enrolled."

No degree, left PSE from the first institution

Student had not attained a degree at the first institution, was no longer enrolled at the first institution, and had not enrolled anywhere else as of spring 1994. Include students coded as "internal non-continuous no longer enrolled" and "internal left without return."

No degree, transferred from the first institution

Student had not attained a degree at the first institution and had transferred from the first institution as of spring 1994. Includes all students coded as "transfers."

For complete description see appendix A.

***Overall persistence and attainment—including transfer status***

**PERACUM**

Aggregated version of overall persistence and attainment variable.

Did not transfer  
Attained degree at first institution

Student had attained a degree at the first institution as of spring 1994. Includes students coded as "internal attained" and "internal non-continuous attained."

No degree, enrolled at first institution

Student had not attained at the first institution and was enrolled at the first institution in spring 1994. Includes students coded as "internal persisters" and "internal non-continuous still enrolled."

No degree, left PSE from first institution

Student had not attained a degree or transferred from the first institution and was no longer enrolled in postsecondary education in spring 1994. Includes students coded as "internal noncontinuous no longer enrolled" and "internal left without return."

Transferred from first institution  
Attained degree elsewhere

Student had attained a degree at an institution after transfer as of spring 1994. Includes students coded as "transfer attained" and "transfer non-continuous attained."

No degree, enrolled elsewhere

Student had not attained a degree and was enrolled at an institution after transfer as of spring 1994. Students coded as "transfer persisters" and "transfer non-continuous still enrolled."

No degree, left PSE after transfer

Student had not attained a degree at an institution after transfer and was no longer enrolled in postsecondary education as of spring 1994. Includes students coded as "transfer noncontinuous non longer enrolled" and "transfer left without return."

For complete description see appendix A.

***Persistence and attainment outcomes among bachelor's degree seekers at 4-year institutions***

**ATTENRST**

Attained bachelor's degree

Regardless of prior attainment, student had attained a bachelor's degree as of spring 1994.

Still enrolled at  
4-year institution

Regardless of prior attainment, student was still enrolled at a 4-year institution as of spring 1994.

Attained associate's degree, not enrolled  
at 4-year institution

Student had attained an associate's degree and was not enrolled at a 4-year institution as of spring 1994.

Attained certificate, not enrolled  
at a 4-year institution

Student had attained a certificate and was not enrolled at 4-year institution as of spring 1994.

No degree, not enrolled  
at 4-year institution

Student had not attained any degree and was not a 4-year institution as of spring 1994.

***Date of bachelor's degree receipt***

**RECDBA**

No degree

Student had not attained a bachelor's degree as of spring 1994.

By June 1993

Student had attained a bachelor's degree by June 1993.

By July 1993–June 1994

Student had attained a bachelor's degree at some time between July 1993–June 1994.

*Persistence and attainment during the academic year*

1989–90 academic year	<b>PER8990X*</b>
1990–91 academic year	<b>PER9091X</b>
1991–92 academic year	<b>PER9192X</b>
1992–93 academic year	<b>PER9293X</b>
1993–94 academic year	<b>PER9394R**</b>

Attained Cert. in AYyy

Student had attained a certificate at the referent institution during the academic year.

Attained AA in AYyy

Student had attained an associate's degree at the referent institution during the academic year.

Attained BA in AYyy

Student had attained a bachelor's degree at the referent institution during the academic year.

Persisted into AYyy+1

Student was still enrolled at the referent institution during the fall of the following academic year, had been working towards an associate's degree during the academic year but changed to working towards a bachelor's degree during the following academic year, or transferred without a break in enrollment continuity to a similar or higher level institution.

Downward or delayed transfer in AYyy

Student transferred to a lower level institution during the academic year or transferred with a break in enrollment continuity.

Stopout in AYyy

Student left the referent institution during the academic year and re-enrolled after a period of more than 4 months.

Left without return in AYyy

Student left the referent institution during the academic year and had not re-enrolled in postsecondary education as of spring 1994.

---

\* PER8990X does not include the category not enrolled in AYyy.

\*\*Because subsequent enrollment is not observed, PER9394R does not include the categories for stopout or delayed transfer and persisters are categorized as still enrolled.

***Departure from the persistence track***

**LEFTPT**

Indicates whether the student departed from the persistence track before the first degree (if any) or last enrollment. Departure is defined as stopping out, a break in continuity of enrollment at the referent institution; downward or delayed transfer, transfers to a lower level institution or transfers involving a break in the continuity of enrollment; leaving without return, leaving the referent institution and not re-enrolling as of spring 1994.

- |                            |  |
|----------------------------|--|
| Did not leave              | Before first degree (if any) or last enrollment the student did not depart from the persistence track. |
| Left the persistence track | Before first degree (if any) or last enrollment the student departed from the persistence track.       |

***First type of departure from the persistence track***

**LEFTPT**

- |                              |   |
|------------------------------|---|
| Downward or delayed transfer | Before first degree (if any) or last enrollment student transferred to a lower level institution or transferred with a break in enrollment continuity.      |
| Stopout                      | Before first degree (if any) or last enrollment student left the referent institution and re-enrolled after a period of more than 4 months.                 |
| Left without return          | Before first degree (if any) or last enrollment student left the referent institution and had not re-enrolled in postsecondary education as of spring 1994. |

***Timing of departure from the persistence track***

**LEFTYR**

Academic year the student first departed from the persistence track.

- |                   |   |
|-------------------|---|
| Did not leave     | Student did not depart from the persistence track.  |
| 1989-90 departure | Student's first departure from the persistence track occurred during the 1989-90 academic year. |
| 1990-91 departure | Student's first departure from the persistence track occurred during the 1990-91 academic year. |
| 1991-92 departure | Student's first departure from the persistence track occurred during the 1991-92 academic year. |
| 1992-93 departure | Student's first departure from the persistence track occurred during the 1992-93 academic year. |

1993-94 departure

Student's first departure from the persistence track occurred during the 1993-94 academic year.

***Persistence and attainment during spells of continuous enrollment***

Persistence and attainment during the first, longest, or last spell of continuous enrollment. Derived by tracing the student's persistence path during the continuous spell of enrollment at the first, longest, or last institution attended.

First spell of continuous enrollment	<b>PERAFIRS</b>
Longest spell of continuous enrollment	<b>PERALONG</b>
Last spell of continuous enrollment	<b>PERALAST*</b>

Attained degree at end of spell	The spell of continuous enrollment ended when the student attained a degree at the referent institution.
---------------------------------	--

Still enrolled in spring 1994	The student was still enrolled at the referent institution at the end of the spell of continuous enrollment.
-------------------------------	--

Spell ended with transfer	The spell of continuous enrollment ended when the student transferred from the referent institution.
---------------------------	--

Spell ended with stopout	The spell of continuous enrollment ended when the student stopped out from the referent institution.
--------------------------	--

Left without return at the end of spell	The spell of continuous enrollment ended when student left the referent institution and did not re-enroll in postsecondary education.
---	---

***Persistence and attainment towards degree***

Aggregated version of persistence and attainment toward the degree variable.

Associate's degree	<b>PERAAA</b>
Bachelor's degree	<b>PERABA</b>
Certificate	<b>PERACT</b>

---

\* Since subsequent enrollment was not observed at the last institution, the possible outcomes are limited to: attained a certificate or degree from the institution, still enrolled, and left without return. For complete description see appendix A.



Attained degree	Student had attained the degree working toward as of spring 1994. Includes students coded as "internal" as well as "transfer" "attained" and "non-continuous attained."
No degree, enrolled	Student was still enrolled toward the degree as of spring 1994. Includes students coded as "internal" as well as "transfer" "persisters" and "non-continuous still enrolled."
No degree, not enrolled	Student had not attained the degree working toward and was no longer enrolled in postsecondary education. Includes students coded as "internal" as well as "transfer" "non-continuous no longer enrolled" and "left without return."
Changed degree working toward	Student had not attained the degree working toward, was no longer working toward this degree, but had enrolled toward a different degree objective. Includes students coded as "internal" as well as "transfer" "changed degree working toward." Students in this category are reclassified according to the new degree objective in either PERAAA, PERABA, or PERACT.

For complete description see appendix A.

<i>Academic year of last enrollment</i>	<b>LASTENR</b>
AY 1989-90	Student was last enrolled during the 1989-90 academic year.
AY 1990-91	Student was last enrolled during the 1990-91 academic year.
AY 1991-92	Student was last enrolled during the 1991-92 academic year.
AY 1992-93	Student was last enrolled during the 1992-93 academic year.
AY 1993-94	Student was last enrolled during the 1993-94 academic year.

### *Number of months enrolled*

Count of number of months enrolled during the period of analysis.

Through first degree (if any) or last enrollment* During first spell of continuous enrollment at the first institution	NUMMCUM NUMMFIRS
Less than 12 months	Student was enrolled for less than 12 months.
12-24 months	Student was enrolled for 12-24 months.
25-36 months	Student was enrolled for 25-36 months.
37-48 months	Students was enrolled for 37-48 months.
More than 48 months	Student was enrolled for more than 48 months.

\*Variable also used as an average.

### *Intensity of enrollment*

Intensity of enrollment. Calculated as the percentage of months enrolled full time during the period of analysis.

Through first degree (if any) or last enrollment During first spell of continuous enrollment During longest spell of continuous enrollment During last spell of continuous enrollment During the 1989-90 academic year During the 1990-91 academic year During the 1991-92 academic year During the 1992-93 academic year During the 1993-94 academic year	ATSTCUM ATSTFIRS ATSTLONG ATSTLAST ATST8990 ATST9091 ATST9192 ATST9293 ATST9394
Exclusively part time	The student was not enrolled full time during any month.
Mixed	The student was enrolled full time between 1-99 percent of months.
Exclusively full time	The student was enrolled full time during all months.

**Attendance status**

When began at first institution	<b>ATT8990</b>
When began working towards associate's degree	<b>ATTAA</b>
When began working toward bachelor's degree	<b>ATTBA</b>
When began working towards certificate	<b>ATTCT</b>
When began first spell	<b>ATT8990</b>
When began longest spell	<b>ATTLONG</b>
When began last spell	<b>ATTLAST</b>

Part time	Student attended part time during the first month enrolled.
Full time	Student attended full time during the first month enrolled.

**Number of institutions attended**

Count of number of institutions attended during the period of analysis. Includes simultaneous or temporary enrollment at more than one institution as well as transfers.

Through first degree (if any) or last enrollment	<b>NINSCUM</b>
Throughout postsecondary education	<b>NINSTOT</b>

One	Student attended one postsecondary institution.
More than one	Student attended more than one postsecondary institution.

Positive values on this variable are also used to identify the percentage of students who ever attended more than one institution.

**Transfer status and enrollment continuity through first degree** **PERACUM**

Recoded version of overall persistence and attainment through first degree variable (PERACUM) to aggregate student persistence and attainment outcomes based on transfer status and enrollment continuity. Indicates transfer and enrollment continuity before first degree (if any) or last enrollment. Students were classified as transfers only if they changed institutions permanently without returning to the original institution.

Did not transfer, continuously enrolled	Before first degree (if any) or last enrollment, student did not transfer and did not break enrollment continuity for more than 4 months. Includes students categorized as "internal persisters" and "internal left without return."
---	--

Did not transfer, not continuously enrolled

Before first degree (if any) or last enrollment, student did not transfer and broke enrollment continuity for more than 4 months. Includes students categorized as "internal stopouts."

Transferred, continuously enrolled

Before first degree (if any) or last enrollment, student transferred and did not break enrollment continuity for more than 4 months. Includes students categorized as "transfer persisters" and "transfer left without return."

Transferred, not continuously enrolled

Before first degree (if any) or last enrollment student transferred and broke enrollment continuity for more than 4 months. Includes students categorized as "transfer stopouts."

For complete description, see appendix A.

***Enrollment continuity through first degree***

**STOPOUT**

Recoded version of overall persistence and attainment through first degree variable. (PERACUM). Aggregates student persistence and attainment outcomes based on enrollment continuity. Indicates enrollment continuity through first degree (if any) or last enrollment.

Continuous

Before first degree (if any) or the last enrollment, the student did not break continuity of enrollment with a period of non-enrollment of more than 4 months. Includes students coded as "internal" as well as "transfer" "attained," "persisters," and "left without return."

Not continuous

Before first degree (if any) or the last enrollment, the student broke continuity of enrollment with a period of non-enrollment of more than 4 months. Includes students categorized as "internal" as well as "transfer" "stopout attained," "stopout still enrolled," and "stopout-no longer enrolled."

For complete description see appendix A.

***Transfer status before first degree***

**PERACUM**

Recoded version of overall persistence and attainment before first degree (if any) or last enrollment, aggregates students' persistence and attainment outcomes based on transfer status. Indicates a transfer before first degree (if any) or last enrollment. Students were classified as transfers only if they changed institutions permanently without returning to the original institution.

Did not transfer Before first degree (if any) or last enrollment, the student did not transfer. Includes all students categorized as "internal."

Transferred Before first degree (if any) or last enrollment, the student transferred. Includes all students categorized as "transfer."

Positive values on this variable are also used to identify the percentage of students who ever transferred before first degree (if any) or last enrollment.

For complete description see appendix A.

***Transferred before or after first degree***

**TRAN1ATT**

Student transferred at some time during postsecondary education, based on attainment status at time of first transfer variable. Positive values on this variable are used to indicate the percentage of students who ever transferred during postsecondary education before or after attainment.

**Institutional Characteristics**

***Level of institution***

Level of referent institution. Aggregates level and control of institution according to level.

First institution attended	<b>OFCO8990</b>
Institution where began working toward associate's degree	<b>OFCOAA</b>
Institution where began working toward bachelor's degree	<b>OFCOBA</b>
Institution where began working toward certificate	<b>OFCOCT</b>
Longest institution attended	<b>OFCOLONG</b>
Last institution attended	<b>OFCOLAST</b>
Referent institution during the 1989-90 academic year	<b>OFCO8990</b>
Referent institution during the 1990-91 academic year	<b>OFCO9091</b>
Referent institution during the 1991-92 academic year	<b>OFCO9192</b>
Referent institution during the 1992-93 academic year	<b>OFCO9293</b>

Less-than-2-year An institution whose normal program of study is less than 2 years in duration.

2-year An institution whose program of study results in an award or degree below the baccalaureate level, and is at least 2 years but less than 4 years in

duration. These institutions include many community and junior colleges.

4-year

An institution that offers 4-year baccalaureate degrees. These institutions may or may not also offer master's, doctoral, or first professional degrees in one or more programs as the highest degree awarded.

***Control of institution***

Control of referent institution. Aggregates level and control of institution according to control.

First institution attended	<b>OFCO8990</b>
Institution where began working toward associate's degree	<b>OFCOAA</b>
Institution where began working toward a bachelor's degree	<b>OFCOBA</b>
Institution where began working toward certificate	<b>OFCOCT</b>
Longest institution attended	<b>OFCOLONG</b>
Last institution attended	<b>OFCOLAST</b>
Referent institution during the 1989-90 academic year	<b>OFCO8990</b>
Referent institution during the 1990-91 academic year	<b>OFCO9091</b>
Referent institution during the 1991-92 academic year	<b>OFCO9192</b>
Referent institution during the 1992-93 academic year	<b>OFCO9293</b>

Public

A postsecondary educational institution operated by publicly elected or appointed school officials in which the program and activities are under the control of these officials and that is supported primarily by public funds.

Private, not-for-profit

A postsecondary educational institution that is controlled by an independent governing board and incorporated under Section 501(c)(3) of the Internal Revenue Code.

Private, for-profit

A postsecondary educational institution that is privately owned and operated as a profit-making enterprise. These institutions include career colleges and proprietary institutions.

***Level and control of institution***

Combined level and control of referent institution.

First institution attended	<b>OFCO8990</b>
Institution through first degree (if any) or last enrollment	<b>OFCONCUM</b>
Institution where began working toward associate's degree	<b>OFCOAA</b>

Institution where began working toward a bachelor's degree	OFCOBA
Institution where began working toward a certificate	OFCOCT
First spell of continuous enrollment	OFCO8990
Longest spell of continuous enrollment	OFCOLONG
Last spell of continuous enrollment	OFCOLAST
Institution where attained highest degree	OFCONHI
Referent institution during the 1990-91 academic year	OFCO9091
Referent institution during the 1991-92 academic year	OFCO9192
Referent institution during the 1992-93 academic year	OFCO9293
Referent institution during the 1993-94 academic year	OFCO9394

4-year

Public	Public, 4-year institution
Private, not-for-profit	Private, not-for-profit, 4-year institution
Private, for profit	Private for profit, 4-year institution

2-year

Public	Public, 2-to 3-year institution
Private, not-for-profit	Private, not-for-profit, 2-to 3-year institution
Private, for-profit	Private, for-profit, 2-to 3-year institution

Less-than-2-year

Public	Public, less-than-2-year institution
Private, not-for-profit	Private, not-for-profit, less-than-2-year institution
Private, for-profit,	Private, for-profit, less-than-2-year institution

***Level and control of first institution***

**OFCO8990**

Recorded level and control of the first (NPSAS) institution.

Public, 4-year	Public, 4-year institution
Private, not-for-profit, 4-year	Private, not-for-profit, 4-year institution
Public, less-than-4-year	Public, 2-to 3-year or less-than-2-year institution
Private, not-for-profit, less-than-4-year	Private, not-for-profit, 2-to 3-year or less-than-2- year institution

Private, for-profit,  
less-than-4-year

Private, for-profit, 2-to 3-year or less-than-2-year  
institution

***Ever attend a public 2-year institution***

**EVERCC**

Positive values on this variable are used to identify the percentage of students who reported ever attending a public 2-year institution.

***Ever attend a public or private, not-for-profit 4-year institution***

**EVER4YR**

Positive values on this variable are used to identify the percentage of students who reported ever attending a public or private, not-for-profit 4-year institution.

***Ever attend a private, for-profit institution***

**EVERPROP**

Positive values on this variable are used to identify the percentage of students who reported ever attending a private, for-profit institution.

***Control of transfer institutions***

**TRANICTL**

Variable indicates the relationship between the control of the institution the student transferred from and the control of the first institution they transferred to.

Did not transfer

Student did not transfer.

Public to public

Student transferred from one publicly controlled institution to another.

Private, not-for-profit to public

Student transferred from a private, not-for-profit institution to a publicly controlled institution.

Public to private, not-for-profit

Student transferred from a publicly controlled institution to a private, not-for-profit institution.

Other transfers

Student's transfer involved other combinations.

**Degree Characteristics**

***Degree working toward***

Type of degree student reported working toward at referent institution.

When began at first institution

**GOAL8990**

When began first spell

**GOAL8990**

When began longest spell

**GOALLONG**



When began last spell  
When began at last institution

**GOALLAST**  
**GOALLAST**

None	Student did not report working toward any formal award.
Certificate	Student reported working toward a certificate or formal award other than an associate's or bachelor's degree.
Associate's degree	Student reported working toward an associate's degree.
Bachelor's degree	Student reported working toward a bachelor's degree.

***Degrees attempted at any time***

Certificate	<b>PERACT</b>
Associate's degree	<b>PERAAA</b>
Bachelor's degree	<b>PERABA</b>

Positive values on those variables are used to identify the percentage of students who ever reported working toward the specific degree at any time during postsecondary education.

***Number of degrees attempted***

**NUMDEG**

Number of degrees attempted during postsecondary education. Count of number of different degrees (associate's, bachelor's, and certificates) the student reported working toward during postsecondary education. Each certificate is considered a separate attempt.

None	Student did not attempt any degree during postsecondary education.
One	Student attempted one degree during postsecondary education.
Two	Student attempted two degrees during postsecondary education.
Three or more	Student attempted three or more degrees during postsecondary education.

***Type of degree attempted***

**DEGSTAT**

Certificate only	Student attempted only a certificate during postsecondary education.
------------------	--

Associate's degree only	Student attempted only an associate's degree during postsecondary education.
Bachelor's degree only	Student attempted only a bachelor's degree during postsecondary education.
More than one degree	Student attempted more than one degree during postsecondary education.

***Type of degree attained***

Type of degree attained during postsecondary education.

First degree	<b>DEGREE1</b>
First degree at first institution attended	<b>DEGREEFS</b>
Highest degree	<b>DEGALL</b>

None	Student did not attain any degrees during postsecondary education.
------	--

Certificate	Student attained a certificate or other formal award during postsecondary education.
-------------	--

Associate's degree	Student attained an associate's degree during postsecondary education.
--------------------	--

Bachelor's degree	Student attained a bachelor's degree during postsecondary education.
-------------------	--

***Type of degree(s) attained*** **DEGASTAT**

Type of degree attained during postsecondary education. The variable indicates the type of degree or combination of degrees attained at any time during postsecondary education, without respect to order.

None	Student did not attain any degree during postsecondary education.
------	---

Certificate	Student attained a certificate or other formal award during postsecondary education.
-------------	--

Associate's degree	Student attained an associate's degree during postsecondary education.
--------------------	--

Bachelor's degree	Student attained a bachelor's degree during postsecondary education.
-------------------	--

Certificate and associate's degree	Student attained a certificate and an associate's degree during postsecondary education.
Certificate and bachelor's degree	Student attained a certificate and a bachelor's degree during postsecondary education.
Associate's and bachelor's degree	Student attained an associate's and a bachelor's degree during postsecondary education.
Certificate, associate's and bachelor's degree	Student attained a certificate, an associate's and a bachelor's degree.

## Student Characteristics

### *Number of children*

Number of children living with the student in the same household during month began at referent institution.

When began at first institution	<b>KIDS8990</b>
When began working toward associate's degree	<b>KIDSAA</b>
When began working toward bachelor's degree	<b>KIDSBA</b>
When began working toward certificate	<b>KIDSCT</b>
When began first spell	<b>KIDS8990</b>
When began longest spell	<b>KIDSLONG</b>
When began last spell	<b>KIDSLAST</b>

None Student had no children living in the same household.

One or more Student had one or more children living in the same household.

Positive values on these variables are also used to identify the percentage of students with children living in the same household.

### *Single parent status*

Single parent status during month began at referent institution. Students are considered single parents if they report having children but are unmarried, divorced, widowed, or separated.

When began at first institution	<b>SING8990</b>
When began working toward associate's degree	<b>SINGAA</b>
When began working toward bachelor's degree	<b>SINGBA</b>
When began working toward certificate	<b>SINGCT</b>

When began first spell  
When began longest spell  
When began last spell

**SING8990**  
**SINGLONG**  
**SINGLAST**

Not a single parent

Student was not a single parent.

Single parent

Student was a single parent.

Positive values on these variables are also used to identify the percentage of students who were single parents.

***Gender***

**H\_GENDER**

Male

Student was male.

Female

Student was female.

***Race-ethnicity of student***

**BPSRACE**

Asian/Pacific Islander

A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or Pacific Islands. This includes people from China, Japan, Korea, the Philippine Islands, Samoa, India, and Vietnam.

Black, non-Hispanic

A person having origins in any of the black racial groups of Africa, not of Hispanic origin.

Hispanic

A person of Mexican, Puerto Rican, Cuban, Central or South America or other Spanish culture or origin, regardless of race.

American Indian/Alaskan Native

A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

White, non-Hispanic

A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

***Age***

Age when began at first institution  
Age when began working toward associate's degree  
Age when began working toward bachelor's degree  
Age when began working toward certificate

**AGE8990**  
**AGEAA**  
**AGEBA**  
**AGECT**

Age when began first spell  
Age when began longest spell  
Age when began last spell

AGE8990  
AGELONG  
AGELAST

18 years or younger                      Student was 18 years old or younger.  
19 years                                      Student was 19 years old.  
20-29 years                                Student was between 20 and 29 years old.  
30 years or older                         Student was 30 year old or older.

***Socioeconomic status***

**SESPERC**

Composite variable combining parent's education and occupation, dependent student's family income, and the existence of a series of material possessions in respondent's home.

Lowest quartile                            Socioeconomic status fell at or below the lowest 25th percentile.  
Middle quartiles                           Socioeconomic status fell between the 25th percentile and the 75th percentile.  
Highest quartile                           Socioeconomic status fell at or above the 75th percentile.

***Marital status***

Marital status when began at first institution  
Marital status when began working toward associate's degree  
Marital status when began working toward bachelor's degree  
Marital status when began working toward certificate  
Marital status when began first spell  
Marital status when began longest spell  
Marital status when began last spell

MAR8990  
MARAA  
MARBA  
MARCT  
MAR8990  
MARLONG  
MARLAST

Not married                                Student was not married. Includes students who were divorced or widowed.  
Married                                      Student was married.  
Separated                                    Student was married, but separated from his or her spouse.

***Type of high school diploma***

**H\_HSDIP**

High school diploma                      Student received a high school diploma.  
GED, cert. of completion                Student received a GED (General Educational Development) certificate or a certificate of completion; also includes a small number of cases with no high school diploma.

Positive values on this variable are also used to identify the percentage of students without a regular high school diploma.

***Parental education***

**RPARED**

Highest level of education completed by either parent.

Less than high school

Neither parent graduated from high school or received a GED (General Educational Development) certificate.

High school graduate

One or both parents graduated from high school or received a GED certificate.

Some postsecondary

One or both parents had some postsecondary education, less than a bachelor's degree, including an associate's degree.

Bachelor's degree or higher

One or both parents earned a bachelor's degree, or an advanced degree such as a master's degree, Ph.D., M.D., etc.

***Dependency status in 1989-90***

**DEPEND**

Dependency status for federal financial aid in 1989-90.

Independent

Student was considered independent by meeting one of the following criteria:

- (1) 24 years of age by December 31, 1989;
- (2) a military veteran;
- (3) a ward of the court or both parents are deceased;
- (4) had legal dependents other than a spouse;
- (5) was married or a graduate student and not claimed as a tax exemption for the 2 years previous to the beginning of the academic year and had at least \$4,000 in financial resources.
- (6) was a single undergraduate but not claimed as a tax exemption for the 2 years previous to the beginning of the academic year and had at least \$4,000 in financial resources.

Dependent

Students were considered financially dependent in 1989-90 if they did not meet any of the criteria for independence.

### ***Dependency status***

Dependency status for federal tax purposes.

When began at first institution	<b>DEP8990</b>
When began working toward associate's degree	<b>DEPAA</b>
When began working toward bachelor's degree	<b>DEPBA</b>
When began working toward certificate	<b>DEPCT</b>
When began first spell	<b>DEP8990</b>
When began longest spell	<b>DEPLONG</b>
When began last spell	<b>DEPLAST</b>

Independent	Student reported not being claimed as dependent on parent's federal tax return in a specific year.
Dependent	Student reported being claimed as dependent on parent's federal tax return in a specific year.

### ***Income and dependency status in 1989-90***

### **INCOME**

Dependency status and categorical income level. Adjusted gross income in calendar year 1988. The source of income for dependent students is their parents or guardians; the source of income for independent students is their own earnings including those of their spouse if they were married. This variable is from NPSAS:90 and includes imputed values.

Dependent students	
Less than \$20,000	Income less than \$20,000 in 1988.
\$20,000-\$39,999	Income between \$20,000 and \$39,999 in 1988.
\$40,000-\$59,999	Income between \$40,000 and \$59,999 in 1988.
\$60,000 or more	Income more than \$60,000 in 1988.
Independent students	
Less than \$10,000	Income less than \$10,000 in 1988.
\$10,000-\$19,999	Income between \$10,000 and \$19,999 in 1988.
\$20,000 or more	Income more than \$20,000 in 1988.

### ***Number of Risk Factors***

Count of number of persistence risk factors. Risk factors include delayed enrollment, no high school diploma, part-time attendance, financial independence, having children, being a single parent, and working full time while enrolled.

When began at first institution	<b>ATRS8990</b>
When began working toward associate's degree	<b>ATRSAA</b>
When began working toward bachelor's degree	<b>ATRSBA</b>
When began working toward certificate	<b>ATRSCT</b>

When began first spell  
When began longest spell  
When began last spell

**ATRS8990**  
**ATRSLONG**  
**ATRSLAST**

None Student had no risk factors.  
One Student had one risk factor.  
Two Student had two risk factors.  
Three or more Student had three or more risk factors.

***Delayed postsecondary enrollment***

**DELAYNER**

Delayed entry into postsecondary education after high school graduation. Positive values on this variable are also used to identify the percentage of students who delayed entry.

Did not delay Students with standard high school diplomas who entered postsecondary education in the same calendar year as high school graduation.

Delayed Students who did not receive a standard high school diploma (received a GED or a certificate of completion) were considered to have delayed, as well as students with standard high school diplomas who did not enter postsecondary education in the same calendar year as high school graduation.

***Worked full time while enrolled***

When began at first institution  
When began working toward associate's degree  
When began working toward bachelor's degree  
When began working toward certificate degree  
When began first spell  
When began longest spell  
When began last spell

**EMWK8990**  
**EMWKAA**  
**EMWKBA**  
**EMWKCT**  
**EMWK8990**  
**EMWKLONG**  
**EMWKLAST**

Did not work full time while enrolled Student worked less than 34 hours per week while enrolled. Includes students who did not work.

Worked full time while enrolled Student considered his/her primary role in postsecondary education to be that of employee, or student who worked 34 or more hours/week while enrolled.

Students who considered their primary role in postsecondary education as employees were automatically considered to be full time. The remaining students were categorized as working full time while enrolled if the average number of hours/week they worked while enrolled was 34 or more. Positive values on these variables are also used to identify the percentage of students who worked full time while enrolled.



## **Attendance status**

Intensity of enrollment during the month when the student began at the referent institution.

When began at first institution	<b>ATT8990</b>
When began working toward associate's degree	<b>ATTAA</b>
When began working toward bachelor's degree	<b>ATTBA</b>
When began working toward certificate	<b>ATTCT</b>
When began first spell	<b>ATT8990</b>
When began longest spell	<b>ATTLONG</b>
When began last spell	<b>ATTLAST</b>
When began the 1989-90 academic year	<b>ATT8990</b>
When began the 1990-91 academic year	<b>ATT9091</b>
When began the 1991-92 academic year	<b>ATT9192</b>
When began AY 1992-93 academic year	<b>ATT9293</b>
When began AY 1993-94 academic year	<b>ATT9394</b>

Full time	Student was enrolled full time.
Part time	Student was enrolled part time.

## **Social, Academic, and Work Experiences**

**Index of social integration in 1989-90** **SOCL8990**

Average social integration at the NPSAS institution. Examines whether the student had contact with faculty outside of class, went places with friends from school, participated in student assistance centers/programs, or participated in school clubs. The mean of the students' responses across these questions was calculated. Each question used in the calculation included 4 possible responses: 1=never, 2=once, 3=sometimes, 4=often.

Low	Student's average social integration was less than or equal to 1.75.
Moderate	Student's average social integration was greater than 1.75 but less than or equal to 2.75.
High	Student's average social integration was greater than 2.75.

**Index of academic integration in 1989-90** **ACAD8990**

Average academic integration at the NPSAS institution. Examines whether the student attended career-related lectures, participated in study groups with other students, talked academic matters with faculty or met advisor concerning academic plans. The mean of the students' responses across these questions was calculated. Each question used in the calculation included 4 possible responses: 1=never, 2=once, 3=sometimes, 4=often.

Low	Student's average academic integration was less than or equal to 1.75.
-----	--

Moderate	Student's average academic integration was greater than 1.75 but less than or equal to 2.75.
High	Student's average academic integration was greater than 2.75.

***Satisfaction with first institution in 1989-90***

**SATISFYN**

Number of aspects of the institution the student reported being satisfied with. Examines whether the student was satisfied with the cost of attending the institution the prestige of the institution, teaching ability, social life, and their intellectual development.

Low	Student reported being satisfied with one or fewer aspects of the institution.
Moderate	Student reported being satisfied with two aspects of the institution.
High	Student reported being satisfied with three or more aspects of the institution.

***Local residence in 1989-90***

**LOCALRES**

Where the student reported living during the 1989-90 academic year.

Campus housing	Student lived in institution-owned living quarters. These are typically on-campus dormitories, residence halls, or other facilities.
Off-campus	Student lived off-campus in non-institution-owned housing, but not with parents.
With parents	Student lived at home with parents.

***Educational aspirations in 1989-90***

**ASPIRE**

Highest level of education that the student expected to complete. Recoded from the student's reported educational aspirations in the NPSAS survey.

Trade school	Student expected to earn a vocational certificate or license, or to attend college, but not to earn a bachelor's degree.
2-year degree	Student expected to earn less than a bachelor's degree, but planned to attend at least 2 years (including those who aspired to earn an associate's degree).
Bachelor's degree	Student expected to earn a bachelor's degree, but not an advanced degree.

Advanced degree

Student expected to earn a master's, doctorate, or first professional degree.

***Average hours worked while enrolled in 1989-90***

**HRS8990**

Average hours worked per week during those months when enrolled for at least part of the month. If the student was employed (including college work-study) during a given month, the average number of hours worked per week across all jobs held during the month was derived based on the start and end dates and the average hours worked per week of each job as reported during the interview. In calculating this average, the denominator was increased by 1 if the student was employed and enrolled at any time during the month. For this variable, employment was only considered if the student was enrolled during part of the month. For example, if students worked 20 hours per week for three months during the year they were enrolled, but worked 40 hours per week at other times, their value for this variable would be 20 (i.e., in deriving this variable, the hours employed while not enrolled were ignored).

Less than 5 hours	Student worked less than 5 hours while enrolled.
5-15 hours	Student worked 5 to 15 hours while enrolled.
16-25 hours	Student worked 16 to 25 hours while enrolled.
26-34 hours	Student worked 26 to 34 hours while enrolled.
More than 34 hours	Student worked more than 34 hours while enrolled.

***Grade point average in 1989-90***

**GPA**

Cumulative grade point average over the 1989-90 academic year. The most recent GPA was used if the cumulative GPA was not available.

Less than C's	Student's grade point average fell at or below 1.75.
Mostly C's	Student's grade point average fell between 1.75 and 2.25.
B's and C's	Student's grade point average fell between 2.25 and 2.75.
Mostly B's	Student's grade point average fell between 2.75 and 3.25.
A's and B's	Student's grade point average fell between 3.25 and 3.75.
Mostly A's	Student's grade point average fell at or above 3.75.

**Number of types of remedial instruction received in 1989-90****REMEDIAL**

Count of number of types of remedial instruction received in 1989-90. Possible types include reading, mathematics, writing, and study skills.

None	Student did not receive any remedial instruction.
One	Student received one type of remedial instruction.
Two or more	Student received two or more types of remedial instruction.

**Education financing characteristics****Total costs in 1989-90****TOTCOST2**

This variable represents the total student costs during the 1989-90 academic year, including the sum of tuition and fees, room and board, books and supplies, and other educational, room, or off-campus costs. Room, board, and other living costs for off-campus students is derived by multiplying the student-reported average monthly household expenses by the number of months enrolled. This variable adjusts for non-tuition costs of part time and independent students so that the monthly expenses of the independent household included in educational costs are limited to the student and related to attendance intensity.

Less than \$4,000	Student's education costs during the 1989-90 academic year was less than \$4,000.
\$4,000-\$7,999	Student's education costs during the 1989-90 academic year was between \$4,000 and \$7,999.
\$8,000-11,999	Student's education costs during the 1989-90 academic year was between \$8,000 and \$11,999.
\$12,000 or more	Student's education costs during the 1989-90 academic year was \$12,000 or more.

**Total aid amount in 1989-90****TOTAID**

Total amount of financial aid received by a student during the 1989-90 academic year. Includes grants, loans, or work study as well as loans under the PLUS program.

None	Student did not receive financial aid during the 1989-90 academic year.
Less than \$2,000	Financial aid received during the 1989-90 academic year was less than \$2,000.
\$2,000-\$4,999	Financial aid received during the 1989-90 academic year was between \$2,000 and \$4,999.

\$5,000–\$6,999	Financial aid received during the 1989–90 academic year was between \$5,000 and \$6,999.
\$7,000 or more	Financial aid received during the 1989–90 was \$7,000 or more.more.

**Total federal aid amount in 1989–90**

**TFEDAID**

Total amount of aid received by a student during the 1989–90 academic year from all federal aid programs. Positive values on this variable are also used to identify the percentage of students who received this category of aid.

None	Student did not receive federal financial aid during the 1989–90 academic year.
Less than \$2,000	Federal financial aid received during the 1989–90 academic year was less than \$2,000.
\$2,000–\$4,999	Federal financial aid received during the 1989–90 academic year was between \$2,000 and \$4,999.
\$5,000–\$6,999	Federal financial aid received during the 1989–90 academic year was between \$5,000 and \$6,999.
\$7,000 or more	Federal financial aid received during the 1989–90 academic year was \$7,000 or more.

**Total loan amount in 1989–90**

**TOTLOAN**

Total amount of non-family loan aid received by a student during the 1989–90 academic year. This includes all loans through federal, state, or institutional programs except PLUS loans (which are made to parents). Loans are a type of student financial aid that advances funds and that are evidenced by a promissory note requiring the recipient to repay the specified amounts under prescribed conditions. Does not include loans from parents, relatives, or friends.

None	Student did not receive a loan during the 1989–90 academic year.
Less than \$1,000	Loans received during the 1989–90 academic year was less than \$1,000.
\$1,000–\$1,999	Loans received during the 1989–90 academic year was between \$1,000 and \$1,999.
\$2,000–\$2,999	Loans received during the 1989–90 academic year was between \$2,000 and \$2,999.
\$3,000 or more	Loans received during the 1989–90 academic year was \$3,000 or more.

**Total grant amount in 1989-90**

**TOTGRT**

Total grants received during the 1989-90 academic year. This includes all grants from any source. Grants are a type of student financial aid that does not require repayment or employment. Grants include scholarships and fellowships.

None	Student did not receive a grant during the 1989-90 academic year.
Less than \$1,000	Grants received during the 1989-90 academic year was less than \$1,000.
\$1,000-\$1,999	Grants received during the 1989-90 academic year was between \$1,000 and \$1,999.
\$2,000-\$2,999	Grants received during the 1989-90 academic year was between \$2,000 and \$2,999.
\$3,000 or more	Grants received during the 1989-90 academic year was \$3,000 or more.

**Aid package at first institution in 1989-90**

**AIDP8990**

Types of financial aid received from all sources, including federal, state, institution, and other sources at the first (NPSAS) institution during the 1989-90 academic year.

No aid	Student did not receive any aid at the first institution during the 1989-90 academic year.
Grants, no loans	Student received grants but not loans at the first institution during the 1989-90 academic year.
Grants and loans	Student received grants and loans at the first institution during 1989-90 academic year.
Loans, no grants	Student received loans but not grants at the first institution during 1989-90 academic year.
Other aid	Student received aid other than grants or loans at the first institution during the 1989-90 academic year.

**Financial aid receipt during the academic year**

During the 1989-90 academic year	<b>AID8990</b>
During the 1990-90 academic year	<b>AID9091</b>
During the 1991-92 academic year	<b>AID9192</b>
During the 1992-93 academic year	<b>AID9293</b>
During the 1993-94 academic year	<b>AID9394</b>

Yes	Student received non-family financial aid from any source; including federal, state, institution and other sources, during the academic year.
No	Student did not receive non-family financial aid from any source; including federal, state, institution and other sources, during the academic year.

Positive values on these variables are also used to identify the percentage of students who received any non-family aid during a particular academic year.

***Any financial aid*** **ANYAID93**

Received any financial aid during postsecondary education.

Received financial aid	Student received non-family financial aid from any source during postsecondary education.
Did not receive financial aid	Student never received any non-family financial aid from any source during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received any non-family financial aid from any source during postsecondary education.

***Grants*** **GOTGRANT**

Received any grants or scholarships during postsecondary education.

Received grant	Student received a grant or scholarship during postsecondary education.
Did not receive grant	Student never received a grant or scholarship during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received a grant or scholarship during postsecondary education.

***Loans*** **GOTLOAN**

Received any loans during postsecondary education.

Received loan	Student received a non-family student loan during postsecondary education.
Did not receive loan	Student never received a non-family student loan during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received non-family student loans during postsecondary education.

***Employer aid*****GOTEMPL**

Received any employer aid during postsecondary education.

Received employer aid                      Student received employer aid during postsecondary education.

Did not receive employer aid              Student never received any employer aid during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received employer aid during postsecondary education.

***Spouse or other relative financial assistance*****SPSOTHER**

Received any financial assistance from spouse or other relatives during postsecondary education.

Received spouse or other relative financial assistance              Student received assistance from a spouse or other relatives during postsecondary education.

Did not receive spouse or other relative financial assistance              Student never received assistance from a spouse or other relatives during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received assistance from a spouse or relatives during postsecondary education.

***Parents financial contribution*****CNTRBPAP**

Received any financial contribution from parents during postsecondary education.

Received parent's financial contribution              Student received a financial contribution from parents during postsecondary education.

Did not receive parent's financial contribution              Student never received any financial contribution from parents during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received a financial contribution from parents during postsecondary education.

***Personal savings*****PRNSAVE**

Used personal savings during postsecondary education.

Used personal savings                      Student used personal savings for tuition or associated living expenses during postsecondary education.

Did not use personal savings              Student never used personal savings for tuition or associated living expenses during postsecondary education.



Positive values on this variable are also used to identify the percentage of students who used personal savings for tuition or associated living expenses during postsecondary education.

***Loan from parents***

**FROMPARS**

Received a loan from parents during postsecondary education.

Received loan from parents

Student received a parental loan during postsecondary education.

Did not receive loans from parents

Student never received a parental loan during postsecondary education.

Positive values on this variable are also used to identify the percentage of students who received a parental loan during postsecondary education.

**Education borrowing activities**

***Borrowed for undergraduate education***

**EVERBOR**

Positive values on this variable are used to identify the percentage of students who received any loan, including a family loan, during postsecondary education.

***Owe on postsecondary loans***

**DRVOWE**

Positive value on this variable are used to identify the percentage of students who still owed on any postsecondary loan from any source, including a family loan.

***Amount borrowed for postsecondary education***

**DRVBORAM**

Amount the student borrowed for postsecondary education from all sources, including family as of spring 1994.

Less than \$5,000

Amount student borrowed for postsecondary education was less than \$5,000.

\$5,000-9,999

Amount student borrowed for postsecondary education was between \$5,000 and \$9,999.

\$10,000-14,999

Amount student borrowed for postsecondary education was between \$10,000 and \$14,999.

\$15,000-19,999

Amount student borrowed for postsecondary education was between \$15,000 and \$19,999.

\$20,000 or more

Amount student borrowed for postsecondary education was \$20,000 or more.

The variable was also used as an average.

***Amount owed on postsecondary loans***

**DRVOWEAM**

Amount the student owes on loans borrowed for postsecondary education from all sources, including family, as of spring 1994.

Less than \$5,000	Amount student owed on postsecondary loans was less than \$5,000.
\$5,000–9,999	Amount student owed on postsecondary loans was between \$5,000 and \$9,999.
\$10,000–14,999	Amount student owed on postsecondary loans was between \$10,000 and \$14,999.
\$15,000–19,999	Amount student owed on postsecondary loans was between \$15,000 and \$19,999.
\$20,000 or more	Amount student owed on postsecondary loans was \$20,000 or more.

The variable was also used as an average.

***Currently repaying educational loans***

**SFCURREP**

Positive values on this variable are used to identify the percentage of students who were repaying the postsecondary loans as of spring 1994.

***Paying by self***

**SFREHELP**

Positive values on this variables are used to identify the percentage of students who were repaying educational loans on their own, rather than receiving help from others.

***Average monthly loan payment***

**SFAVGPAY**

For students who reported repaying loans as of spring 1994 the variable represents their average monthly loan payment.

Less than \$50	Average monthly loan payment was less than \$50.
\$50–99	Average monthly loan payment was between \$50 and \$99.
\$100–149	Average monthly loan payment was between \$100 and \$149.
\$150–199	Average monthly loan payment was between \$150 and \$199.
\$200 or more	Average monthly loan payment was \$200 or more.

## Marital status and family formation

### *Marital status in 1994*

**MARITAL2**

Marital status as of spring 1994. A small percentage of students who indicated that they were single, but living as married, were categorized as never married.

Never married	Student reported never having been married.
Married	Student reported being married.
Divorced, widowed, separated	Student reported being divorced, widowed, separated.

### *Timing of marriage*

**WHEN\_MAR**

Student-reported date of marriage was compared to reported dates of first and last enrollment in order to determine the timing of marriage relative to postsecondary education.

Before postsecondary education	Student reported marrying prior to postsecondary education.
While enrolled in postsecondary education	Student reported marrying while enrolled in postsecondary education.
After last term	Student reported marrying after last term in postsecondary education.

### *Current number of children*

**SECURCHL**

Number of children reported by student as of spring 1994.

None	Student did not report having children.
One or more	Student reported having one or more child.

### *Timing of first child*

**HAD\_KID**

Student-reported birthdate of first child was compared to reported dates of first and last enrollment in order to determine the timing of first child relative to postsecondary education.

Before postsecondary education	Student reported having first child prior to postsecondary education.
While enrolled in postsecondary education	Student reported having first child during postsecondary education.
After last term	Student reported having first child after last term in postsecondary education.

**Age in 1994****AGE8990**

Student's age as of spring 1994; derived by adding 5 years to the age of the students when they began postsecondary education.

24 years or younger	Student was 24 years old or younger.
25–29 years	Student was between 25 and 29 years old.
30–34 years	Student was between 30 and 34 years old.
35 years or older	Student was 35 years or older.

**Graduate school and further education activities*****Applied or intended apply to graduate school*****APPLY**

Positive values on this variable are used to identify the percentage of students who intended to apply or had applied to graduate school. Derived for bachelor's degree attainers only.

***Attended graduate school*****GRADSCHL**

Positive values on this variable are used to identify the percentage of students who had ever attended graduate school. Derived for bachelor's degree attainers only.

***Type of licensing exam taken***

Taken any licensing exams	<b>SBLICEXM</b>
Taken teachers licensing exam	<b>SBTCHEXM</b>
Taken nursing licensing exam	<b>SBNUREXM</b>
Taken medical licensing exam	<b>SBMEDEXM</b>
Taken communication licensing exam	<b>SBCOMEXM</b>
Taken business licensing exam	<b>SBBUSEXM</b>
Taken cosmetology licensing exam	<b>SBCOSEXM</b>
Taken engineering licensing exam	<b>SBENGEXM</b>

Positive values on these variables are used to identify the percentage of those students who took licensing exams who reported taking these specific types of licensing examinations.

**Civic participation and voting activities*****Participate in volunteer/community service in last 2 years*****SIVOL2YR**

Positive values on this variable are used to identify the percentage of students who reported performing any volunteer/community service work during the past 2 years, such as PTA, little league, scouts, service clubs, church groups, or social action groups.

**Currently doing volunteer work in 1994**

**SICURVOL**

Positive values on this variable are used to identify the percentage of students who reported currently performing any volunteer/community service work during spring 1994, such as PTA, little league, scouts, service clubs, church groups or social action groups.

**Types of community/volunteer service organization worked with within past 2 years**

Service organization	<b>SISERORG</b>
Community center/social-action/neighbor group	<b>SICOMCTR</b>
Church/church-related group	<b>SICHRGRP</b>
Hospital/nursing home	<b>SIHOSNUR</b>
Youth organization	<b>SIYTHORG</b>
Educational organization	<b>SIEDUORG</b>

Positive values on these variables are used to identify the percentage of students who reported performing volunteer/community service in these types of organizations within the past 2 years.

**Voter registration status**

**SVVOTREG**

Student's reported voter registration status as of spring 1994.

Currently registered	Student was registered to vote as of spring 1994.
Previously registered, but not currently registered	Student had previously been registered to vote, but was not registered as of spring 1994.
Never registered	Student had never registered to vote.
Not eligible to register	Student was not eligible to vote.

**Voting activities**

Student's reported voting activity as of spring 1994.

Voted in local/state/national election since 2/92	<b>SIVTLSNE</b>
Voted in 1992 presidential election	<b>SIV92PEL</b>

Positive values on these variables are used to identify the percentage of students who voted.

**Employment experiences**

**Ever work while enrolled**

**SWORKAT**

Positive values on this variable are used to identify the percentage of students who ever spent at least 1 month both working and enrolled during postsecondary education.

**Number of jobs held during PSE**

**NUMJOBS**

Count of number of jobs the student reported during postsecondary education.

None	Student did not hold any jobs during postsecondary education.
One	Student held one job during postsecondary education.
Two	Student held two jobs during postsecondary education.
Three or more	Students held three or more jobs during postsecondary education.

***Co-op/apprentice job***

**COOP**

Working students who identified their primary role in postsecondary education as a student were asked the co-op status of all jobs held prior to the date of last enrollment. The variable indicates whether of those jobs at least one was a co-op job (i.e., one in which students receive vocational training through the cooperation of employers and the postsecondary institution).

Did not have at least one co-op or apprentice job

Had at least one co-op or apprentice job

Positive values on this variable are also used to identify the percentage of students who ever held a co-op job.

***On-campus job***

**ONCAMP**

Working students who identified their primary role in postsecondary education as a student were asked the on-campus status of all jobs held prior to the date of last enrollment. The variable indicates whether at least one of those jobs was on-campus.

Did not have at least one on-campus job

Had at least one on-campus job

Positive values on this variable are also used to identify the percentage of students who ever held an on-campus job.

***Job related to studies***

**RFOS**

Working students who identified their primary role in postsecondary education as a student were asked whether any jobs held prior to the date of last enrollment were related to their undergraduate field of study. The variable indicates whether at least one of those jobs was "closely" related to their undergraduate field of study. A job was considered unrelated if it was reported to be either "somewhat" or not related to their field of study.

Did not have at least one job related to studies

Had at least one job related to studies

Positive values on this variable are also used to identify the percentage of students who reported holding at least one job related to their field of study.

***Simultaneous jobs***

**DUPJOBS**

Across all months during which students were both enrolled and working, students reported more than one job per month for at least 2 months (months were not necessarily sequential).

Did not hold more than one job simultaneously

Held more than one job simultaneously

Positive values on this variable are also used to identify the percentage of students who ever held simultaneous jobs.

**Most recent job**

***Primary occupation 1993***

**OCCUP93**

Occupational category of principal job in 1993.

- Clerical
- Craftsman\repair
- Laborer
- Manager\administrator
- Skilled machinist
- Professional
- Sales
- Services including protective services
- Technical\computer
- Other

***Satisfaction with most recent job***

Students reported satisfaction with aspects of most recent job.

- Pay & fringe benefits
- Job security/permanence
- Promotion opportunity
- Further educational opportunities
- Importance of work
- Difficulty/challenge of work
- Overall satisfaction

**SCSATPAY  
SCSATSEC  
SCSATPRO  
SCSATEDO  
SCSATIMP  
SCSATDIF  
SCSATALL**

Satisfied

Student indicated being satisfied with the specific aspect of the most recent job.

Dissatisfied

Student indicated being satisfied with the specific aspect of the most recent job.

## Unemployment experiences

### *Ever unemployed*

UNEMPLOY

Positive values on this variable are used to identify the percentage of students who reported ever being unemployed between 1989 and 1994. Unemployed is defined as having no job but actually seeking work.

### *Ever receive unemployment compensation*

GETCOMP

Positive values on this variable are used to identify the percentage of students who reported ever receiving unemployment compensation between 1989 and 1994.

### *Total duration of unemployment in weeks*

TOTDUR

Variable represents the total number of months the student was ever unemployed between 1989 and 1994. Variable used as an average.

### *Unemployed during calendar year*

Variable represents the number of separate periods of unemployment during each calendar year. Unemployment periods may be counted more than once.

1990  
1991  
1992  
1993

NUNEMP90  
NUNEMP91  
NUNEMP92  
NUNEMP93

Positive values on these variables are used to identify the percentage of students who reported being unemployed in a academic year.

## Most recent principal job

### *Months before obtained first principal job after PSE*

TIME2FJ

Variable represents the number of months between the students' last enrollment and when they obtained their first job. Students who obtained a job immediately after postsecondary education were coded as 0. Students who reported being still enrolled in spring 1994 or who never worked were coded as missing on this variable.

Less than 1 month

Student obtained first principal job within one month after postsecondary education.

1-3 months

Student obtained first principal job within one to three months after postsecondary education.

3-6 months

Student obtained first principal job within three to six months after postsecondary education.

6-9 months

Student obtained first principal job within six to nine months after postsecondary education.



9-12 months

Student obtained first principal job within nine to twelve months after postsecondary

More than 12 months

Student obtained first principal job more than twelve months after postsecondary education.

***Activities to obtain most recent principal job***

Looked through want ads  
Asked family, friends, or faculty—recent job  
Asked for interview to determine opportunity  
Went to campus placement office  
Sent resume, submitted application  
Other action taken

RJWADS  
RJFAMF  
RJINTV  
RJSCPL  
RJRESU  
RJOTHR

Positive values on these variables are used to identify the percentage of students who performed the specific job search activities in order to obtain their most recent job.

***Relationship between most recent principal job and education***

Able to apply skills learned in school  
Could have obtained job without education  
Job different from education and training  
Job used tools and equipment trained to use

RJAPPLSC  
RJJWOTED  
RJJDFTR  
RJTEQTRA

Positive values on these variables are used to identify the percentage of students who reported these specific aspects as characteristic of the relationship between their most recent principal job and their postsecondary education.

## Appendix C

### Technical Notes and Methodology

#### Survey Content

The need for a nationally representative database on postsecondary student financial aid prompted the U.S. Department of Education to conduct the 1990 National Postsecondary Student Aid Study (NPSAS:90). To provide the full range of information on financing postsecondary education, NPSAS included both aided and nonaided students. The 1990/94 Beginning Postsecondary Students Longitudinal Study (BPS:90/94) followed students identified as first-time beginning (FTB) students in the academic year 1989–90 from the NPSAS:90 sample. A computer-assisted telephone interview (CATI) was conducted both 2 and 4 years after the NPSAS:90 survey that obtained information concerning enrollment, program completion, education financing, employment, and family formation; graduate school access and enrollment; and civic participation. The data derived from this survey permit a variety of analyses concerning postsecondary persistence and completion, entry into the work force, and civic participation.

#### Target Population

The target population of BPS is all students who entered postsecondary education for the first time in academic year 1989–90. In defining the cohort as students who began postsecondary education—regardless of when they graduated from high school—BPS represents a departure from previous longitudinal studies of high school cohorts. The sample was designed to include students enrolled in all types of postsecondary education. Thus, it included students enrolled in public institutions; private, not-for-profit institutions; and private, for-profit institutions. The sample included students at 2-year and 4-year institutions,<sup>1</sup> as well as students enrolled in occupationally specific programs that lasted for less than 2 years.

The BPS sample is more likely than previous longitudinal studies to include some of the increasing numbers of “nontraditional” postsecondary students, such as those who have delayed their education due to financial needs or family responsibilities. Students who began their postsecondary studies during some other period and then returned to them in 1989–90 were not included nor were those who were still enrolled in high school. Similarly, institutions offering only correspondence courses, institutions enrolling only their own employees, and U.S. 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 as being 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

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<sup>1</sup>Four-year institutions include all institutions offering 4-year baccalaureate degrees.

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

A database of 11,700 NPSAS:90 participants that was believed to contain all possible FTB students in the NPSAS:90 sample was the basis for selecting the BPS:90/92 sample. Prior to the start of interviewing for BPS:90/92, 1,076 of the 11,700 first-time beginners were excluded from participation after a review of the NPSAS:90 data revealed that they had been improperly classified.

In total the BPS:90/92 working sample consisted of 10,624 students. Considerable effort was directed toward ensuring that the sample for BPS:90/92 contained appropriate members. Since the preliminary sample contained a fairly large number of individuals with questionable status as FTB students, during the course of interviewing for BPS:90/92 2,697 additional students were identified as ineligible and 13 were identified as deceased. Of the 7,914 who remained, 6,520 were given full or partial interviews and 1,394 did not respond.

For additional information on the BPS:90/94 survey, consult the *Beginning Postsecondary Students Longitudinal Study Second Follow-up (BPS:90/94) Final Technical Report*, Postsecondary Longitudinal Studies Branch, Postsecondary Education Division, National Center for Education Statistics, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208-5652.

### **BPS:90/94 Sample Design and Data Collection Procedures**

The BPS:90/94 working sample consisted of the BPS:90/92 eligible respondents, plus those 90/92 non-respondents for whom BPS-eligibility (FTB status) had yet to be determined.

Data collection for BPS:90/94 was completed utilizing Computer-Aided Telephone interview (CATI). Location of student cases for the BPS:90/94 full-scale survey was initiated with information provided by the BPS:90/92 locating database. All student and tracing source contact information contained in that database was submitted to a national change of address (NCOA) service for updating. Cases not located during BPS:90/92 were forwarded directly to pre-CATI telephone tracing, and subsequently to field locating if intensive telephone tracing was unsuccessful. Prior to the start of CATI operations, a pre-notification mailing was made to the student, enabling current contact information to be provided to interviewers for basic CATI locating efforts. In the event that CATI locating was unsuccessful, cases were sent to post-CATI central trace for telephone tracing and, again as necessary, field locating.

Cases entered CATI in three separate waves. The initial wave contained the 6,950 cases not requiring pre-CATI locating; the secondary wave contained 725 cases located in pre-CATI trace. The third wave into CATI reflects "reactivations" of cases previously in CATI but identified for post-CATI trace and successfully located through those additional tracing procedures.

During tracing operations, 127 cases were identified as "exclusions"; this classification included those who were: (a) out of the calling area;<sup>2</sup> (b) deceased; (c) institutionalized or physically/mentally incapacitated and unable to respond to the survey; or (d) otherwise unavailable for the entire data collection period. Discounting these exclusions, 7,132 were located and 655 were not.

For sample members who had not responded to BPS:90/92, FTB status had not been confirmed.<sup>3</sup> Among the 1,376 former nonrespondents for whom BPS eligibility was not determined in BPS:90/92, FTB status was determined for 884 in BPS:90/94. Of these 884, 165 (18.7 percent) were determined to be non-FTB.<sup>4</sup> A total of 6,786 sample members were interviewed in 1994. Of these, 5,926 were full interviews and 691 were partial interviews (including 448 current status interviews).<sup>5</sup>

### Response Rates

A student was defined to be a respondent for BPS:90/94 if the student either confirmed the schools attended (including identification of any additional schools not previously reported) or provided status as of February 1994 for enrollment, employment, and postsecondary degree attainment. Of the 7,239 who are known to be eligible sample students, 6,617 responded; eligibility status is still undetermined for 486 sample members (approximately 6 percent of the BPS:90/94 sample). Thus, the unweighted BPS:90/94 response rate is 91.4 percent among those students known to be eligible for BPS:90/94. The weighted response rate, using the NPSAS:90 analysis weights, is 91.0 percent (table C1). The number of sample members with sufficiently detailed enrollment histories to allow for classification in the persistence variables used in this report was 6,018.

### Sample Weighting and Estimation Procedures

Including the BPS:90/92 weights, four sets of weights have been prepared for analysis of the BPS:90/94 data. These four sets of weights include:

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<sup>2</sup>The calling area consisted of all U.S. states, the District of Columbia, Canada, and some Caribbean Islands (including Puerto Rico)—i.e., numbers not requiring a foreign country or city code. Additionally, 15 international cases for which we obtained valid phone numbers were attempted, yielding 6 completed interviews.

<sup>3</sup>There were 18 cases which had been determined BPS-eligible in BPS:90/92 but were BPS:90/92 nonrespondents because they answered no other information.

<sup>4</sup>Four sample members identified in BPS:90/92 as FTBs were actually non-FTBs and thus BPS-ineligible. The non-FTB rate among BPS:90/92 nonrespondents is considerably lower than that previously experienced among BPS:90/92 respondents; this indicates, among other things, that "reentering" (older) students, who did not meet requirements for FTB determination, were easier to locate and interview during the first follow-up and that post-CATI non-FTB modeling done in BPS:90/92 appropriately excluded a fair number of actual non-FTBs from the group of BPS:90/92 nonrespondents.

<sup>5</sup>For those identified as non-FTBs in the interview, the interview was terminated, and considered complete, as soon as they had completed that portion of Section A determining eligibility. Partial interview was defined as either confirming/updating the set of schools attended in Section B or responding to the current status interview, which, by definition, are applicable only to confirmed FTBs.

- (1) BPS:94 primary weight, cross-sectional and retrospective (BPS94AWT). These are the primary weights to be used for analysis of the data collected in the 1994 survey for the population of students who were first-time beginning students in the 1989–90 academic year and had not died prior to 1994. These weights are also used for analysis of trends utilizing data items collected retrospectively in the 1994 interviews for the population of students who were first-time beginning students in the 1989–90 academic year and had not died prior to 1992. These are the weights used in this report.
- (2) BPS:92 weight, cross-sectional and retrospective (BPS92CWT). These weights are used for analysis of the 1992 survey data items collected either directly in the 1992 interviews or retrospectively in the 1994 interviews for the population of students who were first-time beginning students in the 1989–90 academic year and had not died prior to 1992.
- (3) BPS:92 weight, cross-sectional but not retrospective (BPS92NWT). These weights are used for analysis of the data collected only in the 1992 survey for the population of students who were first-time beginning students in the 1989–90 academic year and had not died prior to 1992.
- (4) BPS:92 to BPS:94 weight, longitudinal but not retrospective (BPS92LWT). These weights are used for analysis of trends based on responses to comparable items collected in the 1992 and 1994 interviews for the population of students who were first-time beginning students in the 1989–90 academic year and had not died prior to 1994. These weights are used primarily for analysis of those items that were not collected retrospectively in the 1994 interviews.

Each set of weights contains an estimation weight to be used for estimating population parameters (e.g., means, percentages, and regression coefficients). Each set of weights also contains a set of 35 replicate weights for computation of sampling variance estimates using the Jackknife replication technique.

Taylor series variance estimates for nonlinear survey statistics are based on representation of the nonlinear statistic by its first-order Taylor series expansion and computation of its variance as if the sampling design were a nested, multistage design with a stratified sample of PSUs selected at the first stage.<sup>6</sup> Hence, given the linearization of any nonlinear survey statistic, the essential ingredients for computation of Taylor series variance estimates are the analysis strata and analysis PSUs.

The Taylor series analysis strata and analysis PSUs are based on the first stage of the sampling design, which for BPS:90 was the first stage of the NPSAS:90 sampling design. Hence, the analysis strata and analysis PSUs developed for use with the NPSAS:90 weights

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<sup>6</sup>Woodruff, R.S. (1971). "A Simple Method for Approximating the Variance of a Complicated Estimate." *Journal of the American Statistical Association* 66, 411–414.

(OFCON2 and PSU) can also be used with the BPS:90/92 weights to compute estimates of sampling variances using the Taylor series technique.

Two types of replication techniques are commonly used for variance estimation for stratified multistage sampling design like the NPSAS:90 design. They are balanced repeated replication (BRR) and Jackknife replications. The Jackknife procedure has generally been shown to produce variance estimators that are at least as accurate as, if not more accurate than, their BRR competitors.<sup>7</sup> Moreover, the Jackknife variance estimators tend to be less erratic when computing variances for small analysis domains because each Jackknife replicate contains sample members except those in a single analysis PSU, whereas each BRR replicate contains only half the analysis PSUs in the sample. Therefore, 35 Jackknife replicate weights were defined for estimation of NPSAS:90 sampling variances. All BPS:90 weight adjustments were independently replicated with each of the Jackknife replicate weights to produce replicate weights that can be used for estimation of sampling variances for the BPS:90 analysis files.

### Accuracy of Estimates

The statistics in this report are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors happen because observations are made only on samples of students, not on entire populations. Nonsampling errors occur not only in sample surveys but also in complete censuses of entire populations.

Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, sampling, and estimating missing data.

### Data Analysis System

The estimates presented in this report were produced from the BPS:90/94 Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own tables from postsecondary data sets. With the DAS, users can recreate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors<sup>8</sup> and weighted sample sizes for these estimates. For example, table C2 presents the standard errors that correspond to selected tables in the text, and the weighted sample size appear in C3. If the number of valid cases is too small to

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<sup>7</sup>Kovar, J.G., Rao, J.N.K., and Wu, C.F.J. (1988). "Bootstrap and Other Methods to Measure Errors in Survey Estimates." *Canadian Journal of Statistics* 16, Supplement, 25-45.

<sup>8</sup>The BPS sample is not a simple random sample and, therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

produce an estimate (i.e., less than 30), the DAS prints the message "low-N" instead of the estimate.

In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlation matrix are the design effects (DEFT) for all the variables identified in the matrix. Since statistical procedures generally compute regression coefficients based on simple random sample assumptions, the standard errors must be adjusted with the design effects to take into account the BPS-stratified sampling method.

For more information about the NCES Data Analysis Systems, contact:

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### **Analysis Variables**

The analysis variables used in this report were derived from the base year NPSAS:90 survey, the 1992 BPS first follow-up, and the 1994 BPS second follow-up. Many of the student characteristics variables originally collected in NPSAS:90 (age, race-ethnicity, type of high school diploma, high school graduation year) were verified, completed, or corrected in the follow-up interviews, so there are small differences in the distributions of the characteristics of the BPS students identified in the NPSAS:90, in the BPS:90/92, and in the BPS:90/94 Data Analysis Systems (DAS). The income variable used in this report is the original NPSAS:90 variable which includes imputed values for approximately one-third of the cases.

The cases with sufficiently detailed enrollment histories to allow classification in the persistence variables used in this report and available in the BPS:90/94 DAS represent 89.4% of the weighted BPS sample. Each of the persistence variables (described in appendix A) is accompanied by a set of descriptive variables (age, attendance status, risk factors, type of institution) specific to the approach that the persistence variable represents. These are described in the glossary (appendix B). The notes to the analysis variables in the BPS:90/94 DAS include the SAS code used to create them.

### **Statistical Procedures**

The comparisons described in the report have all been tested for statistical significance to ensure that the differences are larger than those that might be expected due to sampling variation. The following two types of comparisons have been made in the report:

*Differences in two estimated percentages.* The paired comparisons were tested using Student's *t* statistics. Comparisons based on the estimates of the proportions include the

estimates of the probability of a Type I error, or significance level. The significance levels were determined by calculating the Student's  $t$  values for the differences between each pair of means or proportions and comparing these with published tables of significance levels for two-tailed hypothesis testing. Student's  $t$  values may be computed for comparisons using these tables' estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where  $E_1$  and  $E_2$  are the estimates to be compared and  $se_1$  and  $se_2$  are their corresponding standard errors. Note that this formula is valid only for independent estimates. When the estimates were not independent—for example, when comparing the percentages across a percent distribution in this report—a row in a table—a covariance term was added to the denominator of the  $t$ -test formula. The addition of the covariance term results in the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 + 2(se_1 * se_2)}} = \frac{E_1 - E_2}{se_1 + se_2}$$

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large  $t$  statistics may appear to merit special attention. This can be misleading since the magnitude of the  $t$  statistic is related not only to the observed differences in means or percentages but also to the number of students in the specific categories used for comparison. Hence, a small difference compared across a large number of students would produce a large  $t$  statistic.

A second hazard in reporting statistical tests for each comparison is making multiple comparisons among categories of an independent variable. For example, when making paired comparisons among different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report only when  $p \leq .05/k$  for a particular pairwise comparison, where that comparison was one of  $k$  tests within a family. This guarantees both that the individual comparison would have  $p \leq .05$  and that when  $k$  comparisons were made within a family of possible tests, the significance level of the comparisons would sum to  $p \leq .05$ .<sup>9</sup>

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<sup>9</sup>The standard that  $p \leq .05/k$  for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to  $p \leq .05$ . For tables showing the  $t$  statistic required to ensure that  $p \leq .05/k$  for a particular family size and degrees of freedom, see Olive Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association* 56: 52-64.



For example, in a comparison of the percentages of males and females who enrolled in postsecondary education, only one comparison is possible (males v. females). In this family,  $k=1$ , and the comparison can be evaluated with a Student's  $t$  test. When students are divided into five racial-ethnic groups and all possible comparisons are made, then  $k=10$  and the significance level of each test must be  $p \leq .05/10$ , or  $.005$ . The formula for calculating family size ( $k$ ) is as follows:  $k=j * (j - 1)/2$ , where  $j$  is the number of categories for the variable being tested. In the case of race-ethnicity, there are five racial-ethnic groups (American Indian/Alaskan Native; Asian/Pacific Islander; black, non-Hispanic; Hispanic; and white, non-Hispanic), so  $k=5*(5-1)/2=10$ .

*Trends.* In some instances pair-wise comparisons proved too cumbersome. For example, one would like to say something about the general relationship between the percentage of first-time beginners who attained a degree and their number of risk factors when they began postsecondary education. In many cases not all of the six possible comparisons are statistically significant, even though the data appear to suggest clear trends. In such cases, a weighted least squares regression formula was used to test whether the inverse trend between the number of risk factors and the percentage of students with a postsecondary degree was significant, even if all of the pair-wise comparisons were not.

This regression test for linearity was done in this analysis using the data manipulation and regression capabilities of the Microsoft EXCEL spreadsheet program. The input data for the regressions were the estimates and standard errors in the output tables created by the Data Analysis System. All of the variables included in the regression equations were transformed by dividing them by the standard error of the relevant proportion. An intercept variable was also created by dividing a column of 1s by the standard error of the corresponding proportion. The new dependent variable was then regressed on the new independent variable and the intercept variable. The statistical significance of beta for the independent variable was then evaluated in relation  $p \leq 0.05$ , or  $t \geq 1.96$ . One important limitation of this test is that it can only be used to assess trends across interval variables or variable categories.

**Table C1—Response rates for students included in the BPS:90/94 analysis file, by selected institution characteristics**

	Unweighted response rate	Weighted response rate
All students	91.4	91.0
Institution type		
Less-than-2-year	88.1	87.0
2-year	89.3	90.2
4-year, nondoctorate-granting	92.9	92.7
4-year, doctorate-granting	93.1	92.8
Institution control		
Public	92.1	91.3
Private, not-for-profit	92.7	92.5
Private, for-profit	87.2	86.7
Level and control		
4-year		
Public	93.0	92.8
Private, not-for-profit	93.1	92.8
2-year		
Public	90.0	90.4
Private, not-for-profit	89.4	89.5
Private, for-profit (2-year or more)	88.6	87.9
Less-than-2-year		
Public	92.4	89.2
Private, not-for-profit	95.3	94.7
Private, for-profit	86.4	85.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90-94).

**Table C2—Standard errors for table 1.3 (partial)—Percentage distribution of 1989–90 beginning postsecondary students according to overall persistence and attainment of highest degree as of spring 1994, by demographic characteristics**

	None	Certificate	Associate's degree	Bachelor's degree
Total	1.08	0.79	0.81	1.05
Gender				
Male	1.52	1.05	0.91	1.31
Female	1.47	1.10	1.18	1.29
Age when began at first institution				
18 years or younger	1.22	0.69	0.99	1.37
19 years	3.12	2.30	2.63	1.54
20–29 years	2.67	2.34	1.52	0.88
30 years or older	3.35	2.80	1.69	0.55
Socioeconomic status				
Lowest quartile	2.98	2.38	1.55	1.04
Middle quartiles	1.58	1.15	1.09	1.14
Highest quartile	1.48	0.90	1.25	1.66
Race–ethnicity of student				
American Indian/Alaskan Native	13.06	11.05	9.39	5.89
Asian/Pacific Islander	5.37	3.38	2.94	4.61
Black, non-Hispanic	3.22	2.44	2.08	2.09
Hispanic	3.99	3.23	2.62	2.80
White, non-Hispanic	1.25	0.90	0.90	1.21
Marital status when began at first institution				
Not married	1.09	0.79	0.91	1.19
Married	3.32	2.77	1.64	1.01
Separated	10.50	10.53	1.86	0.79
Parental education				
Less than high school diploma	3.43	3.10	1.57	1.51
High school diploma	1.78	1.45	1.36	1.22
Some postsecondary	2.04	1.46	1.54	1.70
Bachelor's or higher	1.64	0.93	1.26	1.77
Dependency status in 1989–90				
Dependent	1.15	0.75	0.97	1.28
Independent	2.27	1.92	1.10	0.60
Income and dependency status in 1989–90				
Dependent				
Less than \$20,000	2.33	1.72	1.90	1.76
\$20,000–39,999	2.02	1.43	1.61	1.75
\$40,000–59,999	2.28	1.45	1.69	1.93
\$60,000 or more	2.25	1.14	2.04	2.64
Independent				
Less than \$10,000	3.21	2.90	1.80	1.09
\$10,000–19,999	4.30	3.79	2.14	0.91
\$20,000 or more	3.36	2.92	1.77	1.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

Table C3—Weighted sample sizes for selected row variables

	N (in thousands)
Total	2,562
Gender	
Male	1,179
Female	1,383
Age when began at first institution	
18 years or younger	1,402
19 years	276
20–29 years	462
30 years or older	218
Socioeconomic status	
Lowest quartile	375
Middle quartiles	1,169
Highest quartile	1,017
Race–ethnicity of student	
American Indian/Alaskan Native	18
Asian/Pacific Islander	103
Black, non-Hispanic	226
Hispanic	194
White, non-Hispanic	2,016
Marital status when began at first institution	
Not married	1,911
Married	267
Separated	25
Parental education	
Less than high school diploma	233
High school diploma	818
Some postsecondary	555
Bachelor's or higher	817
Dependency status in 1989–90	
Dependent	1,895
Independent	666
Level and control of institution	
4-year	
Public	705
Private, not-for-profit	339
2-year	1,148
Public	44
Private, not-for-profit	98
Private, for-profit	
Less-than-2-year	
Public	47
Private, not-for-profit	10
Private, for-profit	168

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study—Second Follow-up (BPS:90/94).

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For sale by the U.S. Government Printing Office  
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ISBN 0-16-048643-2

301

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