

Persistence and Attainment of 2011–12 First-Time Postsecondary Students After 3 Years

First Look



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Introduction

This report provides a first look at selected findings from the 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14). It is based on final data describing a nationally representative sample of undergraduates who entered postsecondary education for the first time during the 2011–12 academic year. BPS:12/14 covers the experiences of these first-time beginning students over 3 academic years, 2011–12, 2012–13, and 2013–14, and provides information about the rates at which students completed degrees or certificates as well as the rates at which they persisted at the same institution, transferred to other institutions, or left postsecondary education without completing degrees or certificates. The findings presented in this report have been chosen to demonstrate the range of information available when using BPS data rather than to discuss all of the observed differences, and they are not meant to emphasize any particular issue.

BPS:12/14 Data Collection

The first-time postsecondary students in the BPS:12/14 study were identified in the 2011–12 National Postsecondary Student Aid Study (NPSAS:12). NPSAS:12 is a nationally representative sample of about 95,000 undergraduate and 16,000 graduate students attending about 1,500 Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Approximately 37,000 respondents were identified in the NPSAS:12 survey as potential first-time beginning postsecondary students and became the sample for the BPS:12/14 longitudinal study. The NPSAS:12 study sample represents the approximately 23 million² undergraduates enrolled in 2011–12, and the BPS:12/14 study sample represents the approximately 4 million undergraduates who were first-time postsecondary students in 2011–12.

First-time beginners in the BPS:12/14 study participated in two interviews: in 2012, at the end of their first year in postsecondary education, and 3 years after they had started postsecondary education in 2014. In 2012, the interview covered a variety of topics, including students' enrollment characteristics during the first year, their education aspirations, and their demographic characteristics. Conducted between

² This number reflects unduplicated enrollment counts of students enrolled in undergraduate education. Students may enroll in multiple institutions during the academic year. Hence, NPSAS:12 uses a multiplicity adjustment to estimate the unduplicated counts of undergraduate students.

¹ Prior cycles of NPSAS included institutions from Puerto Rico.

February and November of 2014, the second interview focused on their enrollment patterns since 2012, including any transfers to other institutions, stopout periods, attendance intensity, and certificates and degrees earned. Respondents also provided a brief employment history. The interview asked those who were still enrolled for more details about their academic and social experiences in postsecondary education and asked those who had left postsecondary education, either with or without a degree or certificate, for more detailed employment information.

BPS:12/14 draws on many sources of data. Information about first-time postsecondary students' first year comes from NPSAS:12, which included a student interview and information from institutional records, federal financial aid applications, and federal student loan and Pell Grant records. Data on 2011–12 first-time postsecondary students in 2014 are based primarily on the follow-up student interviews. The first follow-up data also integrate students' enrollment records from the National Student Clearinghouse; information from federal databases also used in the base year, such as the Central Processing System (CPS), the National Student Loan Data System (NSLDS), and the Integrated Postsecondary Education Data System (IPEDS); and information from college admissions test agencies. In both study years, student interviews were distributed as web-based questionnaires that were either self-administered or conducted by a trained interviewer. In 2014, about 24,770 students completed the interview, resulting in a weighted interview response rate of 68 percent.

For more information, a glossary describing the variables used in the tables is provided in appendix A. The technical notes in appendix B supply additional information about response rates, data collection, file preparation, and analysis. Publications and public access datasets for BPS studies are also available on the NCES websites http://nces.ed.gov/surveys/bps and http://nces.ed.gov/datalab.

Organization of Tables in This Report

The tables in this report present information about beginning postsecondary students' enrollment and completion from two different perspectives. The first perspective, shown in tables 1–3, is that of the student. Specifically, these tables provide information on 2011–12 beginning students' attainment and persistence anywhere by spring 2014. Attainment results include the percentage of students whose highest credential completed as of spring 2014 was a certificate, associate's degree, or bachelor's degree, regardless of where the credential was completed. Among those who had not yet attained a credential, persistence information is shown, again regardless of where students attended. Persistence results include the percentage of students who were enrolled in a 4-year institution, enrolled in a less-than-4-year

institution, and not enrolled by spring of 2014. Table 1 shows these results for all first-time beginning students, table 2 limits the results to those who began at a public 2-year college, and table 3 limits the results to those who began at a 4-year institution. Within each table, results are disaggregated by key enrollment and student characteristics.

The second perspective, shown in tables 4–6, is students' attainment and retention at the first institution attended. These tables first report the percentage of students whose highest credential earned at the first institution was a certificate, associate's degree, or bachelor's degree. The tables then show the percentage who had not yet attained a credential but were still enrolled at the first institution, had left the first institution but had enrolled at another institution, or had left the first institution and had yet to enroll in another institution. Again, within each table, results are disaggregated by key enrollment and student characteristics.

In considering the attainment results presented in tables 1–6, note that the normal length of time it takes for a full-time student to complete a program and attain a certificate or degree depends on the type of program. Vocational certificate programs normally take less than 2 years to complete, associate's degree programs are often completed in 2 or 3 years, and bachelor's degree programs in 4 or 5 years. The 3-year period covered in this report (from July 2011 to June 2014) is long enough for many students beginning in 2011–12 to complete certificates and associate's degrees but too short for most students to complete bachelor's degrees.

The last table gives context for the statistics in tables 1–6 by providing statistics about the sample. Table 7 presents percentage distributions of the enrollment and student characteristics included in the previous tables for each of the populations examined: all first-time postsecondary students, those beginning at public 2-year institutions, and those beginning at 4-year institutions.

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Selected Findings

Attainment and persistence at any institution within 3 years (2012–14)

- Among 2011–12 first-time postsecondary students, 7 percent had completed a certificate, 7 percent had completed an associate's degree, and 1 percent had completed a bachelor's degree at any institution within 3 years (table 1). Another 39 percent had not earned a credential and were enrolled at a 4-year institution, 16 percent were enrolled at a less-than-4-year institution, and 30 percent were not enrolled at any institution by the spring of 2014.
- Among 2011–12 first-time postsecondary students who first enrolled in a public 2-year institution to pursue a certificate, 36 percent had completed a certificate at any institution within 3 years (table 2). Among those who were enrolled in an associate's degree program in 2011–12, some 2 percent had earned a certificate and 12 percent had completed an associate's degree.
- Among 2011–12 first-time postsecondary students who first enrolled in a 4-year institution and were seeking a bachelor's degree, 1 percent had completed a certificate, 1 percent had completed an associate's degree, and 3 percent had completed a bachelor's degree at any institution within 3 years (table 3). Some 73 percent had not earned a credential and were still enrolled at a 4-year institution, 6 percent were enrolled at a less-than-4-year institution, and 16 percent were no longer enrolled.

Attainment and retention at first institution within 3 years (2012–14)

- Seven percent of 2011–12 first-time postsecondary students had completed a certificate, 7 percent had completed an associate's degree, and 1 percent had completed a bachelor's degree within 3 years at the first postsecondary institution that they attended (table 4). Forty-two percent of students had not attained a credential and were still enrolled at the first institution, 15 percent had left the first institution and enrolled at another institution, and 28 percent had left the first institution and not enrolled at another institution by the spring of 2014.
- Among 2011–12 first-time postsecondary students who first enrolled in a public 2-year institution to pursue a certificate, 36 percent had completed a certificate within 3 years at their first institution (table 5). Among those who began at a public 2-year institution to pursue an associate's degree, 1 percent had completed a certificate and 12 percent had completed an associate's degree within 3 years at their first institution. Ten percent of certificate enrollees and 28 percent of associate's degree enrollees had not earned a credential and were still enrolled at their first institution in the spring of 2014.
- Among 2011–12 first-time postsecondary students who first enrolled in a 4-year institution and were pursuing a bachelor's degree, 3 percent had completed a bachelor's degree within 3 years at their first institution (table 6). Some 65 percent of students who began in a 4-year institution had not earned a degree and remained enrolled at their first institution, 16 percent had left their first institution and enrolled at another institution, and 14 percent had left their first institution and never enrolled anywhere else.

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Tables

Table 1.

ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cre ed at any institu by spring 2014		Persistence: No credential attained at any institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled
Total	7.5	6.9	1.4	38.6	15.6	30.0
Control and level of first institution						
4-year	1.4	3.7	2.7	67.2	5.3	19.8
Public	1.0	2.6	2.4	70.8	5.6	17.7
Private nonprofit	1.5!	1.7	3.4	76.6	4.7	12.1
For-profit	3.0	14.1	2.7	24.8	5.5	49.7
2-year	8.3	11.6	#	7.6	29.4	43.1
Public	4.5	11.0	#	8.2	32.3	44.1
Private nonprofit	23.0!	22.2!	#	‡	12.6 !	32.3
For-profit	43.1	16.4	#	1.6!	3.8	35.1
Less-than-2-year	70.5	‡	#	‡	4.0	25.2
Public	69.9	‡	#	‡	6.0 !	23.2!
Private nonprofit	71.7	#	#	#	#	‡
For-profit	70.5	#	#	‡	3.8	25.4
Degree program, 2011–12						
No certificate or degree	‡	‡	#	28.3	26.9	42.6
Certificate	60.7	0.5	#	1.6	5.5	31.7
Associate's degree	2.3	14.8	#	10.4	28.4	44.1
Bachelor's degree	0.7	1.3	3.1	73.2	5.5	16.1
Attendance intensity through						
June 2014 ¹						
Always full time	8.3	7.4	1.8	50.0	8.7	23.7
Mixed	6.7	7.9	1.1	28.0	28.9	27.5
Always part time	5.1	1.4!	#	3.6	16.6	73.2
Highest level of high school mathematics completed or planned ²						
Less than algebra 2	11.7	6.8	1.1	16.7	19.9	43.9
Algebra 2	10.3	7.4	1.0	25.3	19.9	36.2
Trigonometry	2.9	7.5	1.7	54.5	13.2	20.2
Precalculus	4.3	8.0	1.6	44.3	15.7	26.1
Calculus or math beyond		0.0				
calculus	2.3	4.4	2.2	67.5	8.8	14.9
Sex						
Male	5.6	7.2	1.5	36.9	15.4	33.4
Female	9.0	6.7	1.4	39.9	15.7	27.3
Age as of December 31, 2011						
18 years or younger	4.1	6.9	1.5	50.1	15.4	21.9
19 years	6.0	6.2	2.0	42.1	15.6	28.1
20–23 years	13.1	5.7	0.7!	15.4	17.0	48.1
24–29 years	16.8	8.9	0.6!	9.5	15.8	48.5
30 years or older	17.7	9.3	0.7!	12.5	14.4	45.5

See notes at end of table.

Table 1.

ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cre ed at any institu by spring 2014		Persistence: No credential attained at any institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled
Race/ethnicity ³						
White	6.0	7.6	1.6	43.5	13.5	27.7
Black	7.6	5.6	1.2	30.2	15.3	40.1
Hispanic	12.8	6.9	0.8	26.4	21.3	31.7
Asian	2.2	3.5	3.0	54.7	17.6	19.1
American Indian	‡	5.8!	‡	23.2	13.0 !	39.2
Pacific Islander	8.2!	3.2!	‡	43.0	15.0 !	27.0
Two or more races	5.5	7.2	1.1 !	39.4	15.6	31.1
Dependency status and family responsibilities, 2011–12 ⁴						
Dependent	4.9	6.7	1.7	46.2	15.6	24.9
Independent	15.8	7.6	0.5	14.5	15.5	46.0
Unmarried, no dependent(s)	10.5	8.2	‡	19.7	17.3	43.9
Unmarried, with dependent(s)	18.9	5.5	0.3	12.7	14.3	48.3
Married	18.7	9.8	0.7!	10.3	14.8	45.7
Highest education attained by either parent, 2011–12 ⁵						
High school diploma or less	12.3	7.5	1.0	22.4	16.9	39.8
Some postsecondary education	7.8	8.6	1.1	31.6	19.3	31.7
Bachelor's degree or higher	2.8	5.5	2.1	58.6	11.4	19.6

[#] Rounds to zero.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a

² Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 8.1 percent of first-time students who were age 30 or older by the end of 2011 are included in the total but excluded here because their highest math course was not collected.

³ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁴ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁵ The 4.0 percent of all first-time students who did not have parents' highest level of education information are included in the total but excluded here.

Table 2.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cre ed at any instite by spring 2014		Persistence: No credential attained at any institution by spring 2014			
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled	
Total	4.5	11.0	#	8.2	32.3	44.1	
Degree program, 2011–12 No certificate or degree Certificate Associate's degree	‡ 36.4 2.3	1.2 ! 0.9 ! 12.1	# # #	19.3 2.6! 8.1	33.4 11.8 33.7	44.7 48.3 43.7	
Plan to continue to a bachelor's degree program within 5 years, 2011–12 ¹							
Yes	2.0	12.3	#	9.9	34.8	41.0	
No	3.2	9.5	#	3.6	29.9	53.9	
Attendance intensity through June 2014 ²							
Always full time	5.3	16.4	‡	11.4	26.3	40.6	
Mixed Always part time	4.3 3.4	11.1 1.4 !	#	8.9 1.3 !	44.2 20.3	31.4 73.6	
Highest level of high school mathematics completed or planned ³ Less than algebra 2	4.5	7.4	#	4.6	31.6	51.9	
Algebra 2	4.8	9.0	#	7.7	34.3	44.2	
Trigonometry	1.1 !		#	11.3	30.4	41.3	
Precalculus	3.6	16.6	‡	10.1	32.8	36.8	
Calculus or math beyond calculus	3.9!	14.9	#	18.3	32.0	30.8	
Sex							
Male	3.8	10.6	‡	6.8	30.9	47.8	
Female	5.1	11.3	#	9.4	33.5	40.7	
Age as of December 31, 2011				40.0			
18 years or younger	3.5	14.4	#	10.2	34.5	37.3	
19 years 20–23 years	4.8 4.4	11.2 4.2	‡ #	9.1 7.4	33.0 30.2	41.8 53.9	
24–29 years	4.8!		#	4.0!	28.4	55.2	
30 years or older	7.7	7.7	#	1.8!	27.2	55.6	
Race/ethnicity ⁴							
White	4.8	13.5	‡	9.4	28.8	43.5	
Black	4.6	8.2	#	5.8	28.8	52.6	
Hispanic	4.5	7.7	#	5.4	40.0	42.4	
Asian	‡	5.8	#	14.9	41.6	35.5	
American Indian	‡	‡	#	8.5!	29.6		
Pacific Islander	‡	‡	#	‡	38.6		
Two or more races	3.1!	14.3	#	7.6	32.7	42.4	

See notes at end of table.

Table 2.

FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cr ed at any instit by spring 2014	ution	Persistence: No credential attained at any institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled
Dependency status and family						
responsibilities, 2011–12 ⁵						
Dependent	4.0	12.8	#	9.8	33.9	39.5
Independent	5.7	6.6	#	4.4	28.4	54.9
Unmarried, no dependent(s)	3.8	7.6	#	7.1	30.6	50.7
Unmarried, with dependent(s)	6.0	4.4	#	3.2!	29.2	57.2
Married	7.7	7.6	#	2.1!	24.8	57.8
Highest education attained						
by either parent, 2011–12 ⁶						
High school diploma or less	4.9	8.9	#	5.1	31.2	49.8
Some postsecondary education	4.4	12.4	#	7.5	34.4	41.2
Bachelor's degree or higher	3.7	13.3	#	13.9	30.9	38.2

[#] Rounds to zero.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ The 6.4 percent of first-time students who are enrolled in a certificate program are included in the total but excluded here because information on their bachelor's degree plans was not collected.

² Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a different standard.

³ Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 10.1 percent of all first-time students beginning at a 2-year public college who were age 30 or older by the end of 2011 are included in the total but excluded here because their highest math course was not collected.

⁴ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁵ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁶ The 5.1 percent of all first-time students beginning at a 2-year public college who did not have parents' highest level of education information are included in the total but excluded here.

Table 3.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cr ed at any instit by spring 2014	ution	Persistence: No credential attained at any institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled
Total	1.4	3.7	2.7	67.2	5.3	19.8
Control and doctorate-granting status of first institution						
Public non-doctorate-granting	1.7!	5.8	1.6	54.5	4.8	31.5
Public doctorate-granting	0.7	1.1	2.7	78.1	5.9	11.5
Private nonprofit						
non-doctorate-granting	‡	2.1	4.2	69.5	5.0	16.6
Private nonprofit						
doctorate-granting	0.6!	1.5	2.9	81.4	4.6	9.0
For-profit	3.0	14.1	2.7	24.8	5.5	49.7
Degree program, 2011–12						
No certificate or degree	#	#	#	62.6	‡	29.6!
Certificate	53.0	‡	#	‡	‡	35.5
Associate's degree	1.9!	22.6	#	25.7	3.7	46.0
Bachelor's degree	0.7	1.3	3.1	73.2	5.5	16.1
Attendance intensity through June 2014 ¹						
Always full time	1.0	3.7	2.8	72.8	3.1	16.5
Mixed	2.3!	3.9	2.7	56.7	12.7	21.8
Always part time	‡	‡	#	15.9!	‡	78.5
Highest level of high school mathematics completed or planned ²						
Less than algebra 2	2.4	6.2	3.7	48.5	5.8	33.4
Algebra 2	1.4!	4.5	2.6	56.0	6.6	28.9
Trigonometry	1.6!	4.0	2.4	73.4	6.9	11.7
Precalculus	0.9	2.7	2.6	68.2	6.4	19.1
Calculus or math beyond calculus	0.4!	1.8	2.8	80.6	3.7	10.7
Sex						
Male	0.9	3.6	2.8	65.4	4.7	22.5
Female	1.7	3.7	2.6	68.6	5.8	17.6
Age as of December 31, 2011						
18 years or younger	0.7	2.5	2.5	75.6	5.8	13.0
19 years	1.1	2.5	3.5	68.5	5.5	18.9
20–23 years	2.8	7.1	2.1!		4.5	
24–29 years	2.4	13.0	2.1!		3.0	
30 years or older	8.1!	12.6	2.0!		1.7	42.6

See notes at end of table.

Table 3.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

		ent: Highest cre					
		ed at any instito ny spring 2014	ution	Persistence: No credential attained at any institution by spring 2014			
		, , , , , , , , , , , , , , , , , , , 		<u> </u>	Enrolled at		
				Enrolled at	less-		
Enrollment and student		Associate's	Bachelor's	4-year	than-4-year		
characteristics	Certificate	degree	degree	institution	institution	Not enrolled	
Race/ethnicity ³							
White	1.3	3.5	2.7	70.2	4.8	17.6	
Black	2.0!	4.0	2.3	53.8	7.3	30.6	
Hispanic	1.3	5.5	2.2	63.8	5.8	21.4	
Asian	‡	2.2!	4.7	76.4	5.3	10.4	
American Indian	‡	‡	‡	51.9	‡	36.2	
Pacific Islander	‡	‡	‡	68.0	‡	20.6!	
Two or more races	1.5!	2.4!	2.0!	65.9	5.4	22.8	
Dependency status and family							
responsibilities, 2011–124							
Dependent	0.9	2.6	2.9	72.2	5.6	15.8	
Independent	4.5!	9.8	1.5!	38.0	3.7	42.6	
Unmarried, no dependent(s)	3.1!	8.5	‡	45.9	3.7	37.5	
Unmarried, with dependent(s)	2.6	8.0	1.0	34.3	3.9	50.2	
Married	#	14.3	2.4!	31.4	3.6	39.1	
Highest education attained							
by either parent, 2011–12 ⁵							
High school diploma or less	2.4!	5.4	2.6	52.0	5.6	31.9	
Some postsecondary education	1.9	5.2	2.4	60.6	7.1	22.9	
Bachelor's degree or higher	0.7	2.2	3.0	77.8	4.2	12.1	

[#] Rounds to zero.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a different standard.

² Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 5.2 percent of all first-time students beginning at a 4-year college who were age 30 or older by the end of 2011 are included in the total but excluded here because their highest math course was not collected.

³ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁴ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁵ The 2.5 percent of all first-time students beginning at a 4-year college who did not have parents' highest level of education information are included in the total but excluded here.

Table 4.

ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cr ed at first insti by spring 2014	tution		attained at ing 2014	
Enrollment and student characteristics	Certificate	Associate's	Bachelor's degree	Enrolled at first institution	Left first institution, but enrolled at another institution	Left first institution but never enrolled at another institution
Total	6.7	6.5	1.4	41.7	15.4	28.2
Control and level of first institution						
4-year	0.8!	3.2	2.7	59.1	16.3	18.0
Public	0.4!	2.0	2.3	63.0	16.6	15.8
Private nonprofit	‡	1.4	3.4	67.0	16.8	10.4
For-profit	2.2	13.9	2.7	20.0	13.3	47.8
2-year	7.3	11.2	†	24.7	15.6	41.2
Public	3.4	10.6	Ť	27.3	16.5	42.2
Private nonprofit	22.3!	21.7!	Ť	‡	22.8 !	27.9
For-profit	42.8	16.2	į.	2.0	5.3	33.7
Less-than-2-year	70.1	†	†	1.6!	3.8	24.5
Public	70.5	,	,	‡	‡	23.2 !
Private nonprofit	71.7	†	†	#	#	‡
For-profit	70.0	†	†	1.3!	4.2	24.6
Degree program, 2011–12						
No certificate or degree	‡	‡	#	25.8	31.5	41.8
Certificate	60.4	0.3!	#	3.8!	4.6	31.0
Associate's degree	1.3	14.3	#	26.0	16.3	42.1
Bachelor's degree	‡	0.9	3.1	65.3	16.4	14.3
Attendance intensity through						
June 2014 ¹						
Always full time	7.7	7.0	1.8	46.9	14.3	22.3
Mixed	5.4	7.4	1.1	40.1	21.5	24.6
Always part time	4.8	1.4!	#	17.4	4.2	72.2
Highest level of high school mathematics completed or planned ²						
Less than algebra 2	10.9	6.5	1.1	26.6	13.2	41.7
Algebra 2	9.2	6.8	1.0	31.8	16.9	34.3
Trigonometry	1.9	6.9	1.7	48.7	23.7	17.1
Precalculus	3.5	7.2	1.6	46.1	17.3	24.3
	5.5	1.2	1.0	40.1	17.5	24.5
Calculus or math beyond calculus	1.8	4.3	2.2	64.4	13.8	13.6
Sex						
Male	5.0	6.8	1.4	40.9	13.8	32.0
Female	8.1	6.3	1.4	40.9	16.7	25.2
Age as of December 31, 2011						
18 years or younger	3.3	6.4	1.5	51.2	17.5	20.1
19 years	4.8	5.7	1.9	44.1	18.0	25.4
20–23 years	12.5	5.5	0.7!	22.2	11.7	47.5
24–29 years	16.3	8.8	0.6 !	19.5	7.5	47.3
30 years or older	17.5	9.2	0.7 !	21.9	5.6	45.1

See notes at end of table.

Table 4.

ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14—Continued

	Attainment: Highest credential attained at first institution by spring 2014			Retention: No credential attained at first institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at first institution	Left first institution, but enrolled at another institution	Left first institution but never enrolled at another institution
Race/ethnicity ³						
White	5.5	7.1	1.5	44.3	15.5	26.1
Black	6.3	5.3	1.2	31.0	19.2	37.0
Hispanic	11.9	6.6	0.8	37.3	13.3	30.1
Asian	1.3	3.4	3.0	60.0	14.2	18.1
American Indian	#	5.5!	‡	23.6	15.5	36.8
Pacific Islander	8.2 !	3.2!	‡	45.3	15.4!	24.3
Two or more races	4.5	7.1	1.1!	45.3	11.7	30.3
Dependency status and family responsibilities, 2011–12 ⁴						
Dependent	4.0	6.2	1.7	48.0	17.2	22.9
Independent	15.2	7.5	0.5	22.1	9.7	45.0
Unmarried, no dependent(s)	9.6	8.1	‡	25.9	13.4	42.6
Unmarried, with dependent(s)	18.1	5.4	0.3	19.7	9.2	47.3
Married	18.4	9.7	0.7!	20.3	5.7	45.2
Highest education attained by either parent, 2011–12 ⁵						
High school diploma or less	11.5	7.3	1.0	29.7	12.5	38.0
Some postsecondary education	6.8	8.2	1.1	37.0	17.2	29.7
Bachelor's degree or higher	2.3	4.9	2.1	56.2	16.4	18.1

[†] Not applicable.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[#] Rounds to zero.

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a different standard

² Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 8.1 percent of first-time students who were age 30 or older by the end of 2011 are included in the total but excluded here because their highest math course was not collected.

³ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁴ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁵ The 4.0 percent of all first-time students who did not have parents' highest level of education information are included in the total but excluded here.

Table 5.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	Attainment: Hig attained at fir by sprir	st institution	Retention: No credential attained at first institution by spring 2014			
Enrollment and student characteristics	Certificate	Associate's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution	
Total	3.4	10.6	27.3	16.5	42.2	
Degree program, 2011–12 No certificate or degree Certificate	# 36.0	‡ ‡	30.7 10.1!	25.7 5.9	42.5 47.2	
Associate's degree	1.2	11.6	28.4	16.9	41.8	
Plan to continue to a bachelor's degree program within 5 years, 2011–12 ¹ Yes	0.9	11.9	29.3	19.1	38.9	
No	2.1	9.0	25.7	10.6	52.5	
Attendance intensity through June 2014 ²						
Always full time	4.3	15.8	22.5	18.8	38.6	
Mixed	2.8	10.6	36.5	21.1	29.0	
Always part time	3.1	1.4 !	18.5	4.0	73.0	
Highest level of high school mathematics completed or planned ³						
Less than algebra 2	3.7	7.2	26.5	13.0	49.7	
Algebra 2	3.2	8.6	28.2	17.8	42.2	
Trigonometry	0.7!	15.4	23.6	21.9	38.4	
Precalculus	2.5	15.7	27.6	19.1	35.2	
Calculus or math beyond calculus	‡	14.9	29.1	24.2	29.2	
Calculus	+	14.5	29.1	24.2	29.2	
Sex						
Male	3.1	10.2	25.4	15.0	46.3	
Female	3.7	10.9	29.1	17.8	38.5	
Age as of December 31, 2011						
18 years or younger	2.3	13.8	28.5	20.5	34.9	
19 years	3.0	10.6	27.3	19.7	39.4	
20–23 years	3.8	4.2	26.2	11.8	54.1	
24–29 years	4.6!	7.7 !	24.7	9.5	53.5	
30 years or older	7.5	7.5	26.3	3.8	55.0	
Race/ethnicity ⁴						
White	3.9	13.0	24.3	16.9	41.9	
Black	3.0	7.8	22.2	18.1	48.9	
Hispanic	3.1	7.3	34.4	14.1	41.1	
Asian	‡	5.8	39.9	19.2	34.1	
American Indian	‡ +	‡ +	‡ 20 6 I	25.9!	48.2 31.9 !	
Pacific Islander Two or more races	‡ ‡	‡ 14.3	38.6 ! 29.8	‡ 13.7	31.9 ! 40.2	
1 WO OF HIGHE TAGES	+	14.3	23.0	10.1	40.2	

See notes at end of table.

Table 5. FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011-12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012-14—Continued

	Attainment: Hig attained at fir by sprir	st institution	Retention: No credential attained at first institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution
Dependency status and family					
responsibilities, 2011–12 ⁵		40.0	00.4	40.0	a
Dependent	2.7	12.2	28.1	19.6	37.4
Independent	5.1	6.6	25.6	9.1	53.6
Unmarried, no dependent(s)	3.3	7.6	27.0	13.4	48.6
Unmarried, with dependent(s)	4.9	4.4	26.1	8.1	56.5
Married	7.5	7.4	23.4	4.8	56.9
Highest education attained					
by either parent, 2011–12 ⁶					
High school diploma or less	4.0	8.6	27.7	11.7	48.0
Some postsecondary education	3.2	12.0	27.8	17.2	39.8
Bachelor's degree or higher	2.9	12.8	26.4	22.1	35.8

[#] Rounds to zero.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ The 6.4 percent of first-time students who are enrolled in a certificate program are included in the total but excluded here because information on their bachelor's degree plans was not collected.

² Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a different standard.

³ The math course data were obtained from two sources: surveys that first-time students completed when they took the ACT or SAT I in high school or BPS interviews that first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 10.1 percent of all first-time students beginning at a 2-year public college who were age 30 or older by the end of 2011 are included in the total but not included here because their highest math course was not collected.

⁴ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁵ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁶ The 5.1 percent of all first-time students beginning at a 2-year public college who did not have parents' highest level of education information are included in the total but excluded here.

Table 6.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	Attainment: Highest credential attained at first institution by spring 2014			Retention: No credential attained at first institution by spring 2014		
Enrollment and student characteristics	A Certificate	ssociate's degree	Bachelor's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution
Total	0.8 !	3.2	2.7	59.1	16.3	18.0
Control and doctorate-granting status of first institution						
Public non-doctorate-granting	0.9!	5.0	1.6	45.6	16.7	30.1
Public doctorate-granting Private nonprofit	‡	0.6	2.6	70.7	16.5	9.4
non-doctorate-granting Private nonprofit	‡	1.9	4.1	57.4	20.2	14.2
doctorate-granting	‡	1.0!	2.9	73.5	14.6	7.8
For-profit	2.2	13.9	2.7	20.0	13.3	47.8
Degree program, 2011–12						
No certificate or degree	#	#	#	‡	54.9	33.5!
Certificate	51.2	#	#	‡	8.8!	34.1
Associate's degree	#	21.9	#	19.0	13.6	44.1
Bachelor's degree	‡	0.9	3.1	65.3	16.4	14.3
Attendance intensity through June 2014 ¹						
Always full time	0.5	3.2	2.8	63.8	14.3	15.4
Mixed	‡	3.4	2.7	50.5	23.9	18.3
Always part time	‡	‡	#	15.1!	6.1!	74.4
Highest level of high school mathematics completed or planned ²						
Less than algebra 2	1.1	5.7	3.7	40.4	18.2	30.9
Algebra 2	0.6!	3.7	2.6	46.6	19.8	26.7
Trigonometry	0.4!	3.3	2.4	60.3	24.7	8.8
Precalculus	0.4!	2.0	2.6	60.9	17.0	17.2
Calculus or math beyond						
calculus	0.1!	1.7	2.7	74.2	11.8	9.5
Sex						
Male	0.5	3.2	2.7	58.5	14.0	21.1
Female	1.0!	3.2	2.6	59.6	18.0	15.5
Age as of December 31, 2011						
18 years or younger	0.2!	1.9	2.5	67.3	16.7	11.4
19 years	0.3!	2.1	3.4	60.1	17.7	16.4
20–23 years	1.9!	6.8	2.1!	27.7	16.6	44.9
24–29 years	1.7!	12.7	2.0!	23.9	8.9	50.7
30 years or older	7.9!	12.6	2.0 !	27.5	7.8	42.3

See notes at end of table.

Table 6.
FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14—Continued

	Attainment: Highest credential attained at first institution			Retention: No credential attained at first institution by spring 2014			
Enrollment and student characteristics	Certificate	y spring 2014 Associate's degree	Bachelor's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution	
Race/ethnicity ³							
White	0.9!	2.9	2.7	61.8	15.9	15.9	
Black	0.9!	3.6	2.3	43.9	21.4	27.9	
Hispanic	0.6	5.2	2.2	56.9	16.4	18.8	
Asian	‡	1.9!	4.7	71.5	11.8	9.8	
American Indian	‡	‡	‡	45.9	16.4!	32.3	
Pacific Islander	‡	‡	‡	57.3	‡	20.7!	
Two or more races	0.4!	2.3!	2.0!	61.2	11.4	22.7	
Dependency status and family responsibilities, 2011–12 ⁴							
Dependent	0.3	2.1	2.9	64.3	16.6	13.8	
Independent	3.6!	9.6	1.4!	29.5	14.1	41.8	
Unmarried, no dependent(s)	1.8!	8.2	‡	34.4	17.1	37.2	
Unmarried, with dependent(s)	2.0	8.0	1.0	26.6	14.3	48.2	
Married	‡	14.2	2.4!	26.1	9.1!	39.3	
Highest education attained by either parent, 2011–12 ⁵							
High school diploma or less	‡	5.2	2.6	44.0	16.9	29.8	
Some postsecondary education	0.9	4.7	2.4	52.3	19.3	20.4	
Bachelor's degree or higher	0.4!	1.6	2.9	69.7	14.6	10.8	

[#] Rounds to zero.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a

² Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey. The 5.2 percent of all first-time students beginning at a 4-year college who were age 30 or older by the end of 2011 are included in the total but excluded here because their highest math course was not collected.

³ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁴ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

⁵ The 2.5 percent of all first-time students beginning at a 4-year college who did not have parents' highest level of education information are included in the total but excluded here.

Table 7.

ENROLLMENT AND STUDENT CHARACTERISTICS: Percentage distribution of 2011–12 first-time postsecondary students' selected enrollment and student characteristics, by control and level of first institution: 2012–14

Enrollment and student characteristics	All first-time postsecondary students	First-time postsecondary students beginning at a 2-year public college	First-time postsecondary students beginning at a 4-year college
Total	100.0	100.0	100.0
Control, level, and doctorate-granting status of first institution			
4-year	52.5	†	100.0
Public	30.8	†	58.7
Non-doctorate-granting	9.5	†	18.2
Doctorate-granting	21.3	†	40.5
Private nonprofit	15.6	†	29.6
Non-doctorate-granting	6.3	†	12.0
Doctorate-granting	9.3	†	17.6
For-profit	6.1	†	11.7
2-year	42.9	100.0	†
Public	38.4	100.0	†
Private nonprofit	0.6	†	†
For-profit	3.9	†	†
Less-than-2-year	4.5	†	†
Public	0.6	†	†
Private nonprofit	‡	ţ	†
For-profit	3.8	†	†
Degree program, 2011–12			
No certificate or degree	1.8	3.5	‡
Certificate	10.2	6.4	1.1!
Associate's degree	42.3	90.1	11.1
Bachelor's degree	45.8	†	87.1
Plan to continue to a bachelor's degree program within 5 years, 2011–12			
Yes	34.1	73.2	9.0
No	10.0	20.4	2.9
Not applicable ¹	55.9	6.4	88.2
Number of institutions attended through June 2014			
One	74.3	74.5	72.3
Two	23.1	23.8	24.2
Three or more	2.6	1.7	3.5
Attendance intensity through June 2014 ²			
Always full time	59.5	37.4	73.3
Mixed	30.0	40.7	23.5
Always part time	10.5	21.9	3.2
Highest level of high school mathematics completed or planned ³			
Less than algebra 2	14.6	21.5	8.0
Algebra 2	26.6	33.6	19.4
Trigonometry	8.3	5.8	11.1
Precalculus	20.2	18.8	22.9
Calculus or math beyond calculus	22.0	10.3	33.4
Not applicable ⁴	8.1	10.1	5.2

See notes at end of table.

Table 7.

ENROLLMENT AND STUDENT CHARACTERISTICS: Percentage distribution of 2011–12 first-time postsecondary students' selected enrollment and student characteristics, by control and level of first institution: 2012–14—Continued

		First-time	First-time	
	All first-time	postsecondary	postsecondary	
	postsecondary	students beginning at	students beginning at	
Enrollment and student characteristics	students	a 2-year public college	a 4-year college	
Sex				
Male	44.2	47.2	43.7	
Female	55.8	52.8	56.3	
Age as of December 31, 2011				
18 years or younger	48.0	42.4	56.3	
19 years	26.6	25.7	28.6	
20–23 years	10.5	13.3	6.4	
24–29 years	6.7	8.6	3.5	
30 years or older	8.1	10.1	5.2	
Race/ethnicity ⁵				
White	55.7	53.1	60.5	
Black	14.0	13.4	13.7	
Hispanic	19.7	23.9	13.9	
Asian	5.5	4.8	6.8	
American Indian	1.0	0.8!	0.8	
Pacific Islander	0.4	0.4	0.4	
Two or more races	3.6	3.6	3.8	
Dependency status and family responsibilities, 2011–12	6			
Dependent	76.0	70.5	85.3	
Independent	24.0	29.5	14.7	
Unmarried, no dependent(s)	8.5	11.2	5.6	
Unmarried, with dependent(s)	8.9	9.2	5.5	
Married	6.7	9.1	3.6	
Highest education attained by either parent, 2011–12				
High school diploma or less	31.2	37.2	22.7	
Some postsecondary education	26.5	31.0	23.4	
Bachelor's degree or higher	38.4	26.7	51.4	
Both parents' highest education attained is unknown	4.0	5.1	2.5	

[†] Not applicable.

NOTE: Estimates include individuals who were first-time postsecondary students in 2011–12 at Title IV eligible postsecondary institutions in the 50 states and the District of Columbia. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

[!] Interpret data with caution. Estimate is unstable because the standard error represents more than 30 percent but less than 51 percent of the estimate.

[‡] Reporting standards not met.

¹ Future bachelor's degree plans were not collected for first-time students enrolled in a certificate or bachelor's degree program.

² Full-time status for the purposes of financial aid eligibility is based on 12 credit hours, unless the awarding institution employed a different standard.

³ Math coursetaking data come from two sources: surveys first-time students completed when they took the ACT or SAT I in high school and BPS interviews first-time students completed in the base year or first follow-up. First-time students who reported this information on an entrance examination survey may not have completed all courses at the time they took the survey.

⁴ These data were not collected for those age 30 or older at the end of 2011.

⁵ Black includes African American, Hispanic includes Latino, American Indian includes Alaska Native, Pacific Islander includes Native Hawaiian, and Two or more races includes first-time students having origins in more than one race. Race categories exclude Hispanic origin unless specified.

⁶ First-time students classified as independent include those age 24 or over and those under 24 who are married, have dependents, are veterans or on active duty, are orphans or wards of the courts, are homeless or at risk of homelessness, or were determined to be independent by a financial aid officer using professional judgment. Other first-time students under age 24 are considered to be dependent. Within marital status, the unmarried category includes first-time students who are divorced, separated, or widowed. First-time students are considered to have a dependent if they have a child or any others for whom they are the caretaker or have financial responsibility. A spouse is not considered to be a dependent.

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References

- Cox, B. (1980). The Weighted Sequential Hot Deck Imputation Procedure. In *Proceedings of the Section on Survey Research Methods, American Statistical Association* (pp. 721–726). Alexandria, VA: American Statistical Association.
- Flyer, P.A. (1987). Finite Population Correction for Replication Estimates of Variance. In *Proceedings of the Section on Survey Research Methods, American Statistical Association* (pp. 732–736). Alexandria, VA: American Statistical Association.
- Hill, J., Wilson, D., and Wine, J. (forthcoming). 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14) Data File Documentation. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Kott, P.S. (1988). Model-Based Finite Population Correction for the Horvitz-Thompson Estimator. *Biometrika*, 75(4): 797–799.
- Marker, D.A., Judkins, D.R., and Winglee, M. (2002). Large-Scale Imputation for Complex Surveys. In R. Groves, D. Dillman, J. Eltinge, and R. Little (Eds.), *Survey Nonresponse* (pp. 329–341). New York: John Wiley & Sons, Inc.
- U.S. Department of Education. (2012). 2012 Revision of NCES Statistical Standards (NCES 2014-097). National Center for Education Statistics. Washington, DC. Retrieved May 8, 2014, from https://nces.ed.gov/statprog/2012/.
- Wine, J., Bryan, M., and Siegel, P. (2014). 2011–12 National Postsecondary Student Aid Study (NPSAS:12) Data File Documentation (NCES 2014-182). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved July 20, 2015, from http://nces.ed.gov/pubsearch.

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Appendix A—Glossary

This glossary includes descriptions of the variables used in this report. All of the variables are found in the 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14) database, and the statistics in this report were generated by PowerStats, a web-based software application available to the public at http://nces.ed.gov/datalab. In the glossary, items are listed in alphabetical order by variable label. The name of each variable appears to the right of the variable label.

Glossary Index

AGE Age as of December 31, 2011

PRLVL3Y Attainment and persistence at any institution by spring 2014
PROUTF3Y Attainment and retention at first institution by spring 2014

ENINPT3Y Attendance intensity through June 2014

FSECTOR Control and level of first institution

SECTOR10 Control, level, and doctorate-granting status of first institution

UGDEG Degree program, 2011–12

DEPEND5B Dependency status and family responsibilities, 2011–12
PAREDUC Highest education attained by either parent, 2011–12

HCMATHHI Highest level of high school mathematics completed or planned

ENINUM3Y Number of institutions attended through June 2014

EXPBA Plan to continue to a bachelor's degree program within 5 years, 2011–12

RACE Race/ethnicity

GENDER Sex

Age as of December 31, 2011

AGE

The respondent's age as of December 31, 2011.

18 years or younger 19 years 20–23 years 24–29 years 30 years or older

Attainment and persistence at any institution by spring 2014

PRLVL3Y

Indicates the highest credential attained or, if no credential had been attained, the level of the institution where the respondent was last enrolled through June 2014. Respondents were considered to be enrolled through June 2014 if they were enrolled anywhere after January 2014.

Attained credential from any institution by spring 2014

Highest credential Certificate Associate's degree Bachelor's degree

Did not attain credential from any institution by spring 2014

Enrolled
At 4-year institution
At less-than-4-year institution
Not enrolled

Attainment and retention at first institution by spring 2014

PROUTF3Y

Indicates the respondent's attainment, enrollment, or transfer status as of June 2014 at the first institution attended. Respondents were considered to be enrolled through June 2014 if they were enrolled after January 2014.

Attained credential from first institution by spring 2014

Highest credential Certificate Associate's degree Bachelor's degree

Did not attain credential from first institution by spring 2014

Enrolled at first institution Had left first institution, and had enrolled at another institution Had left first institution, and had never enrolled at another institution

Attendance intensity through June 2014

ENINPT3Y

Indicates the respondent's pattern of enrollment intensity for all months enrolled at all postsecondary institutions between July 2011 and June 2014. For purposes of financial aid eligibility, full-time status is generally based on 12 or more credit hours per term or 24 credit hours per academic year.

Always full time Mixed Always part time

Control and level of first institution

FSECTOR

The control and level of the first institution the student attended in 2011–12. Control (of an institution) is a classification of whether an institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials (private control). Level is a classification of whether an institution's highest program offering was 4-year or higher (4-year), at least 2-but-less-than 4-year (2-year), or less-than-2-year. Public 2-year colleges are classified using the IPEDS definition, that is, including only postsecondary institutions that offer programs of at least 2-but less-than-4 years' duration.

```
4-year
Public
Private nonprofit
For-profit
2-year
Public
Private nonprofit
For-profit
Less-than-2-year
Public
Private nonprofit
For-profit
```

Control, level, and doctorate-granting status of first institution

SECTOR10

Control and doctorate-granting status of the NPSAS sample institution attended in 2011–12. Used in combination with FSECTOR.

```
Public
Less-than-2-year
2-year
4-year non-doctorate-granting
4-year doctorate-granting
Private nonprofit
Less-than-4-year
4-year non-doctorate-granting
4-year doctorate-granting
For-profit
Less-than-2-year
2-year
4-year
```

Degree program, 2011-2012

UGDEG

Indicates the respondent's degree program in 2011–12. This variable was edited to ensure that the degree program respondents reported was actually offered by their institution. Thus respondents who reported working on a bachelor's degree at a 2-year college were classified as enrolled in an associate's degree program, and respondents who reported working on a bachelor's degree or an associate's degree at a less-than-2-year institution were classified as enrolled in a certificate program.

No certificate or degree Certificate Associate's degree Bachelor's degree

Dependency status and family responsibilities, 2011–12

DEPEND5B

Indicates the respondent's dependency status for 2011–12 federal financial aid, and also includes the respondent's marital status and whether the respondent had any dependents in 2011–12. Respondents were considered to be financially independent of their parents for financial aid purposes in 2011–12 if they were age 24 or older as of December 31, 2011, or if they met any of the following criteria: were married; had legal dependents; were veterans of the U.S. armed forces or on active duty; were orphans or wards of the court; were homeless or at risk of homelessness; or were determined to be independent by a financial aid officer using professional judgment. Respondents who were divorced, married but separated, or widowed were classified as unmarried. Respondents were considered to have a dependent if they had a child or any others for whom they were the caretaker or had financial responsibility. A spouse is not considered to be a dependent.

Dependent
Independent
Unmarried, no dependent(s)
Unmarried, with dependent(s)
Married

Highest education attained by either parent, 2011–12

PAREDUC

Indicates the highest level of education achieved by either parent of the respondent as of 2011–12.

High school diploma or less Some postsecondary education Bachelor's degree or higher Both parents' highest education attained is unknown

Highest level of high school mathematics completed or planned

HCMATHHI

Indicates the respondent's highest level of high school math completed or planned to take, according to the respondent's self-report on his/her standardized test questionnaire and the base-year student interview.

Less than algebra 2 Algebra 2 Trigonometry Precalculus Calculus or math beyond calculus Not applicable

Number of institutions attended through June 2014

ENINUM3Y

Indicates the number of institutions the respondent attended at any time through June 2014.

One Two Three or more

Plan to continue to a bachelor's degree program within 5 years, 2011–12

EXPBA

Indicates whether the respondent intended to enroll in a bachelor's degree program within 5 years as of 2011–12.

Yes No Not applicable

Race/ethnicity RACE

Indicates the respondent's race/ethnicity with Hispanic or Latino origin as a separate category. All of the race categories exclude Hispanic origin unless specified.

White A person having origins in any of the original peoples

of Europe, North Africa, or the Middle East.

Black A person having origins in any of the black racial

groups of Africa.

Hispanic A person of Mexican, Puerto Rican, Cuban, Central or

South American, or other Spanish culture or origin,

regardless of race.

Asian A person having origins in any of the peoples of the

Far East, Southeast Asia, or the Indian subcontinent. This includes people from China, Japan, Korea, the

Philippine Islands, India, and Vietnam.

American Indian A person reporting origins in any of the original

peoples of North America and who maintains cultural identification through tribal affiliation or community recognition (American Indians) or are Alaska Natives.

Pacific Islander A person having origins in the Pacific Islands including

Hawaii and Samoa.

Two or more races A person reporting origins in more than one race.

Sex GENDER

Indicates the respondent's sex.

Male

Female

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Appendix B—Technical Notes and Methodology

Overview

The Beginning Postsecondary Students Longitudinal Study (BPS) is one of several National Center for Education Statistics (NCES)-sponsored studies developed to address the need for nationally representative data on key postsecondary education issues such as persistence in and completion of postsecondary education programs; transition to employment; demographic characteristics; and changes over time in students' goals, marital status, income, and debt, among other indicators.

BPS is a follow-up to the National Postsecondary Student Aid Study (NPSAS) and focuses on students who are beginning postsecondary education for the first time in the academic year of the sampled institution in NPSAS. Once these beginning students are identified, BPS follows them to monitor their progress over a period of up to 6 years.

The 2012 Beginning Postsecondary Students (BPS:12) cohort is the fourth cohort of students to be tracked by NCES since the first cohort in 1990. The 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14) wave of data collection is the first follow-up of this cohort, which was first identified as part of the 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

As with previous BPS studies, BPS:12/14 includes a multimode student interview component that collects information on students' education and employment since their first year in postsecondary education.

Data Sources for BPS:12/14

Data for BPS:12/14 were obtained from the following sources:³

- Interview: Data collected directly from sampled students via web and telephone.
- **Student records:** Institution-provided information from student financial aid records and other institutional sources.

³ Additional third-party data sources may be included in the final data files.

- Integrated Postsecondary Education Data System (IPEDS): U.S.
 Department of Education NCES database of descriptive information about individual postsecondary institutions.
- **Central Processing System (CPS):** U.S. Department of Education database of federal financial aid applications.
- National Student Loan Data System (NSLDS): U.S. Department of Education database of federal Title IV loans and Pell Grants.
- National Student Clearinghouse (NSC): A central repository for
 postsecondary enrollment, degree, and certificate records provided by
 participating postsecondary institutions.

BPS:12/14 also includes some data that were originally collected for NPSAS:12. Table B-1 shows whether a data source was new for the given study (N), carried over from the previous round without being refreshed (CO), or carried over from the previous round but refreshed, in which case the data were re-matched (R).

Table B-1.
Data sources for NPSAS:12 and BPS:12/14

Data source	NPSAS:12	BPS:12/14
Interviews	N	N
Student records	N	CO
Integrated Postsecondary Education Data System (IPEDS)	N	R
Central Processing System (CPS)	N	R
National Student Loan Data System (NSLDS)	N	R
SAT	N	CO
ACT	N	CO
National Student Clearinghouse (NSC)	N	R

NOTE: CO = data carried over from previous round and not refreshed. N = new data source. R = data carried over from previous round and refreshed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Sample Design

NPSAS staff began identification of the BPS:12/14 sample by first selecting the NPSAS:12 sample of institutions and then selecting the NPSAS:12 sample of students within institutions. A third stage began identifying the BPS:12/14 sample by establishing whether NPSAS:12 sample members were first-time beginning students during the 2011–12 academic year and, therefore, eligible to be sampled for the BPS:12/14 cohort. BPS:12/14 staff selected a subset of these eligible sample members for the BPS:12/14 sample.

Base-Year Study (NPSAS:12)

To be eligible for inclusion in NPSAS:12, students⁴ must have been part of the student universe at an institution included in the NPSAS:12 institution universe. The definitions of the NPSAS:12 institution and student universes are presented below.

Institution Universe for NPSAS:12

To be eligible for the NPSAS:12 sample, institutions had to have met the following criteria during the 2011–12 academic year:

- offer an educational program designed for persons who had completed at least a high school education;
- offer at least one academic, occupational, or vocational program of study lasting at least 3 months or 300 clock hours;
- offer courses that were open to persons other than the employees or members of the company or group (e.g., union) that administers the institution;
- be located in one of the 50 states or the District of Columbia;
- not be a U.S. service academy institution; and
- have signed the Title IV participation agreement with the Department of Education (ED).⁵

Student Universe for NPSAS:12

To be eligible for NPSAS:12, students had to be enrolled in a NPSAS-eligible institution in any term or course of instruction at any time from July 1, 2011, through June 30, 2012. Students also had to meet the following criteria:

- be enrolled in any of the following:
 - an academic program;
 - at least one course for credit that could be applied toward fulfilling the requirements for an academic degree;
 - exclusively noncredit remedial coursework but determined by the institution to be eligible for Title IV aid; or

⁴ Sample members are referred to as "students" here because they were students during the 2011–12 academic year, when sample selection occurred.

⁵ A Title IV eligible institution has a written program participation agreement with the U.S. Secretary of Education that allows the institution to participate in any of the Title IV federal student financial assistance programs other than the State Student Incentive Grant (SSIG) and the National Early Intervention Scholarship and Partnership (NEISP) programs.

- an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award;
- not be enrolled in high school; and
- not be enrolled solely in a General Educational Development (GED) or other high school completion program.

Institution Sample for NPSAS:12

NPSAS:12 statisticians constructed an institution sampling frame prior to the study's field test (conducted during the 2010–11 financial aid year) from the IPEDS:2008–09 Institutional Characteristics (IC), 12-Month and Fall Enrollment, and Completions files. For the small number of institutions on the frame that had missing enrollment information, NPSAS statisticians imputed the data using the latest IPEDS imputation procedures to guarantee complete data for the frame. From this sampling frame, NPSAS staff selected the field-test sample of institutions as well as 1,670 institutions for the full-scale sample

For the full-scale study in 2011–12, NPSAS staff freshened the institution sampling frame in order to include institutions that were newly eligible in the 2011–12 academic year. To do this, NPSAS staff used the IPEDS:2009–10 IC, 12-Month and Fall Enrollment, and Completions files to identify 387 new or newly eligible institutions for inclusion in the freshened, full-scale sampling frame.

From these 387 additional institutions, staff selected 20 institutions for the full-scale sample, resulting in a total of 1,690 sampled institutions in the freshened sample. While contacting sampled institutions for participation in the full-scale study, data collection staff determined that four of these 1,690 institutions had become ineligible. Table B-2 shows the number of institutions that were sampled, the number of eligible institutions, and the number and unweighted and weighted percentages of eligible institutions providing enrollment lists, by institution characteristic.

Table B-2.

Numbers of sampled, eligible, and participating institutions and enrollment list participation rates, by institution characteristic: 2012–14

			Eligible in	stitutions provid	ing lists
Institution characteristic ¹	Sampled institutions	Eligible institutions	Number	Unweighted percent	Weighted percent ²
All institutions	1,690	1,690	1,480	87.8	87.0
Institution level					
Less-than-2-year	80	80	70	79.5	79.8
2-year	510	510	430	83.9	83.6
4-year non-doctorate-granting	630	630	570	90.5	90.5
4-year doctorate-granting	470	470	420	89.9	89.2
Institution control					
Public	760	760	670	88.5	87.3
Private nonprofit	500	500	440	88.4	86.7
Private for-profit	430	430	370	85.9	85.6
Control, level, and doctorate-granting status of first institution					
	20	20	20	77.3	78.8
Less-than-2-year 2-year	380	380	320	77.3 85.3	76.6 84.1
4-year non-doctorate-granting	130	130	120	93.8	92.3
4-year doctorate-granting	230	230	210	91.7	90.5
Private nonprofit	230	230	210	91.7	90.5
Less-than-4-year	20	20	20	75.0	77.7
4-year non-doctorate-granting	260	260	230	88.8	87.6
4-year doctorate-granting	220	220	200	89.1	86.4
For-profit	220	220	200	03.1	00.4
Less-than-2-year	60	50	40	81.5	80.3
2-year	120	120	90	80.0	77.5
4-year	260	260	230	89.5	89.5

¹ Institution characteristics are based on data from the sampling frame formed from IPEDS:2008–09 and freshened from IPEDS:2009–10.

NOTE: IPEDS = Integrated Postsecondary Education Data System. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

Student Sample for NPSAS:12

Sample institutions provided lists of eligible students, whom NPSAS staff then selected by stratified systematic sampling with predetermined rates that varied by student stratum. NPSAS staff defined sampled members as "study members" if data collection established that the sample member was eligible for the study and had valid data from any data source⁶ for the following variables:

• student type (undergraduate or graduate);

² The weight applied in this column is a base weight.

⁶ A study member must have had valid data for at least one key variable from at least one other source other than CPS.

- date of birth or age;
- sex; and
- at least 8 of the following 15 variables:
 - dependency status
 - o marital status
 - any dependents
 - income
 - expected family contribution (EFC)
 - o degree program
 - o class level
 - first-time beginning student (FTB) status
 - o months enrolled
 - tuition
 - received federal aid
 - o received nonfederal aid
 - student budget
 - race; and
 - o parent education.

Table B-3 shows the number of students sampled, the number of eligible students, and the unweighted and weighted percentages of study members, by institution characteristic. See Wine et al. (2014) for additional details on NPSAS:12 sampling.

Table B-3.

Numbers of sampled and eligible students and rates of study membership in 2011–12 National Postsecondary Student Aid Survey (NPSAS:12), by institution characteristic: 2012

			Study mem	ibers ¹
Institution characteristic ²	Sampled students	Eligible students ³	Unweighted percent	Weighted percent ⁴
All institutions	128,120	123,600	89.9	91.0
Institutional level				
Less-than-2-year	6,380	5,910	93.0	84.7
2-year	48,040	45,680	86.5	86.6
4-year non-doctorate-granting	37,530	36,370	88.6	93.2
4-year doctorate-granting	36,170	35,650	94.9	94.3
Institutional control				
Public	66,500	64,080	89.5	90.0
Private nonprofit	19,680	19,240	92.9	94.7
Private for-profit	41,940	40,280	88.9	91.4
Control, level, and doctorate-granting				
status of first institution				
Public				
Less-than-2-year	790	730	81.5	88.3
2-year	37,000	35,140	86.1	86.3
4-year non-doctorate-granting	8,180	7,930	91.8	91.9
4-year doctorate-granting	20,530	20,280	94.8	94.3
Private nonprofit				
Less-than-4-year	1,090	1,010	91.9	94.7
4-year non-doctorate-granting	8,520	8,300	92.4	95.9
4-year doctorate-granting	10,070	9,920	93.5	93.8
For-profit For-profit				
Less-than-2-year	5,270	4,900	94.8	84.1
2-year	10,280	9,800	87.5	90.0
4-year	26,390	25,580	88.3	93.7

¹ A study member is defined as an eligible sample member for whom sufficient key data were obtained from one or more sources.

First Follow-Up Study (BPS:12/14)

The target population for BPS:12/14 consists of all students who began postsecondary education for the first time during the 2011–12 academic year at any Title IV eligible postsecondary institution in the United States. BPS:12/14 obtained its sample of first-time beginning students (FTBs) from the NPSAS:12 student sample, which included students of both known and unknown FTB status. Therefore, BPS staff used additional information to verify the FTB status of NPSAS:12 sample members. First, staff used class- and student-level information provided by institutions on their student lists to exclude students who had been

² Institution characteristics are based on data from the sampling frame formed from 2008–09 Integrated Postsecondary Education Data System (IPEDS:2008–09) and freshened from IPEDS:2009–10.

³ Sample member eligibility was determined during the student interview or from institutional records in the absence of a student interview.

⁴ The weight applied in this column is a base weight.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

identified as FTBs but were in their third or higher undergraduate year or were not undergraduate students.

Second, staff used listed students' date of birth to identify students older than 18 to send for presampling matching to NSLDS records to determine if any had a federal financial aid history predating the NPSAS year (earlier than July 1, 2011). Because NSLDS maintains current records of all Title IV federal grant and loan funding, any student with disbursements from the prior year or earlier could be reliably excluded from the sampling frame of FTBs.

When NPSAS:12 concluded, 30,080 students had been interviewed and confirmed to be FTBs, and all were included in the BPS:12/14 sample. In addition, a subsample of 7,090 NPSAS:12 nonrespondents who were considered potential FTBs based on student records or institution lists were included in the BPS:12/14 sample. The distributions of the 37,170 BPS:12/14 sample by institution control, level, and doctorate-granting status are provided in table B-4. See Hill et al. (forthcoming) for additional details on sampling.

Table B-4.

Counts of sampled and eligible students and response rates, by institution characteristics: 2012–14

				Interview res	spondents ¹
	Sampled	Eligible	•	Unweighted	Weighted
Institution characteristics ²	students	students ³	Respondents	response rate	response rate ⁴
All institutions	37,170	35,540	24,770	69.7	67.6
Institution level					
Less-than-2-year	1,990	1,830	1,060	57.9	49.1
2-year	15,220	14,460	9,650	66.7	61.2
4-year non-doctorate-granting	12,530	11,990	8,320	69.3	69.5
4-year doctorate-granting	7,430	7,270	5,750	79.1	76.6
Institution control					
Public	17,120	16,490	11,710	71.0	67.2
Private nonprofit	5,520	5,410	4,340	80.1	77.6
Private for-profit	14,530	13,640	8,720	63.9	54.4
Control, level, and doctorate-granting					
status of first institution					
Public					
Less-than-2-year	250	230	150	64.4	54.0
2-year	11,430	10,930	7,380	67.5	61.8
4-year non-doctorate-granting	1,930	1,890	1,410	74.8	67.8
4-year doctorate-granting	3,520	3,450	2,780	80.6	76.3
Private nonprofit					
Less-than-4-year	380	350	240	67.7	61.8
4-year non-doctorate-granting	2,430	2,380	1,860	78.1	75.5
4-year doctorate-granting	2,720	2,680	2,240	83.5	80.3
For-profit					
Less-than-2-year	1,630	1,500	860	57.1	48.8
2-year	3,530	3,280	2,090	63.8	54.3
4-year	9,370	8,860	5,770	65.1	58.4

¹ An interview respondent is defined as an eligible sample member who either completed a full interview, completed an abbreviated interview, or completed at least the enrollment section.

NOTE: Percentages are based on the unrounded count of eligible students. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Information gathered during data collection established that some potential FTBs were not FTBs and were therefore ineligible for the BPS:12/14 study. BPS:12/14 staff defined a "student interview respondent" as any sample member who was eligible for inclusion in the study and had a completed, partial, or abbreviated BPS:12/14 interview. As shown in table B-4, among the 35,540 eligible sample students, the weighted interview response rate was 68 percent.

² Institution characteristics are based on data from the NPSAS:12 sampling frame.

³ Sample member eligibility was determined during the student interview or from institutional records in the absence of a student interview.

⁴ The base weight was used to produce the estimates in this column.

Perturbation

To protect study members' confidentiality, BPS:12/14 staff subjected the data to perturbation procedures to minimize disclosure risks. Perturbation procedures, which have been approved by the Institute of Education Sciences (IES) Disclosure Review Board, preserve the central tendency estimates but may result in slight increases in nonsampling errors.

Imputation

BPS:12/14 statisticians imputed missing data for all variables used in this report and most of those included in the BPS:12/14 PowerStats and QuickStats applications. The imputation procedure involved a four-step process. In the first step, staff logically imputed missing data based on values of other variables. In the second step, staff identified a set of criteria that defined imputation classes used to stratify the dataset. This allowed staff to process imputations independently within each class and improve the quality of the imputed data. In the third step, BPS:12/14 statisticians implemented an initial weighted sequential hot deck process (Cox 1980)⁷ to replace missing data with valid data from the records of donors within imputation classes. In the fourth step, BPS staff implemented a cyclic *n*-partition hot deck process (Marker et.al. 2002) to iteratively cycle through *n*-partition hot decks. More information regarding imputation in BPS:12/14 is available in the forthcoming BPS:12/14 Data File Documentation (Hill et al. forthcoming).

Weighting

BPS:12/14 statisticians computed a weight variable to represent the target populations described in the Sample Design section. As shown in table B-5, the weights compensate for the unequal probability of selection of institutions and students in the NPSAS:12 sample and ensure that estimates generated from sample data represent the target population. The weight also adjusts for multiplicity⁸ at the institution and student levels and unknown student eligibility for NPSAS:12 and for

⁷ The term *hot deck* refers to the fact that the set of potential donors comes from the same dataset. In contrast, *cold deck* procedures use donors from an external dataset or source.

⁸ After the NPSAS:12 institution sample selection, data collection established cases where institutions merged or student enrollment lists for two or more campuses were submitted as one combined student list. In these instances, staff computed weight adjustments for the joint probability of selection. Likewise, students who attended more than one institution during the NPSAS year also had multiple chances of selection. If the student interview or student loan file data indicated that a student had attended more than one institution, the staff computed adjustment factors to account for multiple chances of selection.

subsampling, unknown eligibility, nonresponse, and population coverage in BPS:12/14.

A single weight was constructed for BPS:12/14 for those sample members who had a completed or partial BPS:12/14 interview. This weight supports joint analysis of NPSAS:12 variables and variables obtained directly or derived from the BPS:12/14 interview.

Additional details regarding the creation and use of weights are available in the forthcoming BPS:12/14 Data File Documentation (Hill et al. forthcoming).

Table B-5. Summary of components of the BPS:12/14 weight: 2012–14

Weight component	Purpose
NPSAS:12 adjustments	
Institution sampling and subsampling weights	To account for the institution's probability of selection
Institution multiplicity adjustment	To adjust the weights for institutions that had multiple chances of selection
Institution nonresponse adjustment	To adjust the institution weights to compensate for nonresponding institutions
Institution poststratification adjustment	To adjust the institution weights to match population enrollment totals to ensure population coverage
Student sampling weight	To account for the student's probability of selection
Student multiplicity adjustment	To adjust the weights for students who attended more than one institution
Student unknown eligibility adjustment	To adjust for unknown student eligibility
BPS:12/14 adjustments	
Student subsampling adjustment	To account for subsampling of first time beginners
Student unknown eligibility adjustment	To adjust the weights of nonresponding students with unknown eligibility
Student nonresponse adjustment	To adjust the weights to compensate for nonresponding students
Student poststratification adjustment	To adjust the student weights to match known population enrollment and aid totals to ensure population coverage

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Quality of Estimates

NCES Statistical Standard 4-4-1 states that "any survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or any analysis using the data may be released.... Estimates of survey characteristics for nonrespondents and respondents are required to assess the potential nonresponse bias" (U.S. Department of Education 2012).

Bias Analysis: Institution Level

As shown in table B-2, the NPSAS:12 institution weighted response rate was 87 percent overall and below 85 percent for five of the 10 categories of institution defined by control, level, and doctorate-granting status. NPSAS project staff conducted a nonresponse bias analysis during NPSAS:12 for each of these categories. Wine et al. (2014) provides more information regarding the institution bias analysis.

Bias Analysis: Student Level

As shown in table B-3, the NPSAS:12 weighted study response rate for students was above 85 percent overall and for all institution categories defined by control, level, and doctorate-granting status except for private for-profit less-than-2-year institutions.

As shown in table B-4, the BPS:12/14 weighted response rate for students was below 85 percent overall and all categories of institution defined by control, level, and doctorate-granting status. Therefore, a student-level nonresponse bias analysis was conducted overall and within institution categories for BPS:12/14. The following variables were used for nonresponse bias analysis:⁹

- control, level, and doctorate-granting status of institution (categorical);
- region (categorical);
- age as of NPSAS:12 (categorical);
- CPS match as of NPSAS:12 (yes/no);
- federal aid receipt (yes/no);
- Pell Grant receipt (yes/no);
- Pell Grant amount (categorical);
- Stafford Loan receipt (yes/no);
- Stafford Loan amount (categorical);
- institutional aid receipt (yes/no);
- state aid receipt (yes/no);
- major (categorical);
- institution enrollment from IPEDS file (categorical);

⁹ For the continuous variables, except for age, categories were formed based on quartiles. For age, three categories were defined: 15–23 years; 24–39 years; and 30 years or older.

- any grant aid receipt (categorical); and
- graduation rate (categorical).

First, for each category of the variables listed above, BPS:12/14 statisticians estimated the nonresponse bias by comparing estimates from base-weighted respondents with those of both nonrespondents and the full sample to determine if the differences were statistically significant at the 5 percent level. The two comparisons yielded identical bias estimates but not always the same significance-testing results.

Second, BPS:12/14 statisticians computed nonresponse adjustments to reduce or eliminate nonresponse bias for key variables included in the models. Third, using base weights adjusted for nonresponse, staff re-estimated bias and performed statistical tests to check for any remaining significant nonresponse bias.

Finally, to better understand the effect of poststratification on efforts to reduce nonresponse bias, BPS 12/14 staff created two additional sets of estimates. The first, the difference between respondent means before and after poststratification, represents the effect of poststratification on nonresponse adjustments. The second, the difference between base-weighted full sample means and the poststratified respondent means, represents the cumulative effect of all weighting and adjustment steps. Bias estimates and differences derived from variable categories with fewer than 30 nonrespondents were excluded from the calculation of summary statistics displayed in tables B-6 and B-7.

In total, 97 variable categories were defined from the 15 variables selected for the bias analysis. These 97 variable categories formed the basis of the nonresponse bias analysis. In general, nonresponse weight adjustments reduced nonresponse bias for estimates overall and within institution categories defined by control, level, and doctorate-granting status. As shown in table B-6, the percentage of variable categories that were significantly biased before weighting ranged from 7 percent for private nonprofit less-than-4-year institutions to 62 percent among institutions overall. After the nonresponse weight adjustment, the percentage of variable categories that remained significantly biased ranged from 0 percent for public less-than-2-year and private nonprofit 4-year doctorate-granting institutions to 17 percent for public 4-year doctorate-granting institutions.

Table B-6.
Summary of student-level nonresponse bias analysis, by control, level, and doctorate-granting status of institution: 2012–14

Nonresponse bias statistics ¹	Overall	Public less- than- 2-year	Public 2-year	Public 4-year non- doctorate- granting	Public 4-year doctorate- granting	Private nonprofit less-than- 4-year	Private nonprofit 4-year non- doctorate- granting	Private nonprofit 4-year doctorate- granting	Private for-profit less-than- 2-year	Private for-profit 2-year	Private for-profit 4-year
Before weight adjustments											
Mean percent relative bias											
across characteristics	10.7	7.8	6.4	8.9	4.2	12.9	7.1	4.7	13.0	9.6	7.2
Median percent relative bias											
across characteristics	6.3	5.1	3.8	4.6	2.7	8.8	4.0	3.8	7.5	5.4	5.5
Percentage of characteristics											
with significant bias	62.1	36.4	29.0	43.2	33.3	7.4	32.6	29.3	25.0	8.3	11.7
After nonresponse											
weight adjustments											
Mean percent relative bias											
across characteristics	2.5	3.7	3.8	4.4	2.9	9.5	3.6	1.8	6.0	6.8	6.0
Median percent relative bias											
across characteristics	#	3.9	2.5	2.7	1.4	5.6	1.9	1.3	3.1	4.8	3.1
Percentage of characteristics											
with significant bias	6.9	#	3.2	11.4	16.7	11.1	14.0	#	2.5	8.3	8.3

[#] Rounds to zero.

¹ Relative bias and significance calculated on respondents vs. full sample. Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

 $^{{\}sf NOTE: Variable\ categories\ with\ fewer\ than\ 30\ nonrespondents\ were\ suppressed\ for\ calculations\ in\ this\ table.}$

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

As shown in table B-7, the mean and median absolute differences between estimated means for respondents before and after poststratification adjustment were greatest among public less-than-2-year institutions and private nonprofit less-than-4-year institutions. After the poststratification adjustment, the mean absolute differences between means for the full sample and respondents did not exceed 5, the value for public less-than-2-year institutions. The highest median was 4 percent in among private nonprofit less-than-4-year institutions. This indicates that the combined set of nonresponse and poststratification adjustments reduces bias more than the nonresponse adjustment alone. For more details on weight adjustments, please refer to the forthcoming BPS:12/14 Data File Documentation (Hill et al. forthcoming).

Table B-7.
Summary statistics of impact of poststratification adjustment, by control, level, and doctorate-granting status of institution: 2012–14

Summary statistics	Overall	Public less- than- 2-year	Public 2-year	Public 4-year non- doctorate- granting	Public 4-year doctorate- granting	Private nonprofit less-than- 4-year	Private nonprofit 4-year non- doctorate- granting	Private nonprofit 4-year doctorate- granting	Private for-profit less-than- 2-year	Private for-profit 2-year	Private for-profit 4-year
Difference between means for respondents before and after poststratification adjustment ¹											
Mean absolute difference across characteristics	0.8	6.2	1.6	2.2	1.3	5.6	2.6	1.1	2.8	3.0	1.3
Median absolute difference across characteristics	0.5	4.9	0.3	1.4	1.0	5.7	2.1	0.9	1.2	1.1	1.1
Difference between means for full sample and respondents after poststratification adjustment ²											
Mean absolute difference across characteristics	0.7	5.4	1.7	1.6	1.1	4.9	2.4	1.2	2.8	3.2	1.3
Median absolute difference across characteristics	0.5	1.8	0.6	1.3	0.8	4.4	2.2	0.8	1.7	1.7	0.8

¹Respondents before poststratification adjustment are weighted using the base weight, unknown eligibility, and nonresponse. Respondents after poststratification adjustment are weighted using the base weight, unknown eligibility, nonresponse, and poststratification.

² Full sample is weighted using the base weight, adjusted for multiplicity and unknown eligibility. Respondents after poststratification adjustment are weighted using the base weight, unknown eligibility, nonresponse, and poststratification.

NOTE: Variable categories with fewer than 30 nonrespondents were suppressed for calculations in this table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Bias Analysis: Item-Level

NCES Statistical Standard 4-4-3A states: "For an item with a low total response rate, respondents and nonrespondents can be compared on sampling frame and/or questionnaire variables for which data on respondents and nonrespondents are available. Base weights must be used in such analysis. Comparison items should have very high response rates.... This approach may be limited to the extent that items available for respondents and nonrespondents may not be related to the low response rate item being analyzed" (U.S. Department of Education 2012).

Moreover, NCES Statistical Standard 1-3-5 states: "Item response rates (RRI) are calculated as the ratio of the number of respondents for whom an in-scope response was obtained (I^x for item x) to the number of respondents who are asked to answer that item. The number asked to answer an item is the number of unit level respondents (I) minus the number of respondents with a valid skip for item x (V^x). When an abbreviated questionnaire is used to convert refusals, the eliminated questions are treated as item nonresponse.... In the case of constructed variables, the numerator includes cases that have available data for the full set of items required to construct the variable, and the denominator includes all respondents eligible to respond to all items in the constructed variable" (U.S. Department of Education 2012). The item response rate is calculated as:

$$RRI^{x} = I^{x} / (I - V^{x})$$

NCES Standard 1-3-5 also states that response rates for composite variables must account for missing inputs prior to imputation. Therefore a study member was defined as a respondent for a variable if she had data for that variable from any source, including logical imputation. Nonrespondents for variables are study members who did not have data for that variable from any source. As shown in table B-8, the weighted item response rates for items used in this report ranged from 71 percent to 100 percent overall. The weighted item response rates within the institution categories analyzed ranged from 63 percent to 100 percent.

Table B-8. Weighted item response rates for all students and by control, level, and doctorate-granting status of institution: 2012–14

Variable	Variable label	All students	Public less- than- 2-year	Public 2-year	Public 4-year non- doctorate	Public 4-year doctorate	Private nonprofit less-than- 4-year	Private nonprofit 4-year non- doctorate	Private nonprofit 4-year doctorate	Private for-profit less-than- 2-year	Private for-profit 2-year	Private for-profit 4-year
AGEGROUP	Age as of December 31, 2011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DEPEND5B	Dependency status and family responsibilities, 2011–12	82.1	79.0	76.8	82.8	82.9	93.3	84.3	78.6	95.5	96.6	96.0
ENDTLA3Y	Date of last enrollment through June 2014	96.8	87.8	96.3	97.8	98.4	93.2	98.1	97.9	90.0	95.3	96.7
ENINPT3Y	Attendance intensity through June 2014	96.8	87.8	96.3	97.8	98.4	93.2	98.1	97.9	90.0	95.3	96.7
ENINUM3Y	Number of institutions attended through June 2014	96.8	87.8	96.3	97.8	98.4	93.2	98.1	97.9	90.0	95.3	96.7
EXPBA	Plan to continue to a bachelor's degree program within 5 years, 2011–12	70.6	100.0	69.0	80.0	88.0	76.4	73.1	97.1	67.2	62.9	82.3
FSECTOR	Control and level of first institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GENDER	Sex	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HCMATHHI	Highest level of high school mathematics completed or planned	82.1	71.6	77.2	84.7	90.6	66.1	88.8	91.2	69.5	68.6	68.9
PAREDUC	Highest education attained by either parent, 2011–12	87.6	85.7	86.1	86.6	88.5	90.3	85.5	88.9	92.4	89.9	91.8
PRLVL3Y	Attainment and persistence at any institution by spring 2014	96.8	87.8	96.3	97.8	98.4	93.2	98.1	97.9	90.0	95.3	96.7
PROUTF3Y	Attainment and retention at first institution by spring 2014	98.3	90.4	98.4	98.9	99.5	93.8	99.1	98.5	91.6	96.5	98.1
RACE	Race/ethnicity	94.1	93.7	92.1	96.1	97.8	94.0	95.3	97.0	88.0	89.9	92.2
SECTOR10	Control, level, and doctorate- granting status of first institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
UGDEG	Degree program, 2011–12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Weighted item response rates are calculated per NCES Statistical Standard 1-3-5 as the ratio of the number of respondents for whom an in-scope response was obtained to the number of respondents who are asked to answer that item.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12); and 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

The response rates for three variables (DEPEND5B, EXPBA, and HCMATHHI) were below 85 percent for all students and within some of the institution categories. Using the procedures used for the student-level nonresponse bias analysis presented above, BPS:12/14 statisticians conducted nonresponse bias analyses for these three variables. A subset of the variables used for the student-level analysis was used for the variable-level analysis. For these three items, 36 variable categories were tested overall and within each of the institution categories. The percentage of variable categories for which these items had statistically significant bias prior to imputation ranged from 67 percent to 72 percent. The mean percent relative absolute biases for these items ranged from 27 percent to 54 percent, and the median percent relative absolute biases ranged from 7.5 percent to 10.4 percent.

Differences between means before and after imputation were calculated and tested for statistically significant differences. For the three items with overall response rates less than 85 percent, the differences were significant, indicating that some nonresponse bias may have been reduced through imputation.

For more details on unit and item nonresponse in BPS:12/14, please refer to the forthcoming BPS:12/14 Data File Documentation (Hill et al. forthcoming).

Variance Estimation

The complex sampling design used in BPS:12/14 must be taken into account when calculating variance estimates such as standard errors. To facilitate computation of standard errors for both linear and nonlinear statistics, BPS:12/14 statisticians computed a vector of bootstrap sample weights. These weights are zero for units not selected in a particular bootstrap sample. Weights for other units are inflated for the bootstrap subsampling. Assuming B sets of replicate weights, the variance of any estimate, $\hat{\theta}$, can be estimated by replicating the estimation procedure for each replicate and computing a simple variance of the replicate estimates:

$$Var(\hat{\theta}) = \frac{\sum_{b=1}^{B} (\hat{\theta}_b^{\bullet} - \hat{\theta})^2}{B}$$

where $\hat{\theta}_b^{\bullet}$ is the estimate based on the *b*-th replicate weight (where b = 1 to the number of replicates), and *B* is the total number of sets of replicate weights (B = 200 for BPS:12/14). Once the replicate weights are provided, this estimate can be produced by most survey software packages, such as SUDAAN, WesVAR, or Stata.

¹⁰ Variables that were added to the student-level nonresponse bias analysis and not included in the nonresponse weight adjustment were not included in the item-level nonresponse bias analysis.

BPS:12/14 statisticians produced the replicate weights using a method that combines the approaches developed by Flyer (1987) and Kott (1988). The BPS:12/14 method incorporated the finite population correction factor only at the first stage (NPSAS:12 institution sampling).

Cautions for Analysts

Sources of Error

The estimates in this report are subject to sampling and nonsampling errors. Nonsampling errors are due to a number of issues, including but not limited to nonresponse, coding and data entry errors, misspecification of composite variables, and inaccurate imputations. A study like BPS:12/14 includes multiple sources of data for some variables (CPS, institutional records, student interviews, NSC, etc.), and reporting differences can occur among data sources. Data swapping and other forms of perturbation implemented to protect respondent confidentiality can also lead to inconsistencies.

Sampling errors exist in all sample-based datasets, including BPS:12/14. Estimates calculated from a sample will differ from estimates calculated from other samples even if all the samples used the same sample design and methods.

The standard error is a measure of the precision of the estimate accounting for sampling error. In this report, analysts calculated standard errors using bootstrap replication procedures in PowerStats. Tables B-9–B-15 provide the standard errors for the estimates presented in tables 1–7.

Comparing BPS:12/14 Estimates to Prior BPS Estimates

Comparison of BPS:12/14 results with those of prior cohorts of BPS requires compensation for several changes in the design of the NPSAS survey over time and also for a change in how nonrespondents were handled in BPS:12/14.

First, prior to NPSAS:04, institutions that only offered correspondence courses were not eligible for NPSAS. NPSAS:12, however, included such institutions if they were eligible to distribute Title IV student aid.

Second, starting with NPSAS:2000, samples were limited to institutions participating in federal Title IV student aid programs. In earlier NPSAS surveys which served as the base-year for BPS (NPSAS:90 and NPSAS:96), about 1 percent of undergraduate students, mainly concentrated in for-profit less-than-2-year institutions, attended institutions that were not eligible for Title IV aid. When comparing estimates from

prior BPS cohorts, analysts may want to exclude cases that were sampled from an institution that was not eligible to participate in Title IV aid programs (T4ELIG) in the prior studies (BPS:90 and BPS:96).

Third, prior BPS cohorts sampled institutions in Puerto Rico. There are approximately 80 institutions in Puerto Rico enrolling about 1 percent of all undergraduate students in the nation. In BPS:04/09, students attending institutions in Puerto Rico made up about 8 percent of Hispanic FTBs. Analysts wishing to compare other BPS administrations may filter on COMPTO87 to exclude Puerto Rico.

Fourth, previous BPS administrations did not require that the NPSAS institution be the first institution a student attended after completing high school for the student to be eligible for the study. Therefore, the first institution a respondent attended was not necessarily the NPSAS institution. In BPS:12/14 students who reported in the eligibility section that the NPSAS institution was not the first postsecondary institution they attended after completing high school were excluded from the study sample. Nevertheless, 1 percent of BPS:12/14 respondents indicated later in the interview, in the enrollment section, that they had attended another institution 1 or more months prior to attending the NPSAS institution and during the 2011–12 academic year. Despite this discrepancy, in BPS:12/14 these respondents' first institution is defined as the NPSAS institution.

Fifth, beginning with NPSAS:90, a design change was made to improve NPSAS full-year estimates. NPSAS:90-sampled students were enrolled at four discrete points in time: summer (August), fall (October), winter (February), and spring (June). Since implementation of NPSAS in 1993, institutions have been asked to provide one list that represents students enrolled at any time during the respective financial aid award year. In NPSAS:90, those students who were initially sampled in the fall could have been enrolled for the full academic year.

Finally, the BPS:12/14 analysis file contains all BPS sample members who responded to the student interview. BPS:04/06, however, made use of data from other sources, including NSC, sources to define study respondents who were not interview respondents but had sufficient data from these other sources. BPS:04/06 statisticians imputed missing data for study respondents who had not responded to the BPS:04/06 interview. In previous rounds of BPS, the interview nonrespondents appeared on the file but did not have data items and had a value of zero for the analysis weight.

PowerStats

The estimates in this report were produced using PowerStats, a web-based software application that enables users to generate tables for most of the postsecondary surveys conducted by NCES. PowerStats produces the design-adjusted standard errors necessary for testing the statistical significance of differences in the estimates. PowerStats also describes how each variable was created and includes question wording for items directly from an interview. With PowerStats, users can replicate or expand upon the tables presented in this report.

The output from PowerStats includes the table estimates (e.g., percentages or means), design-adjusted standard errors, ¹¹ and weighted sample sizes for the estimates. If the number of valid cases is too small to produce a reliable estimate (fewer than 30 cases), PowerStats prints the double dagger symbol (‡) instead of the estimate.

In addition to producing tables, PowerStats users may conduct linear or logistic regressions. Many options are available for output with the regression results. For a description of all the options available, users should access the PowerStats website at http://nces.ed.gov/datalab/index.aspx. For more information, contact nces.info@ed.gov.

¹¹ The BPS samples are not simple random samples; therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. PowerStats 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 PowerStats involves approximating the estimator by replication of the sampled population. The procedure used is a bootstrap technique.

Table B-9.

Standard errors for table 1: ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cr	tution		Persistence: No credential attained at any institution by spring 2014			
Enrollment and student characteristics	Certificate	by spring 2014 Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at Enrolled at less- than-4-year institution	Not enrolled		
Total	0.57	0.33	0.11	0.82	0.64	1.06		
Control and level of first institution								
4-year	0.30	0.29	0.22	0.67	0.40	0.56		
Public	0.23	0.26	0.30	0.98	0.58	0.85		
Private nonprofit	0.68	0.31	0.45	1.37	0.44	0.86		
For-profit	0.61	1.74	0.47	1.44	0.93	2.33		
2-year	0.66	0.69	†	0.60	0.96	1.52		
Public	0.44	0.77	†	0.66	1.04	1.39		
Private nonprofit	10.90	8.08	†	†	4.91	6.12		
For-profit	5.08	2.49	; †	0.80	0.56	4.54		
Less-than-2-year	4.35	†	; †	†	0.71	3.98		
Public	8.86	†	†	†	2.81	7.70		
Private nonprofit	14.59	†	†	†	†	7.70 †		
For-profit	5.35	†	†	†	0.77	4.91		
Degree program, 2011–12								
No certificate or degree	†	†	†	7.35	5.55	6.18		
Certificate	4.19	0.14	†	0.41	1.21	3.65		
Associate's degree	0.29	0.86	†	0.78	1.00	1.35		
Bachelor's degree	0.12	0.14	0.24	0.72	0.39	0.61		
Attendance intensity through June 2014								
Always full time	0.49	0.43	0.16	0.82	0.44	0.97		
Mixed	1.11	0.59	0.17	0.79	1.29	1.07		
Always part time	1.00	0.48	†	0.90	1.68	2.07		
Highest level of high school mathematics completed or planned								
Less than algebra 2	1.17	0.78	0.24	1.15	1.23	2.26		
Algebra 2	1.02	0.55	0.15	1.51	1.35	1.82		
Trigonometry	0.50	1.05	0.40	1.85	1.26	1.57		
Precalculus	0.46	0.67	0.32	1.17	1.06	1.12		
Calculus or math beyond								
calculus	0.33	0.45	0.33	1.02	0.73	0.78		
Sex								
Male	0.56	0.51	0.19	1.25	0.79	1.57		
Female	0.76	0.35	0.16	0.77	0.78	0.88		
Age as of December 31, 2011								
18 years or younger	0.38	0.45	0.16	0.71	0.68	0.74		
19 years	0.56	0.47	0.28	1.18	1.03	1.13		
20–23 years	1.65	0.80	0.29	2.37	1.82	3.23		
24–29 years	2.39	1.40	0.21	1.54	2.04	2.46		
30 years or older	2.24	1.00	0.25	1.54	1.70	3.13		

See notes at end of table.

Table B-9.

Standard errors for table 1: ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cr led at any instit by spring 2014	ution	Persistence: No credential attained at any institution by spring 2014			
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled	
Race/ethnicity							
White	0.47	0.43	0.18	1.02	0.78	1.01	
Black	0.88	0.70	0.26	1.88	1.38	1.92	
Hispanic	1.52	0.72	0.21	1.15	1.26	1.71	
Asian	0.63	0.70	0.74	2.88	2.02	2.92	
American Indian	†	2.18	†	5.38	4.51	8.25	
Pacific Islander	3.53	1.57	†	7.22	7.11	6.38	
Two or more races	1.04	1.46	0.54	2.27	2.17	2.67	
Dependency status and family responsibilities, 2011–12							
Dependent	0.31	0.35	0.14	0.65	0.59	0.70	
Independent	1.77	0.57	0.12	1.61	1.23	2.56	
Unmarried, no dependent(s)	1.53	1.22	†	2.88	2.18	2.98	
Unmarried, with dependent(s)	1.84	0.81	0.09	1.58	1.38	2.53	
Married	3.70	1.13	0.24	1.54	1.93	4.17	
Highest education attained by either parent, 2011–12							
High school diploma or less	1.20	0.51	0.15	1.26	1.15	2.00	
Some postsecondary education	0.76	0.73	0.18	1.00	1.04	1.64	
Bachelor's degree or higher	0.31	0.38	0.23	0.98	0.71	0.80	

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-10.

Standard errors for table 2: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attair	ent: Highest cr led at any instit by spring 2014	tution		e: No credention	
		by spring 2014		ally ills	Enrolled at	111g 2014
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	less- than-4-year institution	Not enrolled
Total	0.44	0.77	t	0.66	1.04	1.39
Degree program, 2011–12						
No certificate or degree	†	0.57	†	5.30	5.44	6.84
Certificate	4.90	0.39	†	1.13	3.22	4.62
Associate's degree	0.32	0.79	†	0.63	1.10	1.31
Plan to continue to a bachelor's degree program within 5 years, 2011–12						
Yes	0.34	0.81	†	0.72	1.24	1.37
No	0.71	1.21	†	0.73	2.07	2.35
Attendance intensity through June 2014						
Always full time	0.84	1.26	†	1.04	1.22	1.94
Mixed	0.52	1.04	†	0.84	1.73	1.65
Always part time	0.70	0.56	†	0.57	2.06	2.31
Highest level of high school mathematics completed or planned						
Less than algebra 2	0.84	1.02	†	0.84	2.16	2.59
Algebra 2	0.78	1.01	†	0.87	1.79	1.93
Trigonometry	0.38	3.41	†	2.14	4.00	4.06
Precalculus	0.70	1.79	†	1.03	2.13	2.00
Calculus or math beyond			•			
calculus	1.54	2.02	†	2.72	3.26	2.79
Sex						
Male	0.46	1.08	†	0.77	1.49	1.95
Female	0.68	0.82	†	0.83	1.32	1.51
Age as of December 31, 2011						
18 years or younger	0.66	1.10	†	0.89	1.54	1.64
19 years	0.89	1.22	†	1.14	2.05	2.23
20–23 years	0.91	0.79	†	1.45	2.56	2.82
24–29 years	1.55	2.34	†	1.31	3.49	3.51
30 years or older	1.13	1.42	†	0.67	2.91	3.26
Race/ethnicity						
White	0.63	1.18	†	0.90	1.49	1.71
Black	0.94	1.22	†	1.42	2.31	2.93
Hispanic	0.87	1.00	†	0.79	2.18	2.06
Asian	†	1.47	†	3.39	5.27	6.15
American Indian	†	†	†	4.16	12.25	12.59
Pacific Islander	†	t	†	†	15.92	14.32
Two or more races	1.38	3.21	†	1.88	4.97	4.99

See notes at end of table.

Table B-10.

Standard errors for table 2: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cr ed at any instit by spring 2014	ution	Persistence: No credential attained at any institution by spring 2014			
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled	
Dependency status and family responsibilities, 2011–12							
Dependent	0.54	0.94	†	0.74	1.20	1.43	
Independent	0.77	0.87	†	0.77	1.63	1.82	
Unmarried, no dependent(s)	0.71	1.94	†	1.57	2.64	3.07	
Unmarried, with dependent(s)	1.15	1.01	†	1.11	2.77	2.95	
Married	1.89	1.51	†	0.78	3.20	3.84	
Highest education attained by either parent, 2011–12							
High school diploma or less	0.67	0.98	†	0.66	1.70	2.07	
Some postsecondary education	0.87	1.09	†	0.82	1.90	2.24	
Bachelor's degree or higher	0.79	1.31	†	1.40	1.87	2.21	

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-11.

Standard errors for table 3: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest cr led at any instit by spring 2014	ution	Persistence: No credential attained any institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at 4-year institution	Enrolled at less- than-4-year institution	Not enrolled
Total	0.30	0.29	0.22	0.67	0.40	0.56
Control and doctorate-granting status of first institution						
Public non-doctorate-granting	0.61	0.83	0.33	2.44	0.77	2.30
Public doctorate-granting	0.17	0.20	0.45	0.95	0.76	1.22
Private nonprofit						
non-doctorate-granting	†	0.54	0.82	3.48	0.51	1.77
Private nonprofit	·					
doctorate-granting	0.25	0.41	0.46	1.04	0.60	0.78
For-profit	0.61	1.74	0.47	1.44	0.93	2.33
Degree program, 2011–12						
No certificate or degree	†	†	†	17.47	†	13.14
Certificate	12.13	†	†	†	†	9.81
Associate's degree	0.75	1.88	†	2.26	0.67	2.38
Bachelor's degree	0.12	0.14	0.24	0.72	0.39	0.61
Attendance intensity through June 2014						
Always full time	0.16	0.37	0.27	0.67	0.32	0.56
Mixed	0.96	0.50	0.43	1.39	1.02	1.06
Always part time	†	†	†	4.83	†	4.72
Highest level of high school mathematics completed or planned						
Less than algebra 2	0.56	1.18	0.80	2.45	1.16	2.37
Algebra 2	0.43	0.52	0.39	2.38	1.03	2.13
Trigonometry	0.48	0.90	0.58	2.03	1.19	1.17
Precalculus	0.23	0.45	0.55	1.30	0.76	1.31
Calculus or math beyond calculus	0.11	0.30	0.42	0.99	0.36	0.76
	0.11	0.00	0.12	0.00	0.00	0.70
Sex	0.04	0.20	0.25	4.04	0.40	1.00
Male	0.21 0.43	0.39 0.39	0.35 0.33	1.01 1.24	0.49 0.53	1.09 0.93
Female	0.43	0.39	0.33	1.24	0.53	0.93
Age as of December 31, 2011	a /=	2.25		2.2-	A ==	A = :
18 years or younger	0.15	0.28	0.26	0.82	0.52	0.74
19 years	0.23	0.30	0.48	1.29	0.68	1.11
20–23 years	0.85	1.22	0.98	5.05	1.59	5.48
24–29 years	0.69	2.20	0.84	5.09	1.13	4.32
30 years or older	3.61	1.27	0.84	3.84	0.50	4.36

See notes at end of table.

Table B-11.

Standard errors for table 3: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND PERSISTENCE AT ANY INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and persistence status at any institution, by selected enrollment and student characteristics: 2012–14—Continued

	Attainm	ent: Highest cr	edential			
		ed at any instit by spring 2014			al attained at ing 2014	
Enrollment and student		Associate's	Bachelor's	Enrolled at 4-year	Enrolled at less- than-4-year	
characteristics	Certificate	degree	degree	institution	institution	Not enrolled
Race/ethnicity						
White	0.39	0.29	0.35	0.92	0.40	0.75
Black	0.65	0.72	0.47	2.06	1.56	1.74
Hispanic	0.28	0.77	0.53	1.96	0.77	1.71
Asian	†	0.80	1.19	2.39	1.03	2.14
American Indian	†	†	†	8.05	†	8.70
Pacific Islander	†	†	†	9.13	†	7.95
Two or more races	0.54	0.95	0.97	3.23	1.55	3.03
Dependency status and family responsibilities, 2011–12						
Dependent	0.14	0.22	0.24	0.74	0.38	0.66
Independent	1.45	0.91	0.47	2.59	0.99	3.24
Unmarried, no dependent(s)	1.04	1.38	†	4.60	1.06	3.94
Unmarried, with dependent(s)	0.50	1.29	0.28	3.57	1.64	3.62
Married	†	2.09	0.79	4.38	1.45	6.50
Highest education attained by either parent, 2011–12						
High school diploma or less	1.08	0.51	0.40	1.49	0.72	2.08
Some postsecondary education	0.42	0.83	0.39	1.47	0.75	1.37
Bachelor's degree or higher	0.16	0.24	0.33	0.83	0.42	0.82

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-12.

Standard errors for table 4: ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest co ed at first insti by spring 2014	tution		n: No credential	
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at first institution	Left first institution, but enrolled at another institution	Left first institution but never enrolled at another institution
Total	0.55	0.32	0.11	0.52	0.51	1.20
Control and level of first institution						
4-year	0.24	0.29	0.22	0.74	0.55	0.59
Public	0.15	0.26	0.30	1.00	0.86	0.88
Private nonprofit	†	0.29	0.45	1.86	0.72	0.93
For-profit	0.49	1.67	0.47	1.23	1.29	2.90
2-year	0.64	0.66	†	0.93	0.90	1.63
Public	0.40	0.73	†	1.00	0.96	1.47
Private nonprofit	10.99	7.99	†	†	10.35	4.75
For-profit	5.09	2.51	;	0.46	1.21	4.73
Less-than-2-year	4.38	†	,	0.55	0.84	3.99
Public	9.19	†	†	†	†	7.82
Private nonprofit	14.59	†	†	†	†	
For-profit	5.38	†	†	0.52	0.97	† 4.94
Degree program, 2011–12						
No certificate or degree	†	†	†	5.60	6.02	6.20
Certificate	4.22	0.11	†	1.17	0.51	3.65
Associate's degree	0.19	0.83	†	0.95	0.97	1.47
Bachelor's degree	†	0.10	0.24	0.83	0.59	0.69
Attendance intensity through June 2014						
Always full time	0.49	0.42	0.16	0.62	0.51	0.96
Mixed	1.05	0.58	0.17	1.14	0.86	1.29
Always part time	0.97	0.48	†	1.59	0.78	2.18
Highest level of high school mathematics completed or planned						
Less than algebra 2	1.14	0.76	0.24	1.38	0.90	2.39
Algebra 2	0.99	0.53	0.15	0.95	0.95	1.88
Trigonometry	0.39	1.02	0.40	2.24	2.67	1.82
Precalculus	0.44	0.67	0.32	1.18	0.84	1.12
Calculus or math beyond	0.11	0.07	0.02	1.10	0.01	
calculus	0.31	0.44	0.32	1.05	0.70	0.74
Sex						
Male	0.52	0.50	0.19	1.00	0.65	1.64
Female	0.76	0.34	0.16	0.75	0.67	1.06
Age as of December 31, 2011						
18 years or younger	0.38	0.43	0.16	0.71	0.68	0.74
19 years	0.48	0.44	0.28	0.99	1.07	1.34
20–23 years	1.59	0.77	0.29	1.54	1.32	3.33
24–29 years	2.33	1.40	0.21	2.34	1.27	2.58
30 years or older	2.24	1.01	0.25	1.76	0.90	3.09

See notes at end of table.

Table B-12.
Standard errors for table 4: ALL FIRST-TIME POSTSECONDARY STUDENTS: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Percentage distribution of 2011–12 first-time postsecondary students' 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cı ed at first insti by spring 2014	tution	Retention: No credential attained a first institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at first institution	Left first institution, but enrolled at another institution	Left first institution but never enrolled at another institution
Race/ethnicity						
White	0.46	0.42	0.17	0.73	0.57	1.09
Black	0.85	0.68	0.26	1.30	1.19	2.08
Hispanic	1.45	0.74	0.21	1.33	0.92	1.93
Asian	0.35	0.67	0.74	2.96	2.13	2.94
American Indian	†	2.16	†	4.90	4.59	8.46
Pacific Islander	3.53	1.57	†	7.71	6.14	6.26
Two or more races	0.95	1.46	0.54	2.75	1.56	2.65
Dependency status and family responsibilities, 2011–12						
Dependent	0.28	0.34	0.14	0.60	0.51	0.82
Independent	1.76	0.57	0.12	0.98	0.91	2.66
Unmarried, no dependent(s)	1.52	1.21	†	1.72	1.71	3.12
Unmarried, with dependent(s)	1.85	0.81	0.09	1.71	1.44	2.72
Married	3.68	1.12	0.24	2.09	1.03	4.04
Highest education attained by either parent, 2011–12						
High school diploma or less	1.13	0.50	0.15	0.99	1.01	2.16
Some postsecondary education	0.70	0.71	0.18	1.09	0.77	1.70
Bachelor's degree or higher	0.30	0.38	0.22	0.86	0.64	0.83

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-13.

Standard errors for table 5: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	Attainment: Hig attained at fii by sprir	st institution		Retention: No credential attained at first institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution	
Total	0.40	0.73	1.00	0.96	1.47	
Degree program, 2011–12 No certificate or degree	†	†	6.15	5.03	7.06	
Certificate	5.02	†	3.31	1.14	4.70	
Associate's degree	0.19	0.75	1.04	0.95	1.38	
Plan to continue to a bachelor's degree program within 5 years, 2011–12	0.47	0.70	4.40	4.00	4.40	
Yes	0.17	0.76	1.12	1.02	1.42	
No	0.55	1.15	1.99	1.26	2.41	
Attendance intensity through June 2014						
Always full time	0.78	1.21	1.28	1.27	1.97	
Mixed	0.42	1.01	1.68	1.38	1.64	
Always part time	0.64	0.56	1.82	0.74	2.25	
Highest level of high school mathematics completed or planned						
Less than algebra 2	0.83	0.99	1.97	1.48	2.64	
Algebra 2	0.65	0.97	1.72	1.30	1.90	
Trigonometry	0.27	3.42	3.20	4.16	4.02	
Precalculus	0.64	1.80	2.20	1.37	1.96	
Calculus or math beyond						
calculus	†	2.02	3.17	2.77	2.77	
Sex						
Male	0.39	1.07	1.42	1.22	1.99	
Female	0.61	0.79	1.35	1.16	1.64	
Age as of December 31, 2011						
18 years or younger	0.66	1.03	1.45	1.26	1.63	
19 years	0.67	1.14	1.77	1.62	2.21	
20–23 years	0.84	0.79	2.41	1.68	2.84	
24–29 years	1.56	2.34	3.41	2.01	3.49	
30 years or older	1.12	1.42	2.86	0.84	3.38	
Race/ethnicity						
White	0.60	1.13	1.44	1.16	1.78	
Black	0.89	1.14	1.87	2.12	2.90	
Hispanic	0.77	1.01	2.07	1.42	2.08	
Asian	ţ	1.47	5.16	3.83	6.20	
American Indian	†	†	†	11.34	12.59	
Pacific Islander	†	†	15.92	†	14.11	
Two or more races	<u> </u>	3.21	4.93	2.77	5.06	

See notes at end of table.

Table B-13.

Standard errors for table 5: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 2-YEAR PUBLIC COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 2-year public college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14—Continued

	Attainment: Hig attained at fir by sprir	rst institution		ttained at g 2014	
Enrollment and student characteristics	Certificate	Associate's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution
Dependency status and family					
responsibilities, 2011–12	0.47	0.00	4.40	4.00	4 = 4
Dependent	0.47	0.89	1.16	1.08	1.51
Independent	0.75	0.87	1.57	0.94	1.79
Unmarried, no dependent(s)	0.64	1.94	2.57	2.02	3.23
Unmarried, with dependent(s)	1.10	1.00	2.78	1.40	2.98
Married	1.88	1.50	3.04	1.22	3.83
Highest education attained by either parent, 2011–12					
High school diploma or less	0.64	0.94	1.68	1.07	2.14
Some postsecondary education	0.68	1.08	1.73	1.46	2.31
Bachelor's degree or higher	0.75	1.28	1.81	1.61	2.15

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-14.

Standard errors for table 6: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14

	attain	ent: Highest c	itution		Retention: No credential attained at		
Enrollment and student characteristics	Certificate	by spring 2014 Associate's degree	Bachelor's degree	Enrolled at first institution	stitution by spr Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution	
Total	0.24	0.29	0.22	0.74	0.55	0.59	
Control and doctorate-granting status of first institution							
Public non-doctorate-granting	0.46	0.83	0.33	2.42	1.41	2.47	
Public doctorate-granting	†	0.14	0.43	1.17	0.95	0.82	
Private nonprofit non-doctorate-granting	†	0.56	0.82	4.49	1.26	2.01	
Private nonprofit							
doctorate-granting	†	0.35	0.46	1.23	0.95	0.79	
For-profit	0.49	1.67	0.47	1.23	1.29	2.90	
Degree program, 2011–12							
No certificate or degree	†	†	†	†	14.73	13.61	
Certificate	11.84	†	†	†	4.11	9.82	
Associate's degree	†	1.85	†	2.42	1.97	2.64	
Bachelor's degree	†	0.10	0.24	0.83	0.59	0.69	
Attendance intensity through June 2014							
Always full time	0.10	0.37	0.26	0.92	0.56	0.55	
Mixed	†	0.46	0.43	1.35	1.13	1.38	
Always part time	†	†	†	4.62	2.42	4.59	
Highest level of high school mathematics completed or planned							
Less than algebra 2	0.28	1.17	0.80	2.63	2.63	2.19	
Algebra 2	0.22	0.49	0.39	1.65	1.39	2.23	
Trigonometry	0.19	0.88	0.58	3.49	3.33	1.25	
Precalculus	0.15	0.40	0.55	1.54	1.23	1.26	
Calculus or math beyond							
calculus	0.04	0.30	0.41	1.07	0.68	0.69	
Sex							
Male	0.12	0.36	0.34	1.09	0.76	1.17	
Female	0.38	0.39	0.33	1.44	0.79	0.75	
Age as of December 31, 2011							
18 years or younger	0.05	0.26	0.26	0.87	0.85	0.69	
19 years	0.13	0.27	0.49	1.60	1.26	1.08	
20–23 years	0.71	1.13	0.98	3.63	3.04	5.76	
24–29 years	0.53	2.17	0.84	5.18	2.14	4.22	
30 years or older	3.55	1.26	0.84	3.40	2.18	4.39	

See notes at end of table.

Table B-14.

Standard errors for table 6: FIRST-TIME POSTSECONDARY STUDENTS BEGINNING AT A 4-YEAR COLLEGE: ATTAINMENT AND RETENTION AT FIRST INSTITUTION: Among 2011–12 first-time postsecondary students beginning at a 4-year college, percentage distribution of 3-year attainment and retention status at first institution attended, by selected enrollment and student characteristics: 2012–14—Continued

	attain	ent: Highest cı ed at first insti by spring 2014	tution	Retention: No credential attained at first institution by spring 2014		
Enrollment and student characteristics	Certificate	Associate's degree	Bachelor's degree	Enrolled at first institution	Left first institution but enrolled at another institution	Left first institution but never enrolled at another institution
Race/ethnicity						
White	0.37	0.28	0.35	0.94	0.75	0.71
Black	0.42	0.71	0.47	1.87	1.47	1.82
Hispanic	0.13	0.80	0.53	2.02	1.55	2.10
Asian	†	0.76	1.19	3.08	2.44	2.11
American Indian	†	†	†	8.51	5.59	8.93
Pacific Islander	†	†	†	9.68	†	7.95
Two or more races	0.12	0.93	0.97	3.50	1.88	3.04
Dependency status and family responsibilities, 2011–12						
Dependent	0.07	0.21	0.24	0.74	0.57	0.62
Independent	1.42	0.91	0.46	1.99	2.10	3.56
Unmarried, no dependent(s)	0.78	1.38	†	2.72	4.09	4.26
Unmarried, with dependent(s)	0.42	1.29	0.28	4.35	2.92	3.93
Married	†	2.09	0.79	4.76	3.38	6.13
Highest education attained by either parent, 2011–12						
High school diploma or less	†	0.50	0.40	1.59	1.80	2.32
Some postsecondary education	0.27	0.82	0.39	1.51	1.29	1.40
Bachelor's degree or higher	0.14	0.21	0.32	0.90	0.76	0.69

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).

Table B-15.

Standard errors for table 7: ENROLLMENT AND STUDENT CHARACTERISTICS: Percentage distribution of 2011–12 first-time postsecondary students' selected enrollment and student characteristics, by control and level of first institution: 2012–14

	All first-time	First-time postsecondary	First-time postsecondary
	postsecondary	students beginning at	students beginning at
Enrollment and student characteristics	students	a 2-year public college	a 4-year college
Total	t	t	t
Control, level, and doctorate-granting status			
of first institution			
4-year	1.18	†	†
Public	1.12	†	0.94
Non-doctorate-granting	0.38	†	0.80
Doctorate-granting	1.12	†	1.36
Private nonprofit	0.29	ţ	0.78
Non-doctorate-granting	0.20	†	0.42
Doctorate-granting	0.25	†	0.59
For-profit	0.17	†	0.39
2-year	1.36	†	†
Public	1.41	†	†
Private nonprofit For-profit	0.13 0.16	†	†
·	0.10	†	†
Less-than-2-year Public	0.28	† †	†
Private nonprofit	7	†	†
For-profit	0.26	†	†
Degree program, 2011–12			
No certificate or degree	0.23	0.50	†
Certificate	0.39	1.07	0.34
Associate's degree	0.81	1.19	0.72
Bachelor's degree	0.58	†	1.33
Plan to continue to a bachelor's degree program within 5 years, 2011–12			
Yes	0.61	1.39	0.92
No	0.46	0.87	0.23
Not applicable	0.72	1.07	1.03
Number of institutions attended through June 2014			
One	0.85	1.39	0.78
Two	0.86	1.31	0.79
Three or more	0.15	0.25	0.27
Attendance intensity through June 2014	0.00	4.00	0.70
Always full time	0.83	1.02	0.70
Mixed Always part time	0.54 0.65	0.95 1.13	0.68 0.40
Highest level of high school mathematics			
completed or planned			
Less than algebra 2	0.59	1.11	0.39
Algebra 2	0.52	1.02	0.55
Trigonometry	0.32	0.47	0.48
Precalculus	0.58	1.14	0.55
Calculus or math beyond calculus	0.40	0.56	0.93
Not applicable	0.34	0.78	0.43

See notes at end of table.

Table B-15.

Standard errors for table 7: ENROLLMENT AND STUDENT CHARACTERISTICS: Percentage distribution of 2011–12 first-time postsecondary students' selected enrollment and student characteristics, by control and level of first institution: 2012–14—Continued

Enrollment and student characteristics	All first-time postsecondary students	First-time postsecondary students beginning at a 2-year public college	First-time postsecondary students beginning at a 4-year college
Sex			
Male	0.60	0.92	0.84
Female	0.60	0.92	0.84
Age as of December 31, 2011			
18 years or younger	0.68	1.60	0.88
19 years	0.55	1.00	0.60
20–23 years	0.43	0.86	0.39
24–29 years	0.41	0.91	0.28
30 years or older	0.34	0.78	0.43
Race/ethnicity			
White	0.82	1.18	0.89
Black	0.59	0.80	0.83
Hispanic	0.58	0.93	0.57
Asian	0.28	0.45	0.44
American Indian	0.16	0.23	0.19
Pacific Islander	0.06	0.10	0.07
Two or more races	0.20	0.34	0.26
Dependency status and family responsibilities, 2011–12			
Dependent	0.63	1.72	0.90
Independent	0.63	1.72	0.90
Unmarried, no dependent(s)	0.36	0.93	0.53
Unmarried, with dependent(s)	0.38	0.65	0.44
Married	0.47	0.94	0.28
Highest education attained by either parent, 2011–12			
High school diploma or less	0.54	1.06	0.73
Some postsecondary education	0.49	0.93	0.66
Bachelor's degree or higher	0.62	0.91	0.74
Both parents' highest education attained is unknown	0.27	0.49	0.22

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14).