

Appendix J

Nonresponse Bias Analysis

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution type														
Public														
Less-than-2-year	20	10	3.74	4.12	1.75	0.39	9.37	0.39	9.37	3.71	4.22	0.51	12.04	
2-year	320	60	15.38	15.62	14.18	0.23	1.50	0.23	1.50	15.34	15.15	-0.19	-1.25	
4-year non-doctorate-granting	120	10	4.62	5.29	1.18	0.67*	12.68	0.67*	12.68	4.63	4.74	0.11	2.29	
4-year doctorate-granting	220	20	4.62	5.14	1.99	0.51*	9.99	0.51*	9.99	4.63	4.70	0.07	1.43	
Private nonprofit														
Less-than-4-year	20	10	3.34	3.29	3.57	-0.05	-1.37	-0.05	-1.37	3.34	3.39	0.05	1.36	
4-year non-doctorate-granting	210	30	11.67	12.18	9.06	0.51	4.17	0.51	4.17	11.70	11.28	-0.42	-3.72	
4-year doctorate-granting	220	30	8.64	8.85	7.54	0.21	2.41	0.21	2.41	8.65	8.40	-0.26	-3.08	
Private for-profit														
Less-than-2-year	40	10	21.69	18.27	39.27	-3.42	-18.74	-3.42	-18.74	21.71	18.56	-3.15	-16.97	
2-year	90	20	18.08	18.28	17.07	0.20	1.08	0.20	1.08	18.08	20.72	2.64	12.72	
4-year	230	30	8.22	8.97	4.39	0.75	8.33	0.75*	8.33	8.19	8.84	0.65	7.37	
Carnegie classification code														
Associate's	470	90	26.85	27.47	23.64	0.63	2.28	0.63	2.28	26.77	27.51	0.74	2.68	
Research and Doctoral	200	30	3.96	4.13	3.11	0.17	4.04	0.17	4.04	3.97	4.08	0.10	2.52	
Master's	380	20	9.56	10.83	3.03	1.27*	11.75	1.27*	11.75	9.58	9.62	0.04	0.43	
Bachelor's	190	20	10.32	10.94	7.15	0.62	5.64	0.62	5.64	10.33	10.21	-0.13	-1.24	
Special focus and other	140	20	10.04	10.50	7.71	0.45	4.33	0.45	4.33	10.05	9.49	-0.56	-5.89	
Unavailable or unknown	100	30	39.26	36.13	55.37	-3.14	-8.68	-3.14	-8.68	39.29	39.10	-0.20	-0.50	
Degree of urbanization														
Large city	390	70	27.92	22.54	55.55	-5.38	-23.87	-5.38*	-23.87	27.93	22.79	-5.14	-22.56	
Mid-size city	190	20	11.18	12.39	5.01	1.20	9.71	1.20*	9.71	11.20	11.54	0.34	2.98	
Small city	200	20	11.10	11.65	8.25	0.55	4.76	0.55	4.76	11.09	11.82	0.72	6.10	
Large suburb	310	50	18.59	19.11	15.92	0.52	2.72	0.52	2.72	18.60	19.16	0.57	2.96	
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	120	10	8.36	9.08	4.64	0.72	7.96	0.72	7.96	8.38	7.90	-0.48	-6.07	
Urban area remote from town	60	10	4.67	5.06	2.69	0.39	7.62	0.39	7.62	4.69	5.34	0.66	12.28	

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Rural area on fringe of town	140	20	12.85	14.22	5.81	1.37	9.64	1.37	9.64	12.88	16.04	3.16	19.72	
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Institution region ⁶														
New England	100	10	6.57	7.57	1.46	1.00*	13.15	1.00*	13.15	6.59	7.75	1.16	15.03	
Midwest	250	30	14.31	14.31	14.35	-0.01	-0.05	-0.01	-0.05	14.32	13.78	-0.54	-3.91	
Great Lakes	240	20	14.01	15.22	7.76	1.22	7.99	1.22	7.99	14.02	14.35	0.33	2.27	
Plains	130	20	9.17	9.55	7.24	0.38	3.94	0.38	3.94	9.16	8.84	-0.32	-3.58	
Southeast	340	40	27.05	24.95	37.86	-2.10	-8.43	-2.10	-8.43	27.04	27.70	0.67	2.41	
Southwest	150	20	9.62	9.16	11.96	-0.46	-4.98	-0.46	-4.98	9.64	9.55	-0.09	-0.97	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	210	50	11.87	10.49	18.94	-1.38	-13.13	-1.38	-13.13	11.86	10.66	-1.20	-11.21	
Historically Black college or university														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No or Unavailable or unknown	1,450	200	98.72	98.76	98.50	0.04	0.04	0.04	0.04	98.72	98.90	0.18	0.18	
Hispanic-Serving Institution														
Yes	200	40	14.46	12.87	22.63	-1.59	-12.36	-1.59	-12.36	14.43	12.88	-1.55	-12.04	
No	1,290	170	85.54	87.13	77.37	1.59	1.83	1.59	1.83	85.57	87.12	1.55	1.78	
Percent receiving federal grant aid ⁷														
1–36	360	60	11.71	12.00	10.23	0.29	2.40	0.29	2.40	11.73	12.31	0.58	4.73	
37–52	360	40	14.11	15.24	8.28	1.14	7.45	1.14*	7.45	14.14	14.68	0.54	3.69	
53–71	360	40	27.04	27.64	23.96	0.60	2.17	0.60	2.17	27.10	27.39	0.29	1.07	
72 or more	350	50	39.69	37.72	49.84	-1.98	-5.24	-1.98	-5.24	39.60	38.62	-0.98	-2.53	
None or unknown	50	10	7.45	7.40	7.69	-0.05	-0.63	-0.05	-0.63	7.44	6.99	-0.44	-6.29	

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving state/local grant aid ⁷														
1-6	370	60	45.66	44.23	53.00	-1.43	-3.23	-1.43	-3.23	45.68	45.35	-0.33	-0.73	
7-24	360	50	17.68	17.33	19.53	-0.36	-2.07	-0.36	-2.07	17.72	17.26	-0.46	-2.68	
25-43	350	40	13.60	14.76	7.64	1.16	7.86	1.16*	7.86	13.62	14.15	0.53	3.77	
44 or more	350	50	15.62	16.29	12.15	0.67	4.14	0.67	4.14	15.55	16.25	0.70	4.31	
None or unknown	50	10	7.45	7.40	7.69	-0.05	-0.63	-0.05	-0.63	7.44	6.99	-0.44	-6.29	
Percent receiving institution grant aid ⁷														
1-5	340	70	45.19	41.88	62.14	-3.30	-7.88	-3.30	-7.88	45.13	43.31	-1.82	-4.21	
6-26	360	50	18.16	18.89	14.41	0.73	3.87	0.73	3.87	18.20	18.80	0.60	3.17	
27-67	360	50	13.79	15.01	7.50	1.22	8.15	1.22*	8.15	13.82	15.10	1.28	8.47	
68 or more	370	40	15.42	16.81	8.26	1.39	8.29	1.39*	8.29	15.42	15.80	0.39	2.46	
None or unknown	50	10	7.45	7.40	7.69	-0.05	-0.63	-0.05	-0.63	7.44	6.99	-0.44	-6.29	
Percent receiving student loan aid ⁷														
1-36	340	70	21.04	21.48	18.75	0.44	2.07	0.44	2.07	21.00	23.77	2.77	11.64	
37-64	360	50	21.36	17.66	40.36	-3.70	-20.96	-3.70	-20.96	21.40	17.39	-4.02	-23.10	
65-82	380	30	22.64	24.76	11.80	2.11	8.53	2.11*	8.53	22.69	23.98	1.29	5.36	
83 or more	360	40	27.51	28.70	21.40	1.19	4.15	1.19	4.15	27.46	27.87	0.40	1.44	
None or unknown	50	10	7.45	7.40	7.69	-0.05	-0.63	-0.05	-0.63	7.44	6.99	-0.44	-6.29	
Average net price among students receiving grant or scholarship aid ⁷														
\$1-\$8,672	360	50	25.22	26.49	18.72	1.27	4.78	1.27	4.78	25.20	26.99	1.80	6.65	
\$8,673-\$15,229	360	50	29.44	26.70	43.52	-2.74	-10.27	-2.74	-10.27	29.50	26.32	-3.18	-12.08	
\$15,230-\$21,352	350	50	22.26	22.67	20.12	0.42	1.83	0.42	1.83	22.25	23.35	1.10	4.72	
\$21,353 or more	360	40	14.81	15.77	9.87	0.96	6.10	0.96	6.10	14.79	15.36	0.57	3.71	
None or unknown	60	10	8.27	8.37	7.77	0.10	1.16	0.10	1.16	8.26	7.97	-0.29	-3.61	

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent enrolled: Black, non-Hispanic ⁷													
1-4	390	60	31.61	32.51	26.99	0.90	2.77	0.90	2.77	31.67	30.82	-0.85	-2.76
5-9 or None/unknown	410	40	21.66	22.78	15.86	1.13	4.95	1.13	4.95	21.65	21.01	-0.63	-3.01
10-20	340	40	17.35	19.31	7.30	1.96*	10.14	1.96*	10.14	17.39	18.74	1.35	7.21
21 or more	340	60	29.38	25.40	49.85	-3.99	-15.70	-3.99	-15.70	29.29	29.43	0.13	0.45
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	490	70	47.68	49.09	40.43	1.41	2.87	1.41	2.87	47.65	51.13	3.48	6.81
2	300	20	17.60	19.18	9.54	1.57	8.19	1.57*	8.19	17.64	17.15	-0.49	-2.88
3-5	380	50	22.36	18.65	41.41	-3.71	-19.89	-3.71	-19.89	22.33	18.44	-3.89	-21.09
6 or more	320	70	12.36	13.09	8.62	0.73	5.57	0.73	5.57	12.38	13.29	0.90	6.80
Percent enrolled: Hispanic ⁷													
1-3 or None/unknown	460	60	41.82	41.38	44.08	-0.44	-1.06	-0.44	-1.06	41.77	43.27	1.50	3.47
4-6	340	40	17.05	18.09	11.71	1.04	5.75	1.04	5.75	17.07	17.03	-0.04	-0.24
7-15	330	50	16.56	16.83	15.15	0.27	1.63	0.27	1.63	16.59	16.18	-0.41	-2.54
16 or more	350	60	24.57	23.69	29.06	-0.87	-3.69	-0.87	-3.69	24.56	23.51	-1.05	-4.46
Total undergraduate enrollment ⁷													
1-1,601	340	60	62.10	59.52	75.34	-2.58	-4.33	-2.58*	-4.33	62.13	61.61	-0.52	-0.84
1,602-4,474	380	40	15.24	16.16	10.52	0.92	5.68	0.92	5.68	15.26	15.60	0.34	2.17
4,475-13,842	370	50	11.89	12.70	7.74	0.81	6.37	0.81*	6.37	11.81	11.78	-0.04	-0.30
13,843 or more	370	60	7.32	7.60	5.91	0.27	3.62	0.27	3.62	7.34	7.54	0.20	2.61
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total male undergraduate enrollment ⁷													
1-646	340	50	61.15	58.74	73.48	-2.40	-4.09	-2.40*	-4.09	61.17	60.55	-0.62	-1.02
647-1,908	380	40	16.10	17.04	11.23	0.95	5.56	0.95	5.56	16.12	16.67	0.54	3.26
1,909-5,918	370	50	11.99	12.60	8.87	0.61	4.82	0.61	4.82	11.92	11.79	-0.13	-1.11
5,919 or more	370	60	7.32	7.59	5.93	0.27	3.56	0.27	3.56	7.33	7.52	0.19	2.55
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total female undergraduate enrollment⁷														
1-950	330	60	60.69	57.80	75.53	-2.89	-5.00	-2.89*	-5.00	60.72	60.18	-0.54	-0.89	
951-2,562	380	50	16.58	17.74	10.67	1.15	6.50	1.15*	6.50	16.61	17.05	0.43	2.55	
2,563-7,625	380	50	11.83	12.73	7.22	0.90	7.06	0.90*	7.06	11.78	11.66	-0.11	-0.98	
7,626 or more	370	60	7.45	7.71	6.10	0.26	3.41	0.26	3.41	7.44	7.64	0.20	2.64	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total graduate enrollment⁷														
1-626	200	10	13.77	14.56	9.66	0.80	5.49	0.80	5.49	13.78	13.09	-0.68	-5.22	
627-1,820	190	20	5.83	6.41	2.81	0.59*	9.16	0.59*	9.16	5.84	6.01	0.17	2.87	
1,821-4,414	190	20	4.28	4.58	2.71	0.31	6.67	0.31	6.67	4.29	4.41	0.12	2.71	
4,415 or more	190	30	3.47	3.64	2.62	0.17	4.57	0.17	4.57	3.48	3.54	0.06	1.68	
None or unknown	710	130	72.66	70.80	82.20	-1.86	-2.63	-1.86	-2.63	72.61	72.94	0.33	0.46	
Total male graduate enrollment⁷														
1-204	200	10	13.25	13.94	9.70	0.69	4.95	0.69	4.95	13.26	12.52	-0.74	-5.90	
205-632	190	20	6.18	6.81	2.96	0.63*	9.21	0.63*	9.21	6.20	6.35	0.15	2.39	
633-1,677	200	20	4.41	4.88	2.00	0.47*	9.61	0.47*	9.61	4.42	4.65	0.23	5.05	
1,678 or more	180	30	3.50	3.58	3.13	0.07	2.02	0.07	2.02	3.51	3.53	0.02	0.55	
None or unknown	710	130	72.66	70.80	82.20	-1.86	-2.63	-1.86	-2.63	72.61	72.94	0.33	0.46	
Total female graduate enrollment⁷														
1-407	200	20	13.61	14.29	10.10	0.68	4.78	0.68	4.78	13.62	13.08	-0.55	-4.19	
408-1,098	190	20	5.91	6.47	3.04	0.56	8.65	0.56*	8.65	5.92	5.98	0.07	1.09	
1,099-2,586	190	20	4.29	4.71	2.14	0.42*	8.88	0.42*	8.88	4.30	4.39	0.09	2.02	
2,587 or more	190	30	3.54	3.73	2.52	0.20	5.30	0.20	5.30	3.54	3.60	0.06	1.70	
None or unknown	710	130	72.66	70.80	82.20	-1.86	-2.63	-1.86	-2.63	72.61	72.94	0.33	0.46	

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	350	70	17.17	17.85	13.70	0.67	3.78	0.67	3.78	17.21	18.41	1.20	6.52
65–80	380	40	27.25	27.87	24.06	0.62	2.22	0.62	2.22	27.31	27.02	-0.29	-1.05
81–92	340	40	27.50	25.26	39.04	-2.24	-8.87	-2.24	-8.87	27.49	24.36	-3.13	-12.86
93 or more	360	50	28.07	29.02	23.20	0.95	3.26	0.95	3.26	27.99	30.21	2.22	7.34
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	330	50	21.76	21.35	24.66	-0.41	-1.91	-0.41	-1.91	21.78	19.80	-1.98	-10.02
25–42	340	40	21.31	22.07	15.88	0.76	3.45	0.76*	3.45	21.21	20.76	-0.45	-2.16
43–60	340	40	22.63	22.78	21.52	0.16	0.68	0.16	0.68	22.62	22.13	-0.49	-2.23
61 or more	330	50	34.31	33.80	37.95	-0.51	-1.51	-0.51	-1.51	34.39	37.32	2.93	7.84
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	150	40	32.65	29.86	55.27	-2.78	-9.32	-2.78	-9.32	32.74	31.85	-0.90	-2.81
14–23	160	20	20.31	19.81	24.31	-0.49	-2.49	-0.49	-2.49	20.10	18.78	-1.32	-7.03
24–32	170	10	21.12	22.28	11.68	1.16*	5.21	1.16*	5.21	21.16	22.02	0.86	3.91
33 or more	180	10	25.92	28.04	8.73	2.11*	7.54	2.11*	7.54	26.00	27.35	1.36	4.96
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	190	30	28.61	30.32	21.14	1.71	5.63	1.71	5.63	28.66	32.74	4.08	12.46
64–79	200	30	30.77	28.76	39.58	-2.01	-7.00	-2.01	-7.00	30.82	26.60	-4.22	-15.87
80–98	200	20	22.58	23.83	17.11	1.25	5.24	1.25	5.24	22.55	23.45	0.90	3.82
99 or more	190	30	18.04	17.09	22.16	-0.94	-5.52	-0.94	-5.52	17.97	17.21	-0.75	-4.38

See notes at end of table.

Table J-1. Institution nonresponse bias analysis before and after weight adjustment, by select variables for all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷														
\$4,144 or less	150	30	24.85	21.98	48.19	-2.87	-13.06	-2.87	-13.06	24.64	22.14	-2.50	-11.28	
\$4,145–\$5,619	170	20	29.25	30.08	22.49	0.83	2.77	0.83*	2.77	29.33	29.12	-0.21	-0.73	
\$5,620–\$7,662	170	10	22.57	23.61	14.12	1.04*	4.40	1.04*	4.40	22.63	22.73	0.09	0.41	
\$7,663 or more	170	20	23.33	24.33	15.21	1.00*	4.10	1.00*	4.10	23.40	26.01	2.62	10.06	
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷														
\$3,121 or less	190	40	39.87	34.54	63.21	-5.34	-15.45	-5.34	-15.45	39.87	36.15	-3.72	-10.30	
\$3,122–\$5,426	190	30	29.44	31.29	21.37	1.85	5.90	1.85	5.90	29.44	31.87	2.43	7.62	
\$5,427–\$8,864	210	10	15.39	17.47	6.30	2.08	11.90	2.08*	11.90	15.37	15.54	0.17	1.09	
\$8,865 or more	200	30	15.29	16.70	9.12	1.41	8.45	1.41	8.45	15.32	16.44	1.13	6.86	

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-2. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Degree of urbanization														
Large city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small city	†	†	†	†	†	†	†	†	†	†	†	†	†	
Large suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Institution region ⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Hispanic Serving Institution														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving federal grant aid ⁷														
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
37–52	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
53–71	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
72 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-2. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving state/local grant aid ⁷														
1-6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7-24	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25-43	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
44 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving institution grant aid ⁷														
1-5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6-26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
27-67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
68 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving student loan aid ⁷														
1-36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
37-64	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
65-82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Average net price among students receiving grant or scholarship aid ⁷														
\$1-\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$8,673-\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$15,230-\$21,352	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$21,353 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-2. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent enrolled: Black, non-Hispanic ⁷														
1–4	†	†	†	†	†	†	†	†	†	†	†	†	†	
5–9 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
10–20	†	†	†	†	†	†	†	†	†	†	†	†	†	
21 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
Percent enrolled: Asian or Pacific Islander ⁷														
1 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
2	†	†	†	†	†	†	†	†	†	†	†	†	†	
3–5	†	†	†	†	†	†	†	†	†	†	†	†	†	
6 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
Percent enrolled: Hispanic ⁷														
1–3 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
4–6	†	†	†	†	†	†	†	†	†	†	†	†	†	
7–15	†	†	†	†	†	†	†	†	†	†	†	†	†	
16 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
Total undergraduate enrollment ⁷														
1–1,601	†	†	†	†	†	†	†	†	†	†	†	†	†	
1,602–4,474	†	†	†	†	†	†	†	†	†	†	†	†	†	
4,475–13,842	†	†	†	†	†	†	†	†	†	†	†	†	†	
13,843 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Total male undergraduate enrollment ⁷														
1–646	†	†	†	†	†	†	†	†	†	†	†	†	†	
647–1,908	†	†	†	†	†	†	†	†	†	†	†	†	†	
1,909–5,918	†	†	†	†	†	†	†	†	†	†	†	†	†	
5,919 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-2. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total female undergraduate enrollment ⁷														
1-950	†	†	†	†	†	†	†	†	†	†	†	†	†	
951-2,562	†	†	†	†	†	†	†	†	†	†	†	†	†	
2,563-7,625	†	†	†	†	†	†	†	†	†	†	†	†	†	
7,626 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	†	†	†	†	†	†	†	†	†	†	†	†	†	
65-80	†	†	†	†	†	†	†	†	†	†	†	†	†	
81-92	†	†	†	†	†	†	†	†	†	†	†	†	†	
93 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷														
13 or less	†	†	†	†	†	†	†	†	†	†	†	†	†	
14-23	†	†	†	†	†	†	†	†	†	†	†	†	†	
24-32	†	†	†	†	†	†	†	†	†	†	†	†	†	
33 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-2. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷														
\$4,144 or less	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$4,145–\$5,619	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$5,620–\$7,662	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$7,663 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-3. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree of urbanization													
Large city	60	10	11.67	10.39	18.90	-1.28	-12.29	-1.28	-12.29	11.73	13.12	1.39	10.60
Mid-size city	40	10	7.06	7.19	6.35	0.13	1.76	0.13	1.76	7.10	7.34	0.24	3.23
Small city	40	10	10.44	11.28	5.69	0.84	7.44	0.84	7.44	10.49	11.03	0.54	4.92
Large suburb	70	10	15.43	12.39	32.65	-3.04	-24.57	-3.04	-24.57	15.47	13.09	-2.37	-18.12
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area on fringe of town	60	10	24.87	24.86	24.96	-0.02	-0.06	-0.02	-0.06	25.00	23.54	-1.46	-6.22
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	70	10	33.19	32.84	35.20	-0.36	-1.08	-0.36	-1.08	32.86	30.59	-2.27	-7.42
Southwest	50	10	15.62	15.44	16.65	-0.18	-1.17	-0.18	-1.17	15.70	17.32	1.62	9.36
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	60	30	14.15	11.28	30.40	-2.87*	-25.47	-2.87*	-25.47	14.22	14.19	-0.03	-0.22
Historically Black college or university													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No or Unavailable or unknown	320	60	98.86	98.65	100.00	-0.20	-0.21	-0.20	-0.21	98.85	98.82	-0.03	-0.03
Hispanic-Serving Institution													
Yes	60	20	14.87	10.63	38.85	-4.24	-39.89	-4.24*	-39.89	14.94	11.90	-3.05	-25.60
No	260	40	85.13	89.37	61.15	4.24	4.74	4.24*	4.74	85.06	88.10	3.05	3.46

See notes at end of table.

Table J-3. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving federal grant aid ⁷														
1–36	30	10	8.73	7.67	14.68	-1.05	-13.72	-1.05	-13.72	8.77	10.47	1.70	16.25	
37–52	90	20	18.33	18.72	16.13	0.39	2.08	0.39	2.08	18.43	18.58	0.15	0.82	
53–71	150	20	46.29	46.15	47.05	-0.14	-0.29	-0.14	-0.29	46.48	45.48	-1.00	-2.20	
72 or more	50	10	22.03	22.01	22.13	-0.02	-0.08	-0.02	-0.08	21.68	20.43	-1.25	-6.11	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving state/local grant aid ⁷														
1–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7–24	90	20	32.08	29.93	44.25	-2.15	-7.19	-2.15	-7.19	32.24	31.92	-0.33	-1.02	
25–43	90	10	25.12	24.93	26.19	-0.19	-0.76	-0.19	-0.76	25.24	24.50	-0.74	-3.04	
44 or more	90	20	25.77	25.41	27.82	-0.36	-1.43	-0.36	-1.43	25.40	25.64	0.24	0.93	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving institution grant aid ⁷														
1–5	150	30	38.98	36.95	50.46	-2.03	-5.49	-2.03	-5.49	38.68	38.82	0.15	0.38	
6–26	140	20	43.23	43.28	42.93	0.05	0.12	0.05	0.12	43.45	42.43	-1.02	-2.40	
27–67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving student loan aid ⁷														
1–36	230	50	69.97	67.15	85.88	-2.81*	-4.19	-2.81*	-4.19	69.82	69.60	-0.22	-0.31	
37–64	70	10	20.95	22.15	14.12	1.21	5.45	1.21	5.45	21.05	20.64	-0.41	-1.97	
65–82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-3. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Average net price among students receiving grant or scholarship aid ⁷														
\$1–\$8,672	260	40	70.45	73.74	51.82	3.29	4.47	3.29	4.47	70.30	70.69	0.39	0.55	
\$8,673–\$15,229	60	20	19.87	17.36	34.01	-2.50	-14.40	-2.50	-14.40	19.96	20.16	0.19	0.97	
\$15,230–\$21,352	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$21,353 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Black, non-Hispanic ⁷														
1–4	80	20	30.80	30.57	32.08	-0.23	-0.74	-0.23	-0.74	30.95	30.77	-0.18	-0.58	
5–9 or None/unknown	70	10	21.72	23.00	14.45	1.28	5.58	1.28	5.58	21.83	22.00	0.17	0.77	
10–20	90	10	20.53	21.65	14.14	1.13	5.21	1.13	5.21	20.62	22.38	1.75	7.82	
21 or more	80	10	26.96	24.77	39.33	-2.19	-8.83	-2.19	-8.83	26.60	24.85	-1.74	-7.01	
Percent enrolled: Asian or Pacific Islander ⁷														
1 or None/unknown	110	10	50.99	55.01	28.26	4.02*	7.31	4.02*	7.31	50.75	51.75	1.00	1.93	
2	60	10	13.80	14.52	9.68	0.73	5.01	0.73	5.01	13.87	13.26	-0.60	-4.55	
3–5	90	10	21.93	19.49	35.72	-2.44	-12.51	-2.44	-12.51	22.04	21.40	-0.64	-2.97	
6 or more	70	30	13.29	10.98	26.33	-2.31*	-21.02	-2.31*	-21.02	13.35	13.59	0.24	1.76	
Percent enrolled: Hispanic ⁷														
1–3 or None/unknown	90	10	41.05	46.51	10.14	5.47*	11.75	5.47*	11.75	40.76	44.11	3.36	7.61	
4–6	60	10	15.74	16.87	9.31	1.14	6.73	1.14	6.73	15.81	15.78	-0.03	-0.18	
7–15	60	10	16.70	16.46	18.06	-0.24	-1.47	-0.24	-1.47	16.78	18.42	1.63	8.87	
16 or more	110	30	26.52	20.16	62.48	-6.36*	-31.55	-6.36*	-31.55	26.65	21.69	-4.96*	-22.88	
Total undergraduate enrollment ⁷														
1–1,601	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,602–4,474	20	10	19.72	18.94	24.12	-0.78	-4.11	-0.78	-4.11	19.82	19.66	-0.16	-0.81	
4,475–13,842	120	20	38.53	40.38	28.02	1.86	4.60	1.86	4.60	38.22	38.56	0.34	0.89	
13,843 or more	170	30	23.73	23.53	24.85	-0.20	-0.84	-0.20	-0.84	23.85	25.32	1.48	5.84	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-3. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total male undergraduate enrollment⁷														
1–646	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
647–1,908	30	10	22.58	22.31	24.12	-0.27	-1.22	-0.27	-1.22	22.69	22.65	-0.04	-0.18	
1,909–5,918	120	20	36.72	38.26	28.02	1.54	4.02	1.54	4.02	36.41	36.65	0.24	0.66	
5,919 or more	170	30	23.70	23.50	24.85	-0.20	-0.87	-0.20	-0.87	23.81	25.32	1.51	5.95	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Total female undergraduate enrollment⁷														
1–950	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
951–2,562	20	10	19.55	18.74	24.12	-0.81	-4.32	-0.81	-4.32	19.65	19.83	0.19	0.94	
2,563–7,625	120	20	37.52	39.56	26.00	2.04	5.15	2.04	5.15	37.22	37.35	0.14	0.36	
7,626 or more	170	30	24.91	24.56	26.87	-0.35	-1.42	-0.35	-1.42	25.03	26.37	1.34	5.08	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid⁷														
64 or less	140	30	30.40	30.65	29.07	0.25	0.81	0.25	0.81	30.56	33.46	2.90	8.67	
65–80	110	20	37.66	35.86	47.27	-1.80	-5.01	-1.80	-5.01	37.85	35.57	-2.29	-6.43	
81–92	40	10	16.86	17.68	12.45	0.82	4.66	0.82	4.66	16.95	16.98	0.03	0.19	
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion⁷														
24 or less	220	40	55.04	54.82	56.17	-0.21	-0.39	-0.21	-0.39	55.32	53.48	-1.85	-3.45	
25–42	80	10	27.12	29.31	15.38	2.19	7.49	2.19	7.49	26.74	28.81	2.07	7.20	
43–60	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
61 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-3. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	120	30	51.82	48.60	69.47	-3.21	-6.61	-3.21*	-6.61	52.09	51.68	-0.41	-0.80
14–23	100	10	24.77	24.73	24.99	-0.04	-0.16	-0.04	-0.16	24.42	23.01	-1.42	-6.15
24–32	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
33 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	140	30	38.92	35.99	55.07	-2.94	-8.16	-2.94	-8.16	38.60	35.49	-3.11	-8.77
\$4,145–\$5,619	120	20	34.92	36.26	27.59	1.33	3.68	1.33	3.68	35.11	35.47	0.36	1.03
\$5,620–\$7,662	50	10	14.35	14.81	11.84	0.46	3.09	0.46	3.09	14.42	14.33	-0.09	-0.66
\$7,663 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Carnegie classification code														
Associate's	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Research and Doctoral	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Master's	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Bachelor's	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Special focus and other	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Unavailable or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Degree of urbanization														
Large city	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Mid-size city	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Small city	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Large suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Mid-size suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Small suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Urban area on fringe of town or distant from town	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Urban area remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Rural area on fringe of town	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Rural area distant or remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Institution region⁶														
New England	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Mideast	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Great Lakes	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Plains	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Southeast	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Southwest	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Rocky Mountains	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Far West	†	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Historically Black college or university														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No or Unavailable or unknown	120	10	95.63	95.44	100.00	-0.19	-0.20	-0.19	-0.20	95.63	95.64	0.01	0.01	
Hispanic-Serving Institution														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	110	10	95.22	95.02	100.00	-0.21	-0.22	-0.21*	-0.22	95.22	94.89	-0.33	-0.35	
Percent receiving federal grant aid⁷														
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
37–52	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
53–71	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
72 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving state/local grant aid⁷														
1–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7–24	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25–43	50	10	39.00	38.08	60.04	-0.91	-2.39	-0.91	-2.39	39.00	37.84	-1.15	-3.05	
44 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving institution grant aid⁷														
1–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6–26	50	10	38.18	37.80	46.95	-0.38	-1.00	-0.38	-1.00	38.18	38.49	0.31	0.80	
27–67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving student loan aid ⁷														
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
37–64	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
65–82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Average net price among students receiving grant or scholarship aid ⁷														
\$1–\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$8,673–\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$15,230–\$21,352	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$21,353 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Black, non-Hispanic ⁷														
1–4	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
5–9 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
10–20	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
21 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Asian or Pacific Islander ⁷														
1 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
3–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Hispanic ⁷														
1–3 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
4–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7–15	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
16 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total undergraduate enrollment ⁷	†	†	†	†	†	†	†	†	†	†	†	†	†	†
1–1,601	†	†	†	†	†	†	†	†	†	†	†	†	†	†
1,602–4,474	†	†	†	†	†	†	†	†	†	†	†	†	†	†
4,475–13,842	†	†	†	†	†	†	†	†	†	†	†	†	†	†
13,843 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Total male undergraduate enrollment ⁷														
1–646	†	†	†	†	†	†	†	†	†	†	†	†	†	†
647–1,908	†	†	†	†	†	†	†	†	†	†	†	†	†	†
1,909–5,918	†	†	†	†	†	†	†	†	†	†	†	†	†	†
5,919 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Total female undergraduate enrollment ⁷														
1–950	†	†	†	†	†	†	†	†	†	†	†	†	†	†
951–2,562	†	†	†	†	†	†	†	†	†	†	†	†	†	†
2,563–7,625	†	†	†	†	†	†	†	†	†	†	†	†	†	†
7,626 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Total graduate enrollment ⁷														
1–626	†	†	†	†	†	†	†	†	†	†	†	†	†	†
627–1,820	†	†	†	†	†	†	†	†	†	†	†	†	†	†
1,821–4,414	†	†	†	†	†	†	†	†	†	†	†	†	†	†
4,415 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Total male graduate enrollment ⁷														
1–204	†	†	†	†	†	†	†	†	†	†	†	†	†	†
205–632	†	†	†	†	†	†	†	†	†	†	†	†	†	†
633–1,677	†	†	†	†	†	†	†	†	†	†	†	†	†	†
1,678 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total female graduate enrollment ⁷														
1–407	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
408–1,098	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,099–2,586	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2,587 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷														
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
43–60	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
61 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷														
13 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
14–23	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
24–32	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
33 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-4. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷														
\$4,144 or less	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$4,145–\$5,619	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$5,620–\$7,662	†	†	†	†	†	†	†	†	†	†	†	†	†	
\$7,663 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Carnegie classification code														
Associate's	†	†	†	†	†	†	†	†	†	†	†	†	†	
Research and Doctoral	130	20	53.41	51.04	84.88	-2.37*	-4.65	-2.37*	-4.65	53.41	52.57	-0.85	-1.61	
Master's	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's	†	†	†	†	†	†	†	†	†	†	†	†	†	
Special focus and other	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Unavailable or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree of urbanization														
Large city	60	10	24.51	24.08	30.24	-0.43	-1.79	-0.43	-1.79	24.51	24.68	0.17	0.71	
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Large suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area distant or remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Plains	20	10	9.60	8.21	27.99	-1.39	-16.89	-1.39	-16.89	9.60	9.12	-0.48	-5.23	
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	20	10	10.29	8.78	30.24	-1.50	-17.12	-1.50*	-17.12	10.29	10.14	-0.15	-1.48	

See notes at end of table.

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Historically Black college or university														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No or Unavailable or unknown	210	20	92.61	92.05	100.00	-0.56*	-0.61	-0.56*	-0.61	92.61	92.62	0.01	0.01	
Hispanic-Serving Institution														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	200	20	91.00	90.32	100.00	-0.68*	-0.75	-0.68*	-0.75	91.00	90.43	-0.57	-0.63	
Percent receiving federal grant aid⁷														
1–36	90	10	38.41	36.16	68.31	-2.25*	-6.23	-2.25*	-6.23	38.41	37.58	-0.83	-2.20	
37–52	80	10	30.99	31.42	25.20	0.44	1.39	0.44	1.39	30.99	30.59	-0.40	-1.31	
53–71	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
72 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving state/local grant aid⁷														
1–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7–24	50	10	18.62	18.12	25.20	-0.50	-2.74	-0.50	-2.74	18.62	19.06	0.44	2.29	
25–43	70	10	30.68	31.09	25.20	0.41	1.33	0.41	1.33	30.68	31.25	0.57	1.82	
44 or more	80	10	34.80	34.06	44.56	-0.74	-2.16	-0.74	-2.16	34.80	32.67	-2.13*	-6.53	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent receiving institution grant aid⁷														
1–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6–26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
27–67	150	10	62.54	61.82	72.01	-0.71	-1.15	-0.71	-1.15	62.54	62.40	-0.13	-0.22	
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving student loan aid ⁷														
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
37–64	120	10	49.78	48.28	69.76	-1.51	-3.12	-1.51	-3.12	49.78	49.22	-0.56	-1.14	
65–82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Average net price among students receiving grant or scholarship aid ⁷														
\$1–\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$8,673–\$15,229	140	10	59.96	59.60	64.72	-0.36	-0.60	-0.36	-0.60	59.96	59.37	-0.59	-1.00	
\$15,230–\$21,352	30	10	14.21	13.38	25.20	-0.83	-6.19	-0.83	-6.19	14.21	13.89	-0.32	-2.30	
\$21,353 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Black, non-Hispanic ⁷														
1–4	60	10	30.74	30.02	40.32	-0.72	-2.40	-0.72	-2.40	30.74	31.38	0.64	2.04	
5–9 or None/unknown	70	10	31.02	30.87	33.03	-0.15	-0.49	-0.15	-0.49	31.02	30.39	-0.63	-2.06	
10–20	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
21 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percent enrolled: Asian or Pacific Islander ⁷														
1 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
3–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6 or more	70	10	32.56	31.21	50.40	-1.34	-4.31	-1.34	-4.31	32.56	32.77	0.21	0.63	
Percent enrolled: Hispanic ⁷														
1–3 or None/unknown	80	10	38.03	38.41	33.03	0.38	0.98	0.38	0.98	38.03	38.48	0.45	1.16	
4–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
7–15	40	10	22.12	20.64	41.77	-1.48	-7.17	-1.48	-7.17	22.12	21.18	-0.95	-4.48	
16 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total undergraduate enrollment⁷														
1–1,601	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,602–4,474	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
4,475–13,842	70	10	30.81	30.54	34.48	-0.28	-0.90	-0.28	-0.90	30.81	29.37	-1.44	-4.91	
13,843 or more	130	10	50.97	49.87	65.52	-1.10	-2.20	-1.10	-2.20	50.97	51.18	0.21	0.41	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total male undergraduate enrollment⁷														
1–646	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
647–1,908	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,909–5,918	70	10	30.47	30.55	29.44	0.08	0.25	0.08	0.25	30.47	29.36	-1.11	-3.77	
5,919 or more	140	10	52.73	51.39	70.56	-1.34	-2.61	-1.34	-2.61	52.73	52.69	-0.04	-0.08	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total female undergraduate enrollment⁷														
1–950	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
951–2,562	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2,563–7,625	70	10	30.84	30.78	31.69	-0.06	-0.21	-0.06	-0.21	30.84	29.31	-1.53	-5.22	
7,626 or more	130	10	50.61	49.87	60.48	-0.74	-1.49	-0.74	-1.49	50.61	51.30	0.69	1.34	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total graduate enrollment⁷														
1–626	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
627–1,820	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,821–4,414	80	10	35.48	35.66	33.03	0.18	0.52	0.18	0.52	35.48	35.78	0.31	0.86	
4,415 or more	110	10	43.64	42.26	61.93	-1.38	-3.26	-1.38	-3.26	43.64	43.72	0.08	0.18	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total male graduate enrollment⁷														
1–204	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
205–632	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
633–1,677	80	10	35.09	35.83	25.20	0.75	2.08	0.75	2.08	35.09	35.38	0.30	0.84	
1,678 or more	110	10	43.31	41.31	69.76	-1.99*	-4.83	-1.99*	-4.83	43.31	43.34	0.04	0.08	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total female graduate enrollment ⁷														
1–407	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
408–1,098	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,099–2,586	70	10	30.73	31.15	25.20	0.42	1.34	0.42	1.34	30.73	30.87	0.13	0.43	
2,587 or more	110	10	43.92	42.56	61.93	-1.36	-3.19	-1.36	-3.19	43.92	43.77	-0.14	-0.33	
None or unknown	‡	‡	†	†	†	†	†	†	†	†	†	†	†	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	70	10	33.15	32.53	40.32	-0.62	-1.92	-0.62	-1.92	33.15	33.23	0.07	0.22	
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
81–92	60	10	32.15	31.95	34.48	-0.20	-0.63	-0.20	-0.63	32.15	31.33	-0.82	-2.63	
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷														
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
43–60	80	10	36.54	37.09	30.24	0.55	1.48	0.55	1.48	36.54	37.33	0.79	2.12	
61 or more	60	10	31.97	30.12	53.19	-1.85*	-6.13	-1.85*	-6.13	31.97	31.15	-0.82	-2.62	
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷														
13 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
14–23	40	10	20.36	19.57	30.24	-0.80	-4.08	-0.80	-4.08	20.36	19.40	-0.96	-4.95	
24–32	70	10	29.13	28.82	33.03	-0.32	-1.09	-0.32	-1.09	29.13	29.13	#	#	
33 or more	90	10	38.53	38.67	36.73	0.15	0.38	0.15	0.38	38.53	38.09	-0.43	-1.14	

See notes at end of table.

Table J-5. Institution nonresponse bias analysis before and after weight adjustment, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷														
\$4,144 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$4,145–\$5,619	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$5,620–\$7,662	80	10	35.30	36.00	26.65	0.70	1.94	0.70	1.94	35.30	35.28	-0.03	-0.08	
\$7,663 or more	120	10	58.89	57.73	73.35	-1.17	-2.02	-1.17	-2.02	58.89	58.84	-0.06	-0.10	

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-6. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit less-than-4-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Carnegie classification code														
Associate's	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Research and Doctoral	†	†	†	†	†	†	†	†	†	†	†	†	†	
Master's	†	†	†	†	†	†	†	†	†	†	†	†	†	
Bachelor's	†	†	†	†	†	†	†	†	†	†	†	†	†	
Special focus and other	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Unavailable or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree of urbanization														
Large city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Large suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	
Small suburb	†	†	†	†	†	†	†	†	†	†	†	†	†	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†	
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	#	10	28.39	13.28	100.00	-15.12	-113.85	-15.12*	-113.85	28.39	11.62	-16.77*	-144.28	
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	†	†	†	†	†	†	†	†	†	†	†	†	†	
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Hispanic-Serving Institution														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	10	10	83.39	79.88	100.00	-3.51	-4.39	-3.51	-4.39	83.39	82.57	-0.82	-1.00	

See notes at end of table.

Table J-6. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment							After nonresponse weight adjustment						
	Un-weighted non-respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percent receiving federal grant aid ⁷														
1–36	†	†	†	†	†	†	†	†	†	†	†	†	†	†
37–52	†	†	†	†	†	†	†	†	†	†	†	†	†	†
53–71	†	†	†	†	†	†	†	†	†	†	†	†	†	†
72 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent receiving state/local grant aid ⁷														
1–6	†	†	†	†	†	†	†	†	†	†	†	†	†	†
7–24	†	†	†	†	†	†	†	†	†	†	†	†	†	†
25–43	†	†	†	†	†	†	†	†	†	†	†	†	†	†
44 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent receiving institution grant aid ⁷														
1–5	†	†	†	†	†	†	†	†	†	†	†	†	†	†
6–26	†	†	†	†	†	†	†	†	†	†	†	†	†	†
27–67	†	†	†	†	†	†	†	†	†	†	†	†	†	†
68 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent receiving student loan aid ⁷														
1–36	†	†	†	†	†	†	†	†	†	†	†	†	†	†
37–64	†	†	†	†	†	†	†	†	†	†	†	†	†	†
65–82	†	†	†	†	†	†	†	†	†	†	†	†	†	†
83 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-6. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment							After nonresponse weight adjustment					
	Un-weighted non-respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Average net price among students receiving grant or scholarship aid ⁷													
\$1–\$8,672	†	†	†	†	†	†	†	†	†	†	†	†	†
\$8,673–\$15,229	†	†	†	†	†	†	†	†	†	†	†	†	†
\$15,230–\$21,352	†	†	†	†	†	†	†	†	†	†	†	†	†
\$21,353 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent enrolled: Black, non-Hispanic ⁷													
1–4	†	†	†	†	†	†	†	†	†	†	†	†	†
5–9 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
10–20	†	†	†	†	†	†	†	†	†	†	†	†	†
21 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
2	†	†	†	†	†	†	†	†	†	†	†	†	†
3–5	†	†	†	†	†	†	†	†	†	†	†	†	†
6 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent enrolled: Hispanic ⁷													
1–3 or None/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
4–6	†	†	†	†	†	†	†	†	†	†	†	†	†
7–15	†	†	†	†	†	†	†	†	†	†	†	†	†
16 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Total undergraduate enrollment ⁷													
1–1,601	†	†	†	†	†	†	†	†	†	†	†	†	†
1,602–4,474	†	†	†	†	†	†	†	†	†	†	†	†	†
4,475–13,842	†	†	†	†	†	†	†	†	†	†	†	†	†
13,843 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-6. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment							After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total male undergraduate enrollment ⁷													
1-646	†	†	†	†	†	†	†	†	†	†	†	†	†
647-1,908	†	†	†	†	†	†	†	†	†	†	†	†	†
1,909-5,918	†	†	†	†	†	†	†	†	†	†	†	†	†
5,919 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Total female undergraduate enrollment ⁷													
1-950	†	†	†	†	†	†	†	†	†	†	†	†	†
951-2,562	†	†	†	†	†	†	†	†	†	†	†	†	†
2,563-7,625	†	†	†	†	†	†	†	†	†	†	†	†	†
7,626 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	†	†	†	†	†	†	†	†	†	†	†	†	†
65-80	†	†	†	†	†	†	†	†	†	†	†	†	†
81-92	†	†	†	†	†	†	†	†	†	†	†	†	†
93 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	†	†	†	†	†	†	†	†	†	†	†	†	†
25-42	†	†	†	†	†	†	†	†	†	†	†	†	†
43-60	†	†	†	†	†	†	†	†	†	†	†	†	†
61 or more	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-6. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80–98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Carnegie classification code														
Associate's	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Research and Doctoral	†	†	†	†	†	†	†	†	†	†	†	†	†	
Master's	80	10	18.23	18.96	13.15	0.74	3.88	0.74	3.88	18.23	19.17	0.94	4.91	
Bachelor's	110	10	57.71	56.60	65.39	-1.11	-1.97	-1.11	-1.97	57.71	56.41	-1.30	-2.30	
Special focus and other	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Unavailable or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree of urbanization														
Large city	50	10	24.44	24.03	27.24	-0.41	-1.69	-0.41	-1.69	24.44	23.99	-0.45	-1.88	
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Large suburb	40	10	16.68	17.80	8.93	1.12	6.31	1.12	6.31	16.68	17.85	1.17	6.55	
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Great Lakes	50	10	23.42	24.08	18.90	0.66	2.72	0.66	2.72	23.42	24.16	0.74	3.04	
Plains	20	10	12.72	9.73	33.34	-2.99	-30.72	-2.99	-30.72	12.72	10.65	-2.07	-19.39	
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Historically Black college or university													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No or Unavailable or unknown	200	20	95.93	97.74	83.45	1.81	1.85	1.81	1.85	95.93	97.76	1.83	1.87
Hispanic-Serving Institution													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No	210	30	97.14	97.24	96.44	0.10	0.10	0.10	0.10	97.14	97.27	0.13	0.13
Percent receiving federal grant aid⁷													
1–36	80	10	29.96	28.74	38.38	-1.22	-4.25	-1.22	-4.25	29.96	29.99	0.03	0.09
37–52	70	10	29.02	30.07	21.77	1.05	3.49	1.05	3.49	29.02	29.26	0.24	0.82
53–71	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving state/local grant aid⁷													
1–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7–24	60	10	23.99	22.38	35.11	-1.61	-7.20	-1.61	-7.20	23.99	23.42	-0.58	-2.46
25–43	60	10	23.45	23.31	24.43	-0.14	-0.61	-0.14	-0.61	23.45	22.83	-0.62	-2.73
44 or more	60	10	25.26	26.66	15.59	1.40	5.26	1.40	5.26	25.26	26.84	1.58	5.88
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving institution grant aid⁷													
1–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
6–26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
27–67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
68 or more	160	20	66.40	67.79	56.84	1.39	2.04	1.39	2.04	66.40	67.71	1.31	1.94
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent receiving student loan aid ⁷													
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
37–64	40	10	16.84	15.12	28.70	-1.72	-11.37	-1.72	-11.37	16.84	16.30	-0.54	-3.31
65–82	80	10	36.08	37.10	28.99	1.03	2.77	1.03	2.77	36.08	36.56	0.48	1.32
83 or more	70	10	27.16	29.06	14.04	1.90	6.54	1.90	6.54	27.16	28.28	1.12	3.96
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid ⁷													
\$1–\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$15,230–\$21,352	100	10	43.33	42.40	49.76	-0.93	-2.20	-0.93	-2.20	43.33	43.37	0.04	0.09
\$21,353 or more	80	10	29.72	31.26	19.09	1.54	4.93	1.54	4.93	29.72	30.58	0.86	2.83
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ⁷													
1–4	70	10	35.66	34.04	46.83	-1.62	-4.76	-1.62	-4.76	35.66	34.40	-1.26	-3.66
5–9 or None/unknown	70	10	28.90	30.62	17.02	1.72	5.62	1.72	5.62	28.90	30.30	1.40	4.62
10–20	40	10	20.68	21.44	15.45	0.76	3.54	0.76	3.54	20.68	21.03	0.35	1.65
21 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	90	10	45.37	44.35	52.45	-1.03	-2.31	-1.03	-2.31	45.37	45.46	0.08	0.18
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
3–5	40	10	19.71	18.03	31.32	-1.68	-9.34	-1.68	-9.34	19.71	17.33	-2.38	-13.71
6 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ⁷													
1–3 or None/unknown	100	10	47.31	51.22	20.38	3.90*	7.62	3.90*	7.62	47.31	52.44	5.12*	9.77
4–6	50	10	26.84	22.55	56.45	-4.29	-19.03	-4.29*	-19.03	26.84	21.61	-5.23*	-24.19
7–15	40	10	16.71	17.40	12.01	0.68	3.92	0.68	3.92	16.71	17.48	0.76	4.35
16 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total undergraduate enrollment⁷													
1–1,601	70	10	57.59	55.46	72.25	-2.13	-3.83	-2.13	-3.83	57.59	54.79	-2.80	-5.11
1,602–4,474	110	10	31.71	32.82	24.08	1.11	3.37	1.11	3.37	31.71	33.61	1.89	5.64
4,475–13,842	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total male undergraduate enrollment⁷													
1–646	70	10	53.99	51.93	68.25	-2.07	-3.98	-2.07	-3.98	53.99	50.51	-3.49	-6.91
647–1,908	110	10	34.99	36.38	25.41	1.39	3.82	1.39	3.82	34.99	37.98	2.99	7.87
1,909–5,918	20	10	3.63	3.24	6.34	-0.39	-12.10	-0.39	-12.10	3.63	3.51	-0.13	-3.68
5,919 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total female undergraduate enrollment⁷													
1–950	80	10	57.48	55.14	73.55	-2.33	-4.23	-2.33	-4.23	57.48	54.72	-2.75	-5.03
951–2,562	110	10	31.47	32.52	24.23	1.05	3.23	1.05	3.23	31.47	33.21	1.74	5.24
2,563–7,625	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total graduate enrollment⁷													
1–626	100	10	53.13	53.31	51.94	0.17	0.32	0.17	0.32	53.13	52.50	-0.63	-1.21
627–1,820	50	10	12.58	12.39	13.86	-0.19	-1.50	-0.19	-1.50	12.58	13.67	1.09	7.97
1,821–4,414	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
4,415 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	50	10	31.95	31.97	31.78	0.02	0.07	0.02	0.07	31.95	31.07	-0.88	-2.82
Total male graduate enrollment⁷													
1–204	100	10	54.13	54.38	52.43	0.25	0.45	0.25	0.45	54.13	53.55	-0.59	-1.09
205–632	50	10	11.68	11.43	13.38	-0.25	-2.15	-0.25	-2.15	11.68	13.11	1.43	10.91
633–1,677	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
1,678 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	50	10	31.95	31.97	31.78	0.02	0.07	0.02	0.07	31.95	31.07	-0.88	-2.82

See notes at end of table.

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total female graduate enrollment ⁷														
1–407	90	10	52.13	51.97	53.25	-0.16	-0.31	-0.16	-0.31	52.13	52.13	#	#	
408–1,098	50	10	12.02	11.98	12.32	-0.04	-0.36	-0.04	-0.36	12.02	12.36	0.34	2.75	
1,099–2,586	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2,587 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	50	10	31.95	31.97	31.78	0.02	0.07	0.02	0.07	31.95	31.07	-0.88	-2.82	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
93 or more	140	20	67.60	66.40	76.45	-1.21	-1.82	-1.21	-1.82	67.60	66.12	-1.48	-2.24	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷														
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
43–60	80	10	40.41	39.88	44.55	-0.53	-1.34	-0.53	-1.34	40.41	40.06	-0.35	-0.88	
61 or more	80	10	30.77	30.96	29.37	0.18	0.59	0.18	0.59	30.77	31.24	0.47	1.50	
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷														
63 or less	90	10	51.77	50.33	63.37	-1.44	-2.85	-1.44	-2.85	51.77	49.59	-2.17	-4.38	
64–79	70	10	31.84	33.09	21.71	1.25	3.79	1.25	3.79	31.84	33.87	2.03	5.99	
80–98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-7. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷														
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$3,122–\$5,426	40	10	18.95	17.77	28.51	-1.18	-6.66	-1.18	-6.66	18.95	18.11	-0.84	-4.65	
\$5,427–\$8,864	90	10	43.65	45.30	30.32	1.65	3.64	1.65	3.64	43.65	45.33	1.68	3.71	
\$8,865 or more	70	10	34.85	34.26	39.60	-0.59	-1.71	-0.59	-1.71	34.85	33.96	-0.89	-2.63	

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias1	Relative bias2	Estimated bias3	Relative bias2	Full sample, base weighted	Respondents, non-response adjusted4	Estimated bias5	Relative bias2	
Carnegie classification code														
Associate's	†	†	†	†	†	†	†	†	†	†	†	†	†	
Research and Doctoral	70	10	15.66	15.80	14.82	0.14	0.88	0.14	0.88	15.66	17.66	2.00	11.33	
Master's	110	10	31.77	35.32	10.35	3.55	10.06	3.55*	10.06	31.77	32.88	1.12	3.39	
Bachelor's	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Special focus and other	30	10	44.05	39.24	73.04	-4.81	-12.26	-4.81*	-12.26	44.05	37.35	-6.70	-17.94	
Unavailable or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree of urbanization														
Large city	70	10	42.00	41.74	43.56	-0.26	-0.62	-0.26	-0.62	42.00	40.05	-1.95	-4.88	
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small city	30	10	10.87	11.02	9.99	0.15	1.33	0.15	1.33	10.87	11.34	0.46	4.08	
Large suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	60	10	29.08	29.27	27.96	0.19	0.64	0.19	0.64	29.08	27.86	-1.22	-4.37	
Great Lakes	30	10	25.38	21.91	46.28	-3.47	-15.83	-3.47	-15.83	25.38	20.82	-4.56	-21.91	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	40	10	13.49	14.21	9.17	0.72	5.05	0.72	5.05	13.49	16.35	2.86	17.49	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias1	Relative bias2	Estimated bias3	Relative bias2	Full sample, base weighted	Respondents, non-response adjusted4	Estimated bias5	Relative bias2	
Historically Black college or university														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No or Unavailable or unknown	220	30	99.03	98.87	100.00	-0.16	-0.16	-0.16	-0.16	99.03	98.60	-0.43	-0.44	
Hispanic-Serving Institution														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	210	30	94.77	97.66	77.35	2.89	2.96	2.89	2.96	94.77	97.27	2.50	2.57	
Percent receiving federal grant aid⁷														
1–36	120	20	33.72	35.63	22.25	1.90	5.35	1.90	5.35	33.72	37.88	4.15	10.97	
37–52	50	10	16.82	18.38	7.37	1.57	8.52	1.57	8.52	16.82	18.25	1.43	7.83	
53–71	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
72 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	30	10	39.01	34.11	68.54	-4.90	-14.37	-4.90*	-14.37	39.01	31.21	-7.80	-24.98	
Percent receiving state/local grant aid⁷														
1–6	30	10	10.09	10.08	10.17	-0.01	-0.14	-0.01	-0.14	10.09	11.24	1.15	10.23	
7–24	70	10	17.70	18.33	13.91	0.63	3.43	0.63	3.43	17.70	19.22	1.51	7.88	
25–43	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
44 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	30	10	39.01	34.11	68.54	-4.90	-14.37	-4.90*	-14.37	39.01	31.21	-7.80	-24.98	
Percent receiving institution grant aid⁷														
1–5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
6–26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
27–67	40	10	10.08	10.35	8.42	0.27	2.65	0.27	2.65	10.08	12.62	2.54	20.16	
68 or more	150	10	47.34	51.90	19.87	4.56	8.78	4.56*	8.78	47.34	52.52	5.18	9.87	
None or unknown	30	10	39.01	34.11	68.54	-4.90	-14.37	-4.90*	-14.37	39.01	31.21	-7.80	-24.98	

See notes at end of table.

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias1	Relative bias2	Estimated bias3	Relative bias2	Full sample, base weighted	Respondents, non-response adjusted4	Estimated bias5	Relative bias2
Percent receiving student loan aid ⁷													
1–36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
37–64	60	10	17.45	17.92	14.61	0.47	2.63	0.47	2.63	17.45	19.21	1.76	9.16
65–82	90	10	27.09	30.36	7.38	3.27	10.77	3.27*	10.77	27.09	31.03	3.94	12.69
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	30	10	39.01	34.11	68.54	-4.90	-14.37	-4.90*	-14.37	39.01	31.21	-7.80	-24.98
Average net price among students receiving grant or scholarship aid ⁷													
\$1–\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$15,230–\$21,352	60	10	22.10	23.69	12.55	1.59	6.69	1.59	6.69	22.10	25.68	3.58	13.94
\$21,353 or more	120	10	32.88	35.20	18.91	2.32	6.59	2.32	6.59	32.88	35.57	2.69	7.55
None or unknown	30	10	39.01	34.11	68.54	-4.90	-14.37	-4.90*	-14.37	39.01	31.21	-7.80	-24.98
Percent enrolled: Black, non-Hispanic ⁷													
1–4	60	10	29.81	31.95	16.89	2.14	6.71	2.14	6.71	29.81	33.00	3.20	9.69
5–9 or None/unknown	90	10	39.65	37.89	50.21	-1.75	-4.63	-1.75	-4.63	39.65	37.22	-2.42	-6.51
10–20	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
21 or more	20	10	9.97	6.83	28.91	-3.14	-46.05	-3.14	-46.05	9.97	8.08	-1.89	-23.36
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	30	10	16.73	12.18	44.15	-4.55	-37.38	-4.55	-37.38	16.73	13.34	-3.39	-25.44
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
3–5	60	10	29.62	32.86	10.05	3.25	9.88	3.25*	9.88	29.62	30.70	1.08	3.53
6 or more	90	20	28.10	29.14	21.82	1.04	3.58	1.04	3.58	28.10	31.63	3.53	11.17
Percent enrolled: Hispanic ⁷													
1–3 or None/unknown	70	10	40.09	37.82	53.75	-2.27	-5.99	-2.27	-5.99	40.09	38.42	-1.67	-4.34
4–6	70	10	35.52	35.95	32.91	0.43	1.20	0.43	1.20	35.52	34.12	-1.40	-4.11
7–15	60	10	20.25	21.39	13.34	1.15	5.35	1.15	5.35	20.25	22.04	1.79	8.13
16 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias1	Relative bias2	Estimated bias3	Relative bias2	Full sample, base weighted	Respondents, non-response adjusted4	Estimated bias5	Relative bias2
Total undergraduate enrollment⁷													
1–1,601	20	10	24.53	17.77	65.25	-6.76	-38.01	-6.76*	-38.01	24.53	19.83	-4.70	-23.70
1,602–4,474	90	10	30.39	33.60	11.02	3.21	9.56	3.21*	9.56	30.39	33.31	2.92	8.76
4,475–13,842	70	10	15.40	15.97	11.96	0.57	3.58	0.57	3.58	15.40	16.92	1.52	9.00
13,843 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total male undergraduate enrollment⁷													
1–646	40	10	28.93	22.90	65.25	-6.03	-26.31	-6.03*	-26.31	28.93	24.29	-4.64	-19.12
647–1,908	90	10	26.65	29.02	12.35	2.37	8.18	2.37*	8.18	26.65	29.30	2.65	9.05
1,909–5,918	70	10	14.93	15.64	10.63	0.71	4.56	0.71	4.56	14.93	16.79	1.87	11.11
5,919 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total female undergraduate enrollment⁷													
1–950	20	10	24.84	17.91	66.58	-6.93	-38.68	-6.93*	-38.68	24.84	20.35	-4.48	-22.01
951–2,562	100	10	30.59	33.42	13.51	2.83	8.48	2.83*	8.48	30.59	33.16	2.57	7.76
2,563–7,625	70	10	15.65	16.68	9.47	1.03	6.15	1.03	6.15	15.65	17.19	1.54	8.98
7,626 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total graduate enrollment⁷													
1–626	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
627–1,820	60	10	24.65	27.07	10.03	2.43	8.96	2.43*	8.96	24.65	27.25	2.60	9.55
1,821–4,414	80	10	21.38	22.12	16.97	0.73	3.32	0.73	3.32	21.38	23.00	1.61	7.01
4,415 or more	60	10	12.85	12.78	13.28	-0.07	-0.56	-0.07	-0.56	12.85	13.75	0.90	6.56
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total male graduate enrollment⁷													
1–204	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
205–632	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
633–1,677	80	10	23.44	24.82	15.13	1.38	5.56	1.38	5.56	23.44	26.23	2.79	10.63
1,678 or more	60	10	13.96	13.55	16.45	-0.41	-3.05	-0.41	-3.05	13.96	14.83	0.87	5.87
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias1	Relative bias2	Estimated bias3	Relative bias2	Full sample, base weighted	Respondents, non-response adjusted4	Estimated bias5	Relative bias2	
Total female graduate enrollment ⁷														
1–407	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
408–1,098	70	10	25.80	27.68	14.43	1.89	6.81	1.89	6.81	25.80	27.67	1.87	6.75	
1,099–2,586	80	10	20.59	22.14	11.24	1.55	7.01	1.55	7.01	20.59	22.00	1.41	6.42	
2,587 or more	60	10	12.80	12.94	11.95	0.14	1.09	0.14	1.09	12.80	13.68	0.88	6.44	
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	30	10	15.33	14.09	31.01	-1.24	-8.81	-1.24	-8.81	15.33	15.98	0.64	4.04	
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
93 or more	110	10	59.52	60.11	52.09	0.59	0.98	0.59*	0.98	59.52	58.22	-1.30	-2.23	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷														
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
43–60	60	10	33.90	34.02	32.46	0.11	0.33	0.11	0.33	33.90	33.12	-0.78	-2.37	
61 or more	110	10	49.97	48.92	63.31	-1.06	-2.16	-1.06	-2.16	49.97	49.06	-0.92	-1.87	
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷														
63 or less	80	10	38.68	36.61	59.54	-2.07	-5.65	-2.07	-5.65	38.68	38.26	-0.42	-1.10	
64–79	80	10	29.18	30.15	19.42	0.97	3.21	0.97*	3.21	29.18	29.55	0.36	1.23	
80–98	60	10	32.14	33.24	21.04	1.10	3.31	1.10	3.31	32.14	32.19	0.06	0.18	
99 or more	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-8. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	110	20	44.49	40.31	86.69	-4.19	-10.38	-4.19	-10.38	44.49	42.58	-1.91	-4.48

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-9. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree of urbanization													
Large city	10	10	48.97	33.03	87.05	-15.94	-48.27	-15.94*	-48.27	49.03	34.42	-14.61	-42.45
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Large suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small suburb	†	†	†	†	†	†	†	†	†	†	†	†	†
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area distant or remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†
Institution region ⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Hispanic-Serving Institution													
Yes	10	10	25.04	21.73	32.94	-3.31	-15.22	-3.31	-15.22	24.95	22.21	-2.74	-12.35
No	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving federal grant aid ⁷													
1-36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
37-52	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
53-71	10	10	32.29	36.65	21.88	4.36	11.90	4.36	11.90	32.33	36.68	4.35	11.87
72 or more	30	10	61.20	54.11	78.12	-7.09	-13.10	-7.09	-13.10	61.15	52.94	-8.21	-15.51
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-9. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent receiving state/local grant aid⁷													
1-6	40	10	91.40	93.55	86.26	2.15	2.30	2.15	2.30	91.39	92.07	0.68	0.74
7-24	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25-43	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
44 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving institution grant aid⁷													
1-5	30	10	84.53	78.05	100.00	-6.48	-8.30	-6.48*	-8.30	84.51	73.87	-10.63*	-14.40
6-26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
27-67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving student loan aid⁷													
1-36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
37-64	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
65-82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid⁷													
\$1-\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,673-\$15,229	10	10	39.62	26.31	71.41	-13.31	-50.58	-13.31*	-50.58	39.67	29.78	-9.89	-33.21
\$15,230-\$21,352	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$21,353 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-9. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted non-respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent enrolled: Black, non-Hispanic⁷													
1-4	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
5-9 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10-20	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
21 or more	20	10	42.87	32.10	68.58	-10.76	-33.53	-10.76	-33.53	42.80	37.73	-5.07	-13.43
Percent enrolled: Asian or Pacific Islander⁷													
1 or None/unknown	20	10	43.11	49.00	29.05	5.89	12.02	5.89	12.02	43.17	51.46	8.29	16.12
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
3-5	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
6 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Hispanic⁷													
1-3 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
4-6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7-15	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
16 or more	20	10	44.24	48.97	32.94	4.73	9.66	4.73	9.66	44.18	48.46	4.28	8.83
Total undergraduate enrollment⁷													
1-1,601	40	10	98.08	97.28	100.00	-0.80	-0.83	-0.80*	-0.83	98.08	96.93	-1.15	-1.18
1,602-4,474	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
4,475-13,842	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
13,843 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Total male undergraduate enrollment⁷													
1-646	40	10	97.64	98.56	95.43	0.92	0.94	0.92	0.94	97.63	98.42	0.79	0.80
647-1,908	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
1,909-5,918	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
5,919 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-9. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total female undergraduate enrollment ⁷													
1-950	30	10	93.85	91.27	100.00	-2.58	-2.82	-2.58*	-2.82	93.84	90.94	-2.90	-3.18
951-2,562	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
2,563-7,625	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
65-80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
81-92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
64-79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80-98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-9. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	20	10	56.53	43.91	79.07	-12.62	-28.74	-12.62*	-28.74	56.47	39.65	-16.81	-42.41
\$3,122–\$5,426	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-10. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree of urbanization													
Large city	30	10	20.39	14.45	53.03	-5.94	-41.08	-5.94*	-41.08	20.24	13.93	-6.31	-45.27
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Large suburb	30	10	27.79	30.92	10.56	3.13	10.13	3.13	10.13	27.84	27.03	-0.80	-2.97
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small suburb	†	†	†	†	†	†	†	†	†	†	†	†	†
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area distant or remote from town	†	†	†	†	†	†	†	†	†	†	†	†	†
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	20	10	35.64	36.42	31.40	0.77	2.12	0.77	2.12	35.71	44.56	8.84	19.85
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Hispanic-Serving Institution													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No	60	20	80.95	78.91	92.16	-2.04	-2.58	-2.04	-2.58	81.11	81.74	0.64	0.78
Percent receiving federal grant aid⁷													
1-36	†	†	†	†	†	†	†	†	†	†	†	†	†
37-52	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
53-71	30	10	26.58	24.22	39.54	-2.36	-9.74	-2.36	-9.74	26.63	22.58	-4.05	-17.95
72 or more	50	20	69.60	71.27	60.46	1.66	2.33	1.66	2.33	69.55	72.79	3.24	4.45
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-10. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent receiving state/local grant aid⁷													
1-6	60	10	77.72	78.24	74.87	0.52	0.66	0.52	0.66	77.68	77.51	-0.17	-0.22
7-24	20	10	8.39	7.62	12.63	-0.77	-10.13	-0.77	-10.13	8.40	7.08	-1.32	-18.64
25-43	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent receiving institution grant aid⁷													
1-5	50	10	73.93	75.62	64.61	1.69	2.24	1.69	2.24	73.88	77.17	3.29	4.26
6-26	20	10	16.80	14.16	31.30	-2.64	-18.62	-2.64	-18.62	16.83	13.52	-3.31	-24.45
27-67	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Percent receiving student loan aid⁷													
1-36	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
37-64	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
65-82	20	10	22.62	22.21	24.88	-0.41	-1.85	-0.41	-1.85	22.66	19.03	-3.63	-19.07
83 or more	50	10	38.99	36.23	54.18	-2.76	-7.63	-2.76	-7.63	38.88	32.16	-6.72	-20.90
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Average net price among students receiving grant or scholarship aid⁷													
\$1-\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,673-\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$15,230-\$21,352	40	10	22.17	22.33	21.28	0.16	0.73	0.16	0.73	22.21	22.92	0.71	3.10
\$21,353 or more	20	10	11.38	9.67	20.80	-1.71	-17.72	-1.71	-17.72	11.22	8.84	-2.38	-26.89
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-10. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percent enrolled: Black, non-Hispanic ⁷													
1-4	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
5-9 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10-20	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
21 or more	30	10	40.99	39.36	49.97	-1.63	-4.15	-1.63	-4.15	40.88	48.50	7.62	15.72
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	40	10	65.17	67.32	53.32	2.15	3.20	2.15	3.20	65.29	71.52	6.23	8.71
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
3-5	20	10	14.33	10.95	32.94	-3.38	-30.90	-3.38	-30.90	14.17	10.17	-4.01	-39.39
6 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ⁷													
1-3 or None/unknown	20	10	45.02	46.47	37.09	1.44	3.11	1.44	3.11	45.11	51.82	6.71	12.94
4-6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7-15	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
16 or more	40	10	30.15	30.45	28.50	0.30	0.98	0.30	0.98	30.02	26.40	-3.62	-13.70
Total undergraduate enrollment ⁷													
1-1,601	50	10	89.60	90.54	84.41	0.94	1.04	0.94	1.04	89.58	90.77	1.19	1.31
1,602-4,474	30	10	9.92	9.10	14.41	-0.82	-8.97	-0.82	-8.97	9.94	8.85	-1.08	-12.24
4,475-13,842	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Total male undergraduate enrollment ⁷													
1-646	60	10	91.69	93.03	84.32	1.34	1.44	1.34	1.44	91.67	92.59	0.92	0.99
647-1,908	20	10	5.40	5.07	7.21	-0.33	-6.47	-0.33	-6.47	5.41	5.37	-0.04	-0.72
1,909-5,918	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
5,919 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-10. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total female undergraduate enrollment⁷													
1-950	50	10	88.60	88.04	91.70	-0.56	-0.64	-0.56	-0.64	88.58	89.75	1.17	1.30
951-2,562	30	10	10.64	11.29	7.04	0.65	5.80	0.65	5.80	10.66	9.68	-0.98	-10.11
2,563-7,625	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†	†	†	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid⁷													
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
65-80	30	10	25.34	22.46	41.18	-2.88	-12.83	-2.88	-12.83	25.39	19.59	-5.80	-29.61
81-92	30	10	27.45	24.28	44.91	-3.18	-13.08	-3.18	-13.08	27.32	24.57	-2.75	-11.19
93 or more	10	10	32.70	36.11	13.91	3.42	9.46	3.42	9.46	32.76	41.17	8.41	20.43
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25-42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
43-60	30	10	17.06	17.90	12.56	0.84	4.69	0.84	4.69	16.90	17.92	1.02	5.68
61 or more	50	10	65.90	67.15	59.20	1.25	1.86	1.25	1.86	66.02	69.63	3.61	5.18
Private institution tuition and fees as percent of core revenues (FASB reporting)⁷													
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
64-79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80-98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
99 or more	40	10	22.42	19.58	38.68	-2.84	-14.50	-2.84	-14.50	22.27	17.94	-4.33	-24.15

See notes at end of table.

Table J-10. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	40	10	60.76	56.87	83.01	-3.89	-6.84	-3.89	-6.84	60.88	59.36	-1.52	-2.55
\$3,122–\$5,426	30	10	29.21	31.35	16.99	2.14	6.81	2.14	6.81	29.27	29.85	0.58	1.95
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Carnegie classification code													
Associate's	50	10	27.34	25.69	44.59	-1.64	-6.40	-1.64	-6.40	27.21	26.64	-0.56	-2.11
Research and Doctoral	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Master's	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's	50	10	17.82	18.12	14.67	0.30	1.66	0.30	1.66	17.81	16.90	-0.91	-5.39
Special focus and other	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unavailable or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Degree of urbanization													
Large city	90	10	35.29	35.96	28.30	0.67	1.85	0.67	1.85	35.31	36.31	1.01	2.77
Mid-size city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Large suburb	60	10	29.34	26.89	55.05	-2.45	-9.11	-2.45*	-9.11	29.52	27.00	-2.52	-9.33
Mid-size suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	60	10	25.44	25.33	26.64	-0.11	-0.45	-0.11	-0.45	25.58	26.89	1.31	4.87
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Hispanic-Serving Institution													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No	190	30	85.93	85.58	89.63	-0.35	-0.41	-0.35	-0.41	85.84	86.41	0.57	0.66
Percent receiving federal grant aid⁷													
1–36	10	10	3.21	2.29	12.88	-0.92	-40.30	-0.92	-40.30	3.23	2.37	-0.86	-36.15
37–52	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
53–71	60	10	28.14	27.75	32.30	-0.40	-1.43	-0.40	-1.43	28.31	30.31	2.00	6.59
72 or more	150	10	62.55	64.82	38.75	2.27	3.50	2.27*	3.50	62.33	62.20	-0.13	-0.21
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving state/local grant aid⁷													
1–6	140	20	65.01	64.35	71.96	-0.66	-1.03	-0.66	-1.03	65.20	64.26	-0.94	-1.47
7–24	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–43	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving institution grant aid⁷													
1–5	60	10	31.24	30.69	37.09	-0.56	-1.81	-0.56	-1.81	31.24	29.19	-2.04	-6.99
6–26	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
27–67	50	10	20.61	19.57	31.54	-1.04	-5.32	-1.04	-5.32	20.73	18.78	-1.95	-10.38
68 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent receiving student loan aid⁷													
1–36	0	10	2.12	0.58	18.27	-1.54*	263.27	-1.54*	-263.27	2.14	0.70	-1.44*	205.65
37–64	10	10	3.23	2.40	11.96	-0.83	-34.71	-0.83	-34.71	3.25	2.44	-0.80	-32.92
65–82	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
83 or more	170	20	70.60	71.46	61.54	0.86	1.21	0.86	1.21	70.42	70.54	0.12	0.17
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Average net price among students receiving grant or scholarship aid ⁷													
\$1–\$8,672	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$15,230–\$21,352	80	10	41.82	41.09	49.50	-0.73	-1.78	-0.73	-1.78	41.67	42.97	1.30	3.03
\$21,353 or more	140	10	52.41	53.03	45.86	0.62	1.18	0.62	1.18	52.53	51.42	-1.11	-2.15
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ⁷													
1–4	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
5–9 or None/unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10–20	60	10	22.27	22.39	21.02	0.12	0.53	0.12	0.53	22.39	21.73	-0.67	-3.07
21 or more	100	20	47.38	45.82	63.74	-1.56	-3.40	-1.56	-3.40	47.47	49.03	1.56	3.19
Percent enrolled: Asian or Pacific Islander ⁷													
1 or None/unknown	100	20	44.73	42.80	64.92	-1.92	-4.50	-1.92*	-4.50	44.69	43.50	-1.19	-2.73
2	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
3–5	60	10	28.23	29.30	17.04	1.07	3.64	1.07	3.64	28.11	28.93	0.82	2.83
6 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ⁷													
1–3 or None/unknown	50	10	29.05	26.98	50.79	-2.07	-7.68	-2.07	-7.68	28.84	28.21	-0.63	-2.23
4–6	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
7–15	70	10	27.88	27.71	29.67	-0.17	-0.62	-0.17	-0.62	28.04	26.50	-1.54	-5.82
16 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Total undergraduate enrollment ⁷													
1–1,601	110	10	67.54	69.38	48.24	1.84	2.65	1.84	2.65	67.75	71.30	3.55*	4.98
1,602–4,474	80	10	21.71	21.16	27.43	-0.55	-2.58	-0.55	-2.58	21.74	19.86	-1.88	-9.45
4,475–13,842	20	10	6.57	5.50	17.80	-1.07	-19.48	-1.07	-19.48	6.30	5.00	-1.30*	-26.11
13,843 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Total male undergraduate enrollment⁷														
1–646	90	10	55.43	55.78	51.82	0.34	0.62	0.34	0.62	55.57	56.00	0.42	0.76	
647–1,908	100	10	34.47	34.97	29.27	0.50	1.42	0.50	1.42	34.58	35.43	0.85	2.40	
1,909–5,918	30	10	6.87	6.15	14.34	-0.71	-11.57	-0.71	-11.57	6.60	5.65	-0.95	-16.78	
5,919 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total female undergraduate enrollment⁷														
1–950	110	10	63.54	66.88	28.46	3.34*	5.00	3.34*	5.00	63.72	68.85	5.13*	7.45	
951–2,562	80	10	24.15	23.19	34.17	-0.96	-4.12	-0.96	-4.12	24.19	21.74	-2.45	-11.26	
2,563–7,625	30	10	8.23	6.07	30.85	-2.16*	-35.50	-2.16*	-35.50	8.27	5.79	-2.47*	-42.68	
7,626 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Total graduate enrollment⁷														
1–626	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
627–1,820	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,821–4,414	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
4,415 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	150	20	68.82	68.69	70.13	-0.12	-0.18	-0.12	-0.18	68.83	71.07	2.25	3.16	
Total male graduate enrollment⁷														
1–204	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
205–632	10	10	5.23	4.24	15.65	-0.99	-23.43	-0.99	-23.43	5.26	4.05	-1.21	-29.82	
633–1,677	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,678 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	150	20	68.82	68.69	70.13	-0.12	-0.18	-0.12	-0.18	68.83	71.07	2.25	3.16	
Total female graduate enrollment⁷														
1–407	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
408–1,098	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
1,099–2,586	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
2,587 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
None or unknown	150	20	68.82	68.69	70.13	-0.12	-0.18	-0.12	-0.18	68.83	71.07	2.25	3.16	

See notes at end of table.

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	20	10	13.40	11.48	33.38	-1.93	-16.80	-1.93	-16.80	13.48	12.90	-0.59	-4.55
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
81–92	100	10	37.11	37.31	35.01	0.20	0.54	0.20	0.54	37.34	35.96	-1.37	-3.82
93 or more	40	10	23.03	22.99	23.47	-0.04	-0.18	-0.04	-0.18	22.56	23.14	0.58	2.50
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	90	10	42.09	42.55	37.24	0.46	1.07	0.46	1.07	42.04	43.28	1.24	2.87
43–60	30	10	15.86	14.08	34.81	-1.78	-12.66	-1.78	-12.66	15.85	14.22	-1.64*	-11.51
61 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	10	10	3.56	2.75	11.86	-0.81	-29.53	-0.81	-29.53	3.58	2.44	-1.13*	-46.44
64–79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80–98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
99 or more	130	20	59.47	58.76	66.73	-0.71	-1.21	-0.71	-1.21	59.42	60.96	1.54	2.52

See notes at end of table.

Table J-11. Institution nonresponse bias analysis before and after weight adjustment, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted respondents	Un-weighted non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	110	20	53.43	53.25	55.32	-0.19	-0.35	-0.19	-0.35	53.56	54.94	1.38	2.51
\$3,122–\$5,426	90	10	33.96	35.06	22.66	1.10	3.15	1.10	3.15	33.75	34.46	0.71	2.06
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of all sample cases (using the base weight adjusted for subsampling).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base weighted non-response rate and the difference between the mean of respondent cases (using base weight adjusted for subsampling) and the mean of nonrespondent cases (using the base weight adjusted for subsampling).

⁴ Base weight, adjusted for subsampling, multiplicity, and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-12. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for all institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution type					
Public					
Less-than-2-year	4.22	3.71	3.46	0.76*	0.25
2-year	15.15	15.34	15.71	-0.56*	-0.37
4-year non-doctorate-granting	4.74	4.63	4.65	0.09	-0.02
4-year doctorate-granting	4.70	4.63	4.87	-0.17*	-0.24
Private nonprofit					
Less-than-4-year	3.39	3.34	3.40	-0.01	-0.06
4-year non-doctorate-granting	11.28	11.70	13.41	-2.13*	-1.71*
4-year doctorate-granting	8.40	8.65	8.59	-0.19	0.06
Private for-profit					
Less-than-2-year	18.56	21.71	18.94	-0.38	2.77
2-year	20.72	18.08	18.03	2.69*	0.05
4-year	8.84	8.19	8.94	-0.10	-0.75
Carnegie classification code					
Associate's	27.51	26.77	27.65	-0.14	-0.88
Research and Doctoral	4.08	3.97	4.09	-0.01	-0.12
Master's	9.62	9.58	9.89	-0.27	-0.31
Bachelor's	10.21	10.33	11.22	-1.01*	-0.89
Special focus and other	9.49	10.05	10.66	-1.17*	-0.61
Unavailable or unknown	39.10	39.29	36.48	2.62*	2.81
Degree of urbanization					
Large city	22.79	27.93	23.60	-0.81	4.33
Mid-size city	11.54	11.20	12.01	-0.47	-0.81
Small city	11.82	11.09	11.75	0.07	-0.66
Large suburb	19.16	18.60	18.79	0.37	-0.19
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	7.90	8.38	8.21	-0.31	0.17
Urban area remote from town	5.34	4.69	5.35	-0.01	-0.66
Rural area on fringe of town	16.04	12.88	14.73	1.31	-1.85
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	7.75	6.59	8.06	-0.31	-1.47*
Mideast	13.78	14.32	13.57	0.21	0.75
Great Lakes	14.35	14.02	14.76	-0.41	-0.74
Plains	8.84	9.16	8.98	-0.14	0.18
Southeast	27.70	27.04	27.09	0.61	-0.05
Southwest	9.55	9.64	9.81	-0.26	-0.17
Rocky Mountains	‡	‡	‡	‡	‡
Far West	10.66	11.86	10.86	-0.20	1.00
Historically Black college or university					
Yes	‡	‡	‡	‡	‡
No or Unavailable or unknown	98.90	98.72	98.85	0.05*	-0.13
Hispanic-Serving Institution					
Yes	12.88	14.43	12.47	0.41	1.96
No	87.12	85.57	87.53	-0.41	-1.96

See notes at end of table.

Table J-12. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for all institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving federal grant aid ³					
1–36	12.31	11.73	12.59	-0.28	-0.86
37–52	14.68	14.14	15.08	-0.40	-0.94
53–71	27.39	27.10	27.84	-0.45	-0.74
72 or more	38.62	39.60	36.64	1.98*	2.96
None or unknown	6.99	7.44	7.85	-0.86*	-0.41
Percent receiving state/local grant aid ³					
1–6	45.35	45.68	43.74	1.61*	1.94
7–24	17.26	17.72	17.65	-0.39	0.07
25–43	14.15	13.62	14.59	-0.44	-0.97
44 or more	16.25	15.55	16.17	0.08	-0.62
None or unknown	6.99	7.44	7.85	-0.86*	-0.41
Percent receiving institution grant aid ³					
1–5	43.31	45.13	40.93	2.38*	4.20
6–26	18.80	18.20	19.04	-0.24	-0.84
27–67	15.10	13.82	15.41	-0.31	-1.59
68 or more	15.80	15.42	16.77	-0.97*	-1.35
None or unknown	6.99	7.44	7.85	-0.86*	-0.41
Percent receiving student loan aid ³					
1–36	23.77	21.00	22.27	1.50	-1.27
37–64	17.39	21.40	17.23	0.16	4.17
65–82	23.98	22.69	24.52	-0.54	-1.83
83 or more	27.87	27.46	28.13	-0.26	-0.67
None or unknown	6.99	7.44	7.85	-0.86*	-0.41
Average net price among students receiving grant or scholarship aid ³					
\$1–\$8,672	26.99	25.20	25.57	1.42	-0.37
\$8,673–\$15,229	26.32	29.50	24.99	1.33*	4.51
\$15,230–\$21,352	23.35	22.25	24.46	-1.11*	-2.21
\$21,353 or more	15.36	14.79	16.10	-0.74*	-1.31
None or unknown	7.97	8.26	8.88	-0.91*	-0.62
Percent enrolled: Black, non-Hispanic ³					
1–4	30.82	31.67	30.59	0.23	1.08
5–9 or None/unknown	21.01	21.65	21.48	-0.47	0.17
10–20	18.74	17.39	19.18	-0.44	-1.79
21 or more	29.43	29.29	28.75	0.68	0.54
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	51.13	47.65	50.02	1.11	-2.37
2	17.15	17.64	17.63	-0.48	0.01
3–5	18.44	22.33	19.05	-0.61	3.28
6 or more	13.29	12.38	13.30	-0.01	-0.92
Percent enrolled: Hispanic ³					
1–3 or None/unknown	43.27	41.77	42.51	0.76	-0.74
4–6	17.03	17.07	17.57	-0.54	-0.50
7–15	16.18	16.59	16.50	-0.32	0.09
16 or more	23.51	24.56	23.42	0.09	1.14

See notes at end of table.

Table J-12. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for all institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total undergraduate enrollment³					
1–1,601	61.61	62.13	60.23	1.38*	1.90
1,602–4,474	15.60	15.26	16.33	-0.73*	-1.07
4,475–13,842	11.78	11.81	12.03	-0.25	-0.22
13,843 or more	7.54	7.34	7.42	0.12	-0.08
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment³					
1–646	60.55	61.17	59.13	1.42*	2.04
647–1,908	16.67	16.12	17.40	-0.73*	-1.28
1,909–5,918	11.79	11.92	12.04	-0.25	-0.12
5,919 or more	7.52	7.33	7.43	0.09	-0.10
None or unknown	‡	‡	‡	‡	‡
Total female undergraduate enrollment³					
1–950	60.18	60.72	58.73	1.45*	1.99
951–2,562	17.05	16.61	17.81	-0.76*	-1.20
2,563–7,625	11.66	11.78	11.93	-0.27	-0.15
7,626 or more	7.64	7.44	7.54	0.10	-0.10
None or unknown	‡	‡	‡	‡	‡
Total graduate enrollment³					
1–626	13.09	13.78	14.47	-1.38*	-0.69
627–1,820	6.01	5.84	6.24	-0.23*	-0.40
1,821–4,414	4.41	4.29	4.53	-0.12	-0.24
4,415 or more	3.54	3.48	3.51	0.03	-0.03
None or unknown	72.94	72.61	71.25	1.69*	1.36
Total male graduate enrollment³					
1–204	12.52	13.26	13.88	-1.36*	-0.62
205–632	6.35	6.20	6.58	-0.23*	-0.38
633–1,677	4.65	4.42	4.79	-0.14	-0.37
1,678 or more	3.53	3.51	3.50	0.03	0.01
None or unknown	72.94	72.61	71.25	1.69*	1.36
Total female graduate enrollment³					
1–407	13.08	13.62	14.42	-1.34*	-0.80
408–1,098	5.98	5.92	6.25	-0.27*	-0.33
1,099–2,586	4.39	4.30	4.50	-0.11	-0.20
2,587 or more	3.60	3.54	3.58	0.02	-0.04
None or unknown	72.94	72.61	71.25	1.69*	1.36
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid³					
64 or less	18.41	17.21	18.16	0.25	-0.95
65–80	27.02	27.31	27.60	-0.58	-0.29
81–92	24.36	27.49	24.79	-0.43	2.70
93 or more	30.21	27.99	29.45	0.76	-1.46

See notes at end of table.

Table J-12. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for all institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	19.80	21.78	19.89	-0.09	1.89
25–42	20.76	21.21	21.95	-1.19*	-0.74
43–60	22.13	22.62	23.21	-1.08	-0.59
61 or more	37.32	34.39	34.95	2.37	-0.56
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	31.85	32.74	33.39	-1.54*	-0.65
14–23	18.78	20.10	19.08	-0.30	1.02
24–32	22.02	21.16	21.85	0.17	-0.69
33 or more	27.35	26.00	25.69	1.66	0.31
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	32.74	28.66	31.00	1.74	-2.34
64–79	26.60	30.82	27.04	-0.44	3.78
80–98	23.45	22.55	24.00	-0.55	-1.45
99 or more	17.21	17.97	17.96	-0.75*	0.01
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	22.14	24.64	22.19	-0.05	2.45
\$4,145–\$5,619	29.12	29.33	28.87	0.25	0.46
\$5,620–\$7,662	22.73	22.63	22.84	-0.11	-0.21
\$7,663 or more	26.01	23.40	26.09	-0.08	-2.69
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	36.15	39.87	34.11	2.04	5.76
\$3,122–\$5,426	31.87	29.44	31.37	0.50	-1.93
\$5,427–\$8,864	15.54	15.37	17.19	-1.65*	-1.82
\$8,865 or more	16.44	15.32	17.32	-0.88	-2.00

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-13. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public less-than-2-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Degree of urbanization						
Large city	‡	‡	‡	‡	‡	‡
Mid-size city	‡	‡	‡	‡	‡	‡
Small city	†	†	†	†	†	†
Large suburb	‡	‡	‡	‡	‡	‡
Mid-size suburb	†	†	†	†	†	†
Small suburb	‡	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡	‡
Institution region²						
New England	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡	‡
Hispanic-Serving Institution						
Yes	‡	‡	‡	‡	‡	‡
No	‡	‡	‡	‡	‡	‡
Percent receiving federal grant aid³						
1–36	‡	‡	‡	‡	‡	‡
37–52	‡	‡	‡	‡	‡	‡
53–71	‡	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³						
1–6	‡	‡	‡	‡	‡	‡
7–24	‡	‡	‡	‡	‡	‡
25–43	‡	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡
Percent receiving institution grant aid³						
1–5	‡	‡	‡	‡	‡	‡
6–26	‡	‡	‡	‡	‡	‡
27–67	‡	‡	‡	‡	‡	‡
68 or more	†	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡	‡
Percent receiving student loan aid³						
1–36	‡	‡	‡	‡	‡	‡
37–64	‡	‡	‡	‡	‡	‡
65–82	‡	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-13. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Average net price among students receiving grant or scholarship aid ³					
\$1–\$8,672	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡
\$15,230–\$21,352	†	†	†	†	†
\$21,353 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ³					
1–4	‡	‡	‡	‡	‡
5–9 or None/unknown	‡	‡	‡	‡	‡
10–20	‡	‡	‡	‡	‡
21 or more	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	‡	‡	‡	‡	‡
2	‡	‡	‡	‡	‡
3–5	‡	‡	‡	‡	‡
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ³					
1–3 or None/unknown	‡	‡	‡	‡	‡
4–6	‡	‡	‡	‡	‡
7–15	‡	‡	‡	‡	‡
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment ³					
1–1,601	‡	‡	‡	‡	‡
1,602–4,474	‡	‡	‡	‡	‡
4,475–13,842	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total male undergraduate enrollment ³					
1–646	‡	‡	‡	‡	‡
647–1,908	‡	‡	‡	‡	‡
1,909–5,918	‡	‡	‡	‡	‡
5,919 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total female undergraduate enrollment ³					
1–950	‡	‡	‡	‡	‡
951–2,562	‡	‡	‡	‡	‡
2,563–7,625	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	‡	‡	‡	‡	‡
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-13. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	‡	‡	‡	‡	‡
14–23	‡	‡	‡	‡	‡
24–32	‡	‡	‡	‡	‡
33 or more	‡	‡	‡	‡	‡
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	‡	‡	‡	‡	‡
\$5,620–\$7,662	‡	‡	‡	‡	‡
\$7,663 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

Table J-14. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 2-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Degree of urbanization					
Large city	13.12	11.73	12.87	0.25	-1.14
Mid-size city	7.34	7.10	7.13	0.21	-0.03
Small city	11.03	10.49	10.81	0.22	-0.32
Large suburb	13.09	15.47	12.57	0.52	2.90
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	23.54	25.00	23.88	-0.34	1.12
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	30.59	32.86	31.25	-0.66*	1.61
Southwest	17.32	15.70	17.43	-0.11	-1.73
Rocky Mountains	‡	‡	‡	‡	‡
Far West	14.19	14.22	13.73	0.46*	0.49
Historically Black college or university					
Yes	‡	‡	‡	‡	‡
No or Unavailable or unknown	98.82	98.85	98.79	0.03	0.06
Hispanic-Serving Institution					
Yes	11.90	14.94	11.33	0.57*	3.61
No	88.10	85.06	88.67	-0.57*	-3.61
Percent receiving federal grant aid³					
1-36	10.47	8.77	10.35	0.12	-1.58
37-52	18.58	18.43	18.10	0.48*	0.33
53-71	45.48	46.48	45.54	-0.06	0.94
72 or more	20.43	21.68	20.71	-0.28	0.97
None or unknown	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³					
1-6	‡	‡	‡	‡	‡
7-24	31.92	32.24	32.21	-0.29	0.03
25-43	24.50	25.24	24.25	0.25	0.99
44 or more	25.64	25.40	25.32	0.32	0.08
None or unknown	‡	‡	‡	‡	‡
Percent receiving institution grant aid³					
1-5	38.82	38.68	38.18	0.64*	0.50
6-26	42.43	43.45	42.50	-0.07	0.95
27-67	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-14. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving student loan aid³					
1–36	69.60	69.82	69.45	0.15	0.37
37–64	20.64	21.05	20.42	0.22	0.63
65–82	‡	‡	‡	‡	‡
83 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid³					
\$1–\$8,672	70.69	70.30	70.23	0.46	0.07
\$8,673–\$15,229	20.16	19.96	20.17	-0.01	-0.21
\$15,230–\$21,352	‡	‡	‡	‡	‡
\$21,353 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic³					
1–4	30.77	30.95	30.98	-0.21	-0.03
5–9 or None/unknown	22.00	21.83	21.94	0.06	-0.11
10–20	22.38	20.62	22.20	0.18	-1.58
21 or more	24.85	26.60	24.87	-0.02	1.73
Percent enrolled: Asian or Pacific Islander³					
1 or None/unknown	51.75	50.75	52.90	-1.15*	-2.15
2	13.26	13.87	13.08	0.18	0.79
3–5	21.40	22.04	20.98	0.42	1.06
6 or more	13.59	13.35	13.04	0.55*	0.31
Percent enrolled: Hispanic³					
1–3 or None/unknown	44.11	40.76	45.24	-1.13*	-4.48*
4–6	15.78	15.81	15.69	0.09	0.12
7–15	18.42	16.78	18.22	0.20	-1.44
16 or more	21.69	26.65	20.84	0.85*	5.81*
Total undergraduate enrollment³					
1–1,601	‡	‡	‡	‡	‡
1,602–4,474	19.66	19.82	20.75	-1.09*	-0.93
4,475–13,842	38.56	38.22	37.89	0.67*	0.33
13,843 or more	25.32	23.85	24.01	1.31*	-0.16
None or unknown	†	†	†	†	†
Total male undergraduate enrollment³					
1–646	‡	‡	‡	‡	‡
647–1,908	22.65	22.69	23.90	-1.25*	-1.21
1,909–5,918	36.65	36.41	35.87	0.78*	0.54
5,919 or more	25.32	23.81	24.00	1.32*	-0.19
None or unknown	†	†	†	†	†
Total female undergraduate enrollment³					
1–950	‡	‡	‡	‡	‡
951–2,562	19.83	19.65	20.90	-1.07*	-1.25
2,563–7,625	37.35	37.22	36.75	0.60*	0.47
7,626 or more	26.37	25.03	24.99	1.38*	0.04
None or unknown	†	†	†	†	†

See notes at end of table.

Table J-14. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	33.46	30.56	32.72	0.74*	-2.16
65–80	35.57	37.85	35.64	-0.07	2.21
81–92	16.98	16.95	17.38	-0.40	-0.43
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	53.48	55.32	52.50	0.98	2.82
25–42	28.81	26.74	28.97	-0.16	-2.23
43–60	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	51.68	52.09	52.49	-0.81*	-0.40
14–23	23.01	24.42	22.63	0.38*	1.79
24–32	‡	‡	‡	‡	‡
33 or more	‡	‡	‡	‡	‡
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	35.49	38.60	34.83	0.66*	3.77
\$4,145–\$5,619	35.47	35.11	35.34	0.13	-0.23
\$5,620–\$7,662	14.33	14.42	14.43	-0.10	-0.01
\$7,663 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-15. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year non-doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Carnegie classification code						
Associate's	‡	‡	‡	‡	‡	
Research and Doctoral	†	†	†	†	†	
Master's	‡	‡	‡	‡	‡	
Bachelor's	‡	‡	‡	‡	‡	
Special focus and other	‡	‡	‡	‡	‡	
Unavailable or unknown	†	†	†	†	†	
Degree of urbanization						
Large city	‡	‡	‡	‡	‡	
Mid-size city	‡	‡	‡	‡	‡	
Small city	‡	‡	‡	‡	‡	
Large suburb	‡	‡	‡	‡	‡	
Mid-size suburb	‡	‡	‡	‡	‡	
Small suburb	‡	‡	‡	‡	‡	
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡	
Urban area remote from town	‡	‡	‡	‡	‡	
Rural area on fringe of town	‡	‡	‡	‡	‡	
Rural area distant or remote from town	‡	‡	‡	‡	‡	
Institution region²						
New England	‡	‡	‡	‡	‡	
Mideast	‡	‡	‡	‡	‡	
Great Lakes	‡	‡	‡	‡	‡	
Plains	‡	‡	‡	‡	‡	
Southeast	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	
Far West	‡	‡	‡	‡	‡	
Historically Black college or university						
Yes	‡	‡	‡	‡	‡	
No or Unavailable or unknown	95.64	95.63	95.74	-0.10	-0.11	
Hispanic-Serving Institution						
Yes	‡	‡	‡	‡	‡	
No	94.89	95.22	94.82	0.07	0.40*	
Percent receiving federal grant aid³						
1-36	‡	‡	‡	‡	‡	
37-52	‡	‡	‡	‡	‡	
53-71	‡	‡	‡	‡	‡	
72 or more	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	
Percent receiving state/local grant aid³						
1-6	‡	‡	‡	‡	‡	
7-24	‡	‡	‡	‡	‡	
25-43	37.84	39.00	37.79	0.05	1.21	
44 or more	‡	‡	‡	‡	‡	
None or unknown	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-15. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving institution grant aid³					
1-5	‡	‡	‡	‡	‡
6-26	38.49	38.18	38.59	-0.10	-0.41
27-67	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent receiving student loan aid³					
1-36	‡	‡	‡	‡	‡
37-64	‡	‡	‡	‡	‡
65-82	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid³					
\$1-\$8,672	‡	‡	‡	‡	‡
\$8,673-\$15,229	‡	‡	‡	‡	‡
\$15,230-\$21,352	‡	‡	‡	‡	‡
\$21,353 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic³					
1-4	‡	‡	‡	‡	‡
5-9 or None/unknown	‡	‡	‡	‡	‡
10-20	‡	‡	‡	‡	‡
21 or more	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander³					
1 or None/unknown	‡	‡	‡	‡	‡
2	‡	‡	‡	‡	‡
3-5	‡	‡	‡	‡	‡
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic³					
1-3 or None/unknown	‡	‡	‡	‡	‡
4-6	‡	‡	‡	‡	‡
7-15	‡	‡	‡	‡	‡
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment³					
1-1,601	‡	‡	‡	‡	‡
1,602-4,474	‡	‡	‡	‡	‡
4,475-13,842	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total male undergraduate enrollment³					
1-646	‡	‡	‡	‡	‡
647-1,908	‡	‡	‡	‡	‡
1,909-5,918	‡	‡	‡	‡	‡
5,919 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†

See notes at end of table.

Table J-15. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment ³					
1-950	‡	‡	‡	‡	‡
951-2,562	‡	‡	‡	‡	‡
2,563-7,625	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total graduate enrollment ³					
1-626	‡	‡	‡	‡	‡
627-1,820	‡	‡	‡	‡	‡
1,821-4,414	‡	‡	‡	‡	‡
4,415 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total male graduate enrollment ³					
1-204	‡	‡	‡	‡	‡
205-632	‡	‡	‡	‡	‡
633-1,677	‡	‡	‡	‡	‡
1,678 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total female graduate enrollment ³					
1-407	‡	‡	‡	‡	‡
408-1,098	‡	‡	‡	‡	‡
1,099-2,586	‡	‡	‡	‡	‡
2,587 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65-80	‡	‡	‡	‡	‡
81-92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25-42	‡	‡	‡	‡	‡
43-60	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	‡	‡	‡	‡	‡
14-23	‡	‡	‡	‡	‡
24-32	‡	‡	‡	‡	‡
33 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-15. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After post-stratification adjustment			
		Mean		Difference	
	Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	‡	‡	‡	‡	‡
\$5,620–\$7,662	‡	‡	‡	‡	‡
\$7,663 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-16. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Carnegie classification code					
Associate's	†	†	†	†	†
Research and Doctoral	52.57	53.41	51.02	1.55*	2.39*
Master's	‡	‡	‡	‡	‡
Bachelor's	†	†	†	†	†
Special focus and other	‡	‡	‡	‡	‡
Unavailable or unknown	‡	‡	‡	‡	‡
Degree of urbanization					
Large city	24.68	24.51	24.30	0.38	0.21
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	‡	‡	‡	‡	‡
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	†	†	†	†	†
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	9.12	9.60	9.11	0.01	0.49
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	10.14	10.29	9.87	0.27*	0.42
Historically Black college or university					
Yes	‡	‡	‡	‡	‡
No or Unavailable or unknown	92.62	92.61	92.19	0.43*	0.42*
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	90.43	91.00	90.62	-0.19	0.38
Percent receiving federal grant aid³					
1–36	37.58	38.41	36.69	0.89*	1.72
37–52	30.59	30.99	30.33	0.26	0.66
53–71	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³					
1–6	‡	‡	‡	‡	‡
7–24	19.06	18.62	18.83	0.23	-0.21
25–43	31.25	30.68	31.10	0.15	-0.42
44 or more	32.67	34.80	32.40	0.27	2.40*
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-16. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving institution grant aid ³					
1–5	‡	‡	‡	‡	‡
6–26	‡	‡	‡	‡	‡
27–67	62.40	62.54	61.52	0.88*	1.02
68 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent receiving student loan aid ³					
1–36	‡	‡	‡	‡	‡
37–64	49.22	49.78	48.25	0.97*	1.53
65–82	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid ³					
\$1–\$8,672	‡	‡	‡	‡	‡
\$8,673–\$15,229	59.37	59.96	58.84	0.53*	1.12
\$15,230–\$21,352	13.89	14.21	13.68	0.21	0.53
\$21,353 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ³					
1–4	31.38	30.74	31.22	0.16	-0.48
5–9 or None/unknown	30.39	31.02	30.35	0.04	0.67
10–20	‡	‡	‡	‡	‡
21 or more	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	‡	‡	‡	‡	‡
2	‡	‡	‡	‡	‡
3–5	‡	‡	‡	‡	‡
6 or more	32.77	32.56	32.44	0.33	0.12
Percent enrolled: Hispanic ³					
1–3 or None/unknown	38.48	38.03	38.85	-0.37	-0.82
4–6	‡	‡	‡	‡	‡
7–15	21.18	22.12	21.28	-0.10	0.84
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment ³					
1–1,601	‡	‡	‡	‡	‡
1,602–4,474	‡	‡	‡	‡	‡
4,475–13,842	29.37	30.81	30.99	-1.62*	-0.18
13,843 or more	51.18	50.97	48.43	2.75*	2.54*
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment ³					
1–646	‡	‡	‡	‡	‡
647–1,908	‡	‡	‡	‡	‡
1,909–5,918	29.36	30.47	30.87	-1.51*	-0.40
5,919 or more	52.69	52.73	50.14	2.55*	2.59*
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-16. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment³					
1-950	‡	‡	‡	‡	‡
951-2,562	‡	‡	‡	‡	‡
2,563-7,625	29.31	30.84	30.77	-1.46*	0.07
7,626 or more	51.30	50.61	48.72	2.58*	1.89
None or unknown	‡	‡	‡	‡	‡
Total graduate enrollment³					
1-626	‡	‡	‡	‡	‡
627-1,820	‡	‡	‡	‡	‡
1,821-4,414	35.78	35.48	36.84	-1.06*	-1.36
4,415 or more	43.72	43.64	41.60	2.12*	2.04
None or unknown	†	†	†	†	†
Total male graduate enrollment³					
1-204	‡	‡	‡	‡	‡
205-632	‡	‡	‡	‡	‡
633-1,677	35.38	35.09	36.19	-0.81*	-1.10
1,678 or more	43.34	43.31	41.35	1.99*	1.96
None or unknown	†	†	†	†	†
Total female graduate enrollment³					
1-407	‡	‡	‡	‡	‡
408-1,098	‡	‡	‡	‡	‡
1,099-2,586	30.87	30.73	31.53	-0.66*	-0.80
2,587 or more	43.77	43.92	41.77	2.00*	2.15*
None or unknown	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid³					
64 or less	33.23	33.15	32.71	0.52*	0.44
65-80	‡	‡	‡	‡	‡
81-92	31.33	32.15	32.02	-0.69	0.13
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion³					
24 or less	‡	‡	‡	‡	‡
25-42	‡	‡	‡	‡	‡
43-60	37.33	36.54	37.20	0.13*	-0.66
61 or more	31.15	31.97	30.56	0.59*	1.41
Public institution tuition and fees as percent of core revenues (GASB reporting)³					
13 or less	‡	‡	‡	‡	‡
14-23	19.40	20.36	19.40	#	0.96
24-32	29.13	29.13	29.04	0.09	0.09
33 or more	38.09	38.53	37.66	0.43*	0.87

See notes at end of table.

Table J-16. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	‡	‡	‡	‡	‡
\$5,620–\$7,662	35.28	35.30	35.45	-0.17	-0.15
\$7,663 or more	58.84	58.89	58.57	0.27	0.32

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-17. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit less-than-4-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Carnegie classification code					
Associate's	‡	‡	‡	‡	‡
Research and Doctoral	†	†	†	†	†
Master's	†	†	†	†	†
Bachelor's	†	†	†	†	†
Special focus and other	‡	‡	‡	‡	‡
Unavailable or unknown	‡	‡	‡	‡	‡
Degree of urbanization					
Large city	‡	‡	‡	‡	‡
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	‡	‡	‡	‡	‡
Mid-size suburb	†	†	†	†	†
Small suburb	†	†	†	†	†
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	†	†	†	†	†
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	11.62	28.39	11.62	#	16.77*
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	†	†	†	†	†
Far West	‡	‡	‡	‡	‡
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	82.57	83.39	82.57	#	0.82
Percent receiving federal grant aid³					
1-36	‡	‡	‡	‡	‡
37-52	‡	‡	‡	‡	‡
53-71	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Percent receiving state/local grant aid³					
1-6	‡	‡	‡	‡	‡
7-24	‡	‡	‡	‡	‡
25-43	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†

See notes at end of table.

Table J-17. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Percent receiving institution grant aid³						
1-5	‡	‡	‡	‡	‡	‡
6-26	‡	‡	‡	‡	‡	‡
27-67	‡	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†
Percent receiving student loan aid³						
1-36	‡	‡	‡	‡	‡	‡
37-64	‡	‡	‡	‡	‡	‡
65-82	‡	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†	†
Average net price among students receiving grant or scholarship aid³						
\$1-\$8,672	‡	‡	‡	‡	‡	‡
\$8,673-\$15,229	‡	‡	‡	‡	‡	‡
\$15,230-\$21,352	‡	‡	‡	‡	‡	‡
\$21,353 or more	‡	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic³						
1-4	‡	‡	‡	‡	‡	‡
5-9 or None/unknown	‡	‡	‡	‡	‡	‡
10-20	‡	‡	‡	‡	‡	‡
21 or more	‡	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander³						
1 or None/unknown	‡	‡	‡	‡	‡	‡
2	‡	‡	‡	‡	‡	‡
3-5	‡	‡	‡	‡	‡	‡
6 or more	‡	‡	‡	‡	‡	‡
Percent enrolled: Hispanic³						
1-3 or None/unknown	‡	‡	‡	‡	‡	‡
4-6	‡	‡	‡	‡	‡	‡
7-15	‡	‡	‡	‡	‡	‡
16 or more	‡	‡	‡	‡	‡	‡
Total undergraduate enrollment³						
1-1,601	‡	‡	‡	‡	‡	‡
1,602-4,474	‡	‡	‡	‡	‡	‡
4,475-13,842	‡	‡	‡	‡	‡	‡
13,843 or more	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†
Total male undergraduate enrollment³						
1-646	‡	‡	‡	‡	‡	‡
647-1,908	‡	‡	‡	‡	‡	‡
1,909-5,918	‡	‡	‡	‡	‡	‡
5,919 or more	†	†	†	†	†	†
None or unknown	†	†	†	†	†	†

See notes at end of table.

Table J-17. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment ³					
1–950	‡	‡	‡	‡	‡
951–2,562	‡	‡	‡	‡	‡
2,563–7,625	‡	‡	‡	‡	‡
7,626 or more	†	†	†	†	†
None or unknown	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	‡	‡	‡	‡	‡
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25–42	‡	‡	‡	‡	‡
43–60	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡
80–98	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-18. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Carnegie classification code					
Associate's	‡	‡	‡	‡	‡
Research and Doctoral	†	†	†	†	†
Master's	19.17	18.23	17.46	1.71*	0.77
Bachelor's	56.41	57.71	55.07	1.34	2.64
Special focus and other	‡	‡	‡	‡	‡
Unavailable or unknown	†	†	†	†	†
Degree of urbanization					
Large city	23.99	24.44	24.23	-0.24	0.21
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	17.85	16.68	17.71	0.14	-1.03
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	24.16	23.42	24.90	-0.74	-1.48
Plains	10.65	12.72	10.35	0.30	2.37
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
Historically Black college or university					
Yes	‡	‡	‡	‡	‡
No or Unavailable or unknown	97.76	95.93	98.00	-0.24*	-2.07
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	97.27	97.14	96.99	0.28	0.15
Percent receiving federal grant aid³					
1–36	29.99	29.96	28.06	1.93*	1.90
37–52	29.26	29.02	27.88	1.38*	1.14
53–71	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³					
1–6	‡	‡	‡	‡	‡
7–24	23.42	23.99	22.19	1.23*	1.80
25–43	22.83	23.45	22.03	0.80	1.42
44 or more	26.84	25.26	25.55	1.29*	-0.29
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-18. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving institution grant aid ³					
1-5	‡	‡	‡	‡	‡
6-26	‡	‡	‡	‡	‡
27-67	‡	‡	‡	‡	‡
68 or more	67.71	66.40	65.52	2.19*	0.88
None or unknown	‡	‡	‡	‡	‡
Percent receiving student loan aid ³					
1-36	‡	‡	‡	‡	‡
37-64	16.30	16.84	15.20	1.10*	1.64
65-82	36.56	36.08	36.35	0.21	-0.27
83 or more	28.28	27.16	27.68	0.60	-0.52
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid ³					
\$1-\$8,672	‡	‡	‡	‡	‡
\$8,673-\$15,229	‡	‡	‡	‡	‡
\$15,230-\$21,352	43.37	43.33	41.55	1.82*	1.78
\$21,353 or more	30.58	29.72	29.57	1.01	0.15
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ³					
1-4	34.40	35.66	34.40	#	1.26
5-9 or None/unknown	30.30	28.90	29.85	0.45	-0.95
10-20	21.03	20.68	21.32	-0.29	-0.64
21 or more	‡	‡	‡	‡	‡
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	45.46	45.37	44.85	0.61	0.52
2	‡	‡	‡	‡	‡
3-5	17.33	19.71	17.41	-0.08	2.30
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ³					
1-3 or None/unknown	52.44	47.31	52.88	-0.44	-5.57*
4-6	21.61	26.84	21.82	-0.21	5.02*
7-15	17.48	16.71	16.46	1.02*	0.25
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment ³					
1-1,601	54.79	57.59	57.33	-2.54*	0.26
1,602-4,474	33.61	31.71	29.96	3.65*	1.75
4,475-13,842	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment ³					
1-646	50.51	53.99	53.29	-2.78*	0.70
647-1,908	37.98	34.99	34.08	3.90*	0.91
1,909-5,918	3.51	3.63	3.12	0.39*	0.51
5,919 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-18. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment³					
1-950	54.72	57.48	57.27	-2.55*	0.21
951-2,562	33.21	31.47	29.60	3.61*	1.87
2,563-7,625	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total graduate enrollment³					
1-626	52.50	53.13	53.18	-0.68	-0.05
627-1,820	13.67	12.58	12.61	1.06*	-0.03
1,821-4,414	‡	‡	‡	‡	‡
4,415 or more	‡	‡	‡	‡	‡
None or unknown	31.07	31.95	31.75	-0.68	0.20
Total male graduate enrollment³					
1-204	53.55	54.13	54.31	-0.76	-0.18
205-632	13.11	11.68	11.92	1.19*	-0.24
633-1,677	‡	‡	‡	‡	‡
1,678 or more	‡	‡	‡	‡	‡
None or unknown	31.07	31.95	31.75	-0.68	0.20
Total female graduate enrollment³					
1-407	52.13	52.13	52.64	-0.51	-0.51
408-1,098	12.36	12.02	11.65	0.71*	0.37
1,099-2,586	‡	‡	‡	‡	‡
2,587 or more	‡	‡	‡	‡	‡
None or unknown	31.07	31.95	31.75	-0.68	0.20
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid³					
64 or less	‡	‡	‡	‡	‡
65-80	‡	‡	‡	‡	‡
81-92	‡	‡	‡	‡	‡
93 or more	66.12	67.60	65.22	0.90*	2.38
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion³					
24 or less	‡	‡	‡	‡	‡
25-42	‡	‡	‡	‡	‡
43-60	40.06	40.41	40.06	#	0.35
61 or more	31.24	30.77	29.50	1.74*	1.27
Private institution tuition and fees as percent of core revenues (FASB reporting)³					
63 or less	49.59	51.77	49.89	-0.30	1.88
64-79	33.87	31.84	34.23	-0.36	-2.39
80-98	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-18. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Full sample, base weighted (2)	Mean	Respondents, adjusted for nonresponse and post-stratified (3)	Difference
			Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	18.11	18.95	17.76	0.35	1.19
\$5,427–\$8,864	45.33	43.65	45.44	-0.11	-1.79
\$8,865 or more	33.96	34.85	34.17	-0.21	0.68

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-19. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Carnegie classification code					
Associate's	†	†	†	†	†
Research and Doctoral	17.66	15.66	17.24	0.42*	-1.58
Master's	32.88	31.77	32.15	0.73*	-0.38
Bachelor's	‡	‡	‡	‡	‡
Special focus and other	37.35	44.05	38.46	-1.11*	5.59
Unavailable or unknown	‡	‡	‡	‡	‡
Degree of urbanization					
Large city	40.05	42.00	40.29	-0.24	1.71
Mid-size city	‡	‡	‡	‡	‡
Small city	11.34	10.87	11.18	0.16	-0.31
Large suburb	‡	‡	‡	‡	‡
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	27.86	29.08	27.86	#	1.22
Great Lakes	20.82	25.38	21.05	-0.23	4.33
Plains	‡	‡	‡	‡	‡
Southeast	16.35	13.49	16.27	0.08	-2.78
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
Historically Black college or university					
Yes	‡	‡	‡	‡	‡
No or Unavailable or unknown	98.60	99.03	98.64	-0.04	0.39
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	97.27	94.77	97.29	-0.02	-2.52
Percent receiving federal grant aid³					
1-36	37.88	33.72	37.27	0.61*	-3.55
37-52	18.25	16.82	18.09	0.16	-1.27
53-71	‡	‡	‡	‡	‡
72 or more	‡	‡	‡	‡	‡
None or unknown	31.21	39.01	32.08	-0.87*	6.93
Percent receiving state/local grant aid³					
1-6	11.24	10.09	11.28	-0.04	-1.19
7-24	19.22	17.70	18.78	0.44*	-1.08
25-43	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡
None or unknown	31.21	39.01	32.08	-0.87*	6.93

See notes at end of table.

Table J-19. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving institution grant aid³					
1–5	‡	‡	‡	‡	‡
6–26	‡	‡	‡	‡	‡
27–67	12.62	10.08	12.48	0.14	-2.40
68 or more	52.52	47.34	51.79	0.73*	-4.45
None or unknown	31.21	39.01	32.08	-0.87*	6.93
Percent receiving student loan aid³					
1–36	‡	‡	‡	‡	‡
37–64	19.21	17.45	18.93	0.28*	-1.48
65–82	31.03	27.09	30.85	0.18	-3.76
83 or more	‡	‡	‡	‡	‡
None or unknown	31.21	39.01	32.08	-0.87*	6.93
Average net price among students receiving grant or scholarship aid³					
\$1–\$8,672	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡
\$15,230–\$21,352	25.68	22.10	25.37	0.31*	-3.27
\$21,353 or more	35.57	32.88	34.97	0.60*	-2.09
None or unknown	31.21	39.01	32.08	-0.87*	6.93
Percent enrolled: Black, non-Hispanic³					
1–4	33.00	29.81	33.26	-0.26	-3.45
5–9 or None/unknown	37.22	39.65	36.83	0.39	2.82
10–20	‡	‡	‡	‡	‡
21 or more	8.08	9.97	8.06	0.02	1.91
Percent enrolled: Asian or Pacific Islander³					
1 or None/unknown	13.34	16.73	13.32	0.02	3.41
2	‡	‡	‡	‡	‡
3–5	30.70	29.62	30.80	-0.10	-1.18
6 or more	31.63	28.10	31.40	0.23	-3.30
Percent enrolled: Hispanic³					
1–3 or None/unknown	38.42	40.09	38.72	-0.30	1.37
4–6	34.12	35.52	34.09	0.03	1.43
7–15	22.04	20.25	21.86	0.18	-1.61
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment³					
1–1,601	19.83	24.53	20.31	-0.48*	4.22
1,602–4,474	33.31	30.39	32.56	0.75*	-2.17
4,475–13,842	16.92	15.40	16.45	0.47*	-1.05
13,843 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment³					
1–646	24.29	28.93	24.59	-0.30	4.34
647–1,908	29.30	26.65	28.72	0.58*	-2.07
1,909–5,918	16.79	14.93	16.33	0.46*	-1.40
5,919 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-19. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment³					
1-950	20.35	24.84	20.84	-0.49*	4.00
951-2,562	33.16	30.59	32.40	0.76*	-1.81
2,563-7,625	17.19	15.65	16.72	0.47*	-1.07
7,626 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total graduate enrollment³					
1-626	‡	‡	‡	‡	‡
627-1,820	27.25	24.65	27.07	0.18	-2.42
1,821-4,414	23.00	21.38	22.45	0.55*	-1.07
4,415 or more	13.75	12.85	13.37	0.38*	-0.52
None or unknown	†	†	†	†	†
Total male graduate enrollment³					
1-204	‡	‡	‡	‡	‡
205-632	‡	‡	‡	‡	‡
633-1,677	26.23	23.44	25.89	0.34*	-2.45
1,678 or more	14.83	13.96	14.42	0.41*	-0.46
None or unknown	†	†	†	†	†
Total female graduate enrollment³					
1-407	‡	‡	‡	‡	‡
408-1,098	27.67	25.80	27.46	0.21	-1.66
1,099-2,586	22.00	20.59	21.44	0.56*	-0.85
2,587 or more	13.68	12.80	13.30	0.38*	-0.50
None or unknown	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid³					
64 or less	15.98	15.33	16.16	-0.18	-0.83
65-80	‡	‡	‡	‡	‡
81-92	‡	‡	‡	‡	‡
93 or more	58.22	59.52	58.12	0.10*	1.40
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion³					
24 or less	‡	‡	‡	‡	‡
25-42	‡	‡	‡	‡	‡
43-60	33.12	33.90	33.06	0.06*	0.84
61 or more	49.06	49.97	48.72	0.34*	1.25
Private institution tuition and fees as percent of core revenues (FASB reporting)³					
63 or less	38.26	38.68	38.32	-0.06	0.36
64-79	29.55	29.18	29.26	0.29*	-0.08
80-98	32.19	32.14	32.42	-0.23	-0.28
99 or more	†	†	†	†	†

See notes at end of table.

Table J-19. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	42.58	44.49	42.39	0.19	2.10

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-20. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit less-than-2-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Degree of urbanization					
Large city	34.42	49.03	34.42	#	14.61
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	‡	‡	‡	‡	‡
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	†	†	†	†	†
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	†	†	†	†	†
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	†	†	†	†	†
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
Hispanic-Serving Institution					
Yes	22.21	24.95	22.21	#	2.74
No	‡	‡	‡	‡	‡
Percent receiving federal grant aid³					
1-36	‡	‡	‡	‡	‡
37-52	‡	‡	‡	‡	‡
53-71	36.68	32.33	36.68	#	-4.35
72 or more	52.94	61.15	52.94	#	8.21
None or unknown	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³					
1-6	92.07	91.39	92.07	#	-0.68
7-24	‡	‡	‡	‡	‡
25-43	‡	‡	‡	‡	‡
44 or more	†	†	†	†	†
None or unknown	‡	‡	‡	‡	‡
Percent receiving institution grant aid³					
1-5	73.87	84.51	73.87	#	10.64*
6-26	‡	‡	‡	‡	‡
27-67	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-20. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving student loan aid ³					
1–36	‡	‡	‡	‡	‡
37–64	‡	‡	‡	‡	‡
65–82	‡	‡	‡	‡	‡
83 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid ³					
\$1–\$8,672	‡	‡	‡	‡	‡
\$8,673–\$15,229	29.78	39.67	29.78	#	9.89
\$15,230–\$21,352	‡	‡	‡	‡	‡
\$21,353 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ³					
1–4	‡	‡	‡	‡	‡
5–9 or None/unknown	‡	‡	‡	‡	‡
10–20	‡	‡	‡	‡	‡
21 or more	37.73	42.80	37.73	#	5.07
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	51.46	43.17	51.46	#	-8.29
2	‡	‡	‡	‡	‡
3–5	‡	‡	‡	‡	‡
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ³					
1–3 or None/unknown	‡	‡	‡	‡	‡
4–6	‡	‡	‡	‡	‡
7–15	‡	‡	‡	‡	‡
16 or more	48.46	44.18	48.46	#	-4.28
Total undergraduate enrollment ³					
1–1,601	96.93	98.08	96.93	#	1.15
1,602–4,474	‡	‡	‡	‡	‡
4,475–13,842	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment ³					
1–646	98.42	97.63	98.42	#	-0.79
647–1,908	‡	‡	‡	‡	‡
1,909–5,918	‡	‡	‡	‡	‡
5,919 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total female undergraduate enrollment ³					
1–950	90.94	93.84	90.94	#	2.90
951–2,562	‡	‡	‡	‡	‡
2,563–7,625	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-20. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Full sample, base weighted (2)	Mean	Respondents, adjusted for nonresponse and post-stratified (3)	Difference
			Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	‡	‡	‡	‡	‡
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡
80–98	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	39.65	56.47	39.65	#	16.82
\$3,122–\$5,426	‡	‡	‡	‡	‡
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-21. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 2-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Degree of urbanization					
Large city	13.93	20.24	15.73	-1.80	4.51
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	27.03	27.84	27.92	-0.89	-0.08
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	†	†	†	†	†
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	†	†	†	†	†
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	44.56	35.71	42.89	1.67	-7.18
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	81.74	81.11	82.11	-0.37	-1.00
Percent receiving federal grant aid³					
1-36	†	†	†	†	†
37-52	‡	‡	‡	‡	‡
53-71	22.58	26.63	23.36	-0.78	3.27
72 or more	72.79	69.55	71.72	1.07	-2.17
None or unknown	†	†	†	†	†
Percent receiving state/local grant aid³					
1-6	77.51	77.68	75.90	1.61	1.78
7-24	7.08	8.40	8.92	-1.84*	-0.52
25-43	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Percent receiving institution grant aid³					
1-5	77.17	73.88	75.15	2.02*	-1.27
6-26	13.52	16.83	15.03	-1.51*	1.80
27-67	‡	‡	‡	‡	‡
68 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Percent receiving student loan aid³					
1-36	‡	‡	‡	‡	‡
37-64	‡	‡	‡	‡	‡
65-82	19.03	22.66	19.58	-0.55	3.08
83 or more	32.16	38.88	35.33	-3.17*	3.55
None or unknown	†	†	†	†	†

See notes at end of table.

Table J-21. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Average net price among students receiving grant or scholarship aid ³					
\$1–\$8,672	‡	‡	‡	‡	‡
\$8,673–\$15,229	‡	‡	‡	‡	‡
\$15,230–\$21,352	22.92	22.21	27.58	-4.66*	-5.37
\$21,353 or more	8.84	11.22	10.86	-2.02*	0.36
None or unknown	†	†	†	†	†
Percent enrolled: Black, non-Hispanic ³					
1–4	‡	‡	‡	‡	‡
5–9 or None/unknown	‡	‡	‡	‡	‡
10–20	‡	‡	‡	‡	‡
21 or more	48.50	40.88	48.16	0.34	-7.28
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	71.52	65.29	69.31	2.21	-4.02
2	‡	‡	‡	‡	‡
3–5	10.17	14.17	12.00	-1.83*	2.17
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ³					
1–3 or None/unknown	51.82	45.11	47.65	4.17*	-2.54
4–6	‡	‡	‡	‡	‡
7–15	‡	‡	‡	‡	‡
16 or more	26.40	30.02	27.53	-1.13	2.49
Total undergraduate enrollment ³					
1–1,601	90.77	89.58	88.13	2.64*	1.45
1,602–4,474	8.85	9.94	11.39	-2.54*	-1.45
4,475–13,842	‡	‡	‡	‡	‡
13,843 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total male undergraduate enrollment ³					
1–646	92.59	91.67	90.46	2.13*	1.21
647–1,908	5.37	5.41	6.91	-1.54*	-1.50
1,909–5,918	‡	‡	‡	‡	‡
5,919 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Total female undergraduate enrollment ³					
1–950	89.75	88.58	86.82	2.93*	1.76
951–2,562	9.68	10.66	12.45	-2.77*	-1.79
2,563–7,625	‡	‡	‡	‡	‡
7,626 or more	‡	‡	‡	‡	‡
None or unknown	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	19.59	25.39	20.84	-1.25	4.55
81–92	24.57	27.32	26.33	-1.76	0.99
93 or more	41.17	32.76	37.86	3.31*	-5.10

See notes at end of table.

Table J-21. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25–42	‡	‡	‡	‡	‡
43–60	17.92	16.90	19.78	-1.86	-2.88
61 or more	69.63	66.02	67.85	1.78	-1.83
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡
80–98	‡	‡	‡	‡	‡
99 or more	17.94	22.27	22.28	-4.34*	-0.01
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	59.36	60.88	59.32	0.04	1.56
\$3,122–\$5,426	29.85	29.27	29.20	0.65	0.07
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-22. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 4-year institutions: 2012

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Carnegie classification code					
Associate's	26.64	27.21	26.65	-0.01	0.56
Research and Doctoral	‡	‡	‡	‡	‡
Master's	‡	‡	‡	‡	‡
Bachelor's	16.90	17.81	16.89	0.01	0.92
Special focus and other	‡	‡	‡	‡	‡
Unavailable or unknown	‡	‡	‡	‡	‡
Degree of urbanization					
Large city	36.31	35.31	36.30	0.01	-0.99
Mid-size city	‡	‡	‡	‡	‡
Small city	‡	‡	‡	‡	‡
Large suburb	27.00	29.52	27.00	#	2.52
Mid-size suburb	‡	‡	‡	‡	‡
Small suburb	‡	‡	‡	‡	‡
Urban area on fringe of town or distant from town	‡	‡	‡	‡	‡
Urban area remote from town	‡	‡	‡	‡	‡
Rural area on fringe of town	‡	‡	‡	‡	‡
Rural area distant or remote from town	‡	‡	‡	‡	‡
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	26.89	25.58	26.88	0.01	-1.30
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
Hispanic-Serving Institution					
Yes	‡	‡	‡	‡	‡
No	86.41	85.84	86.45	-0.04*	-0.61
Percent receiving federal grant aid³					
1-36	2.37	3.23	2.36	0.01	0.87
37-52	‡	‡	‡	‡	‡
53-71	30.31	28.31	30.33	-0.02	-2.02
72 or more	62.20	62.33	62.18	0.02	0.15
None or unknown	‡	‡	‡	‡	‡
Percent receiving state/local grant aid³					
1-6	64.26	65.20	64.30	-0.04	0.90
7-24	‡	‡	‡	‡	‡
25-43	‡	‡	‡	‡	‡
44 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-22. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Percent receiving institution grant aid ³					
1-5	29.19	31.24	29.20	-0.01	2.04
6-26	‡	‡	‡	‡	‡
27-67	18.78	20.73	18.77	0.01	1.96
68 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Percent receiving student loan aid ³					
1-36	0.70	2.14	0.70	#	1.44*
37-64	2.44	3.25	2.43	0.01*	0.82
65-82	‡	‡	‡	‡	‡
83 or more	70.54	70.42	70.56	-0.02	-0.14
None or unknown	‡	‡	‡	‡	‡
Average net price among students receiving grant or scholarship aid ³					
\$1-\$8,672	‡	‡	‡	‡	‡
\$8,673-\$15,229	‡	‡	‡	‡	‡
\$15,230-\$21,352	42.97	41.67	42.98	-0.01	-1.31
\$21,353 or more	51.42	52.53	51.39	0.03	1.14
None or unknown	‡	‡	‡	‡	‡
Percent enrolled: Black, non-Hispanic ³					
1-4	‡	‡	‡	‡	‡
5-9 or None/unknown	‡	‡	‡	‡	‡
10-20	21.73	22.39	21.72	0.01	0.67
21 or more	49.03	47.47	49.03	#	-1.56
Percent enrolled: Asian or Pacific Islander ³					
1 or None/unknown	43.50	44.69	43.52	-0.02	1.17
2	‡	‡	‡	‡	‡
3-5	28.93	28.11	28.95	-0.02	-0.84
6 or more	‡	‡	‡	‡	‡
Percent enrolled: Hispanic ³					
1-3 or None/unknown	28.21	28.84	28.23	-0.02	0.61
4-6	‡	‡	‡	‡	‡
7-15	26.50	28.04	26.49	0.01	1.55
16 or more	‡	‡	‡	‡	‡
Total undergraduate enrollment ³					
1-1,601	71.30	67.75	71.43	-0.13*	-3.68*
1,602-4,474	19.86	21.74	19.77	0.09*	1.97
4,475-13,842	5.00	6.30	4.97	0.03*	1.33*
13,843 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total male undergraduate enrollment ³					
1-646	56.00	55.57	56.13	-0.13*	-0.56
647-1,908	35.43	34.58	35.34	0.09*	-0.76
1,909-5,918	5.65	6.60	5.63	0.02*	0.97
5,919 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡

See notes at end of table.

Table J-22. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total female undergraduate enrollment³					
1-950	68.85	63.72	69.00	-0.15*	-5.28*
951-2,562	21.74	24.19	21.64	0.10*	2.55
2,563-7,625	5.79	8.27	5.77	0.02*	2.50*
7,626 or more	‡	‡	‡	‡	‡
None or unknown	‡	‡	‡	‡	‡
Total graduate enrollment³					
1-626	‡	‡	‡	‡	‡
627-1,820	‡	‡	‡	‡	‡
1,821-4,414	‡	‡	‡	‡	‡
4,415 or more	‡	‡	‡	‡	‡
None or unknown	71.07	68.83	71.10	-0.03	-2.27
Total male graduate enrollment³					
1-204	‡	‡	‡	‡	‡
205-632	4.05	5.26	4.03	0.02*	1.23
633-1,677	‡	‡	‡	‡	‡
1,678 or more	‡	‡	‡	‡	‡
None or unknown	71.07	68.83	71.10	-0.03	-2.27
Total female graduate enrollment³					
1-407	‡	‡	‡	‡	‡
408-1,098	‡	‡	‡	‡	‡
1,099-2,586	‡	‡	‡	‡	‡
2,587 or more	‡	‡	‡	‡	‡
None or unknown	71.07	68.83	71.10	-0.03	-2.27
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid³					
64 or less	12.90	13.48	12.90	#	0.58
65-80	‡	‡	‡	‡	‡
81-92	35.96	37.34	35.92	0.04	1.42
93 or more	23.14	22.56	23.19	-0.05	-0.63
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion³					
24 or less	‡	‡	‡	‡	‡
25-42	43.28	42.04	43.25	0.03*	-1.21
43-60	14.22	15.85	14.23	-0.01	1.62*
61 or more	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting)³					
63 or less	2.44	3.58	2.44	#	1.14*
64-79	‡	‡	‡	‡	‡
80-98	‡	‡	‡	‡	‡
99 or more	60.96	59.42	60.99	-0.03	-1.57

See notes at end of table.

Table J-22. Institution nonresponse bias analysis after nonresponse and poststratification adjustments, by select variables for private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean; respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	54.94	53.56	54.96	-0.02	-1.40
\$3,122–\$5,426	34.46	33.75	34.44	0.02	-0.69
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 5 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, subsampling and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution type													
Public													
Less-than-2-year	500	110	0.21	0.20	0.29	-0.01	-4.35	-0.01	-4.35	0.21	0.21	#	#
2-year	29,790	4,900	33.26	31.48	51.35	-1.79*	-5.68	-1.79*	-5.68	32.40	32.40	#	#
4-year non-doctorate-granting	7,180	590	10.13	10.30	8.34	0.18*	1.71	0.18*	1.71	10.21	10.21	#	#
4-year doctorate-granting	19,880	1,130	25.61	26.48	16.81	0.87*	3.29	0.87*	3.29	25.68	25.68	#	#
Private nonprofit													
Less-than-4-year	1,100	80	0.26	0.28	0.13	0.01	4.72	0.01	4.72	0.27	0.27	#	#
4-year non-doctorate-granting	6,910	610	6.42	6.76	3.04	0.33*	4.95	0.33*	4.95	6.47	6.47	#	#
4-year doctorate-granting	10,180	660	10.81	11.17	7.19	0.36*	3.20	0.36*	3.20	11.04	11.04	#	#
Private for-profit													
Less-than-2-year	4,550	200	2.28	2.12	3.90	-0.16	-7.56	-0.16	-7.56	2.35	2.35	#	#
2-year	7,860	690	2.21	2.22	2.07	0.01	0.62	0.01	0.62	2.29	2.29	#	#
4-year	23,110	3,570	8.80	9.00	6.87	0.19	2.12	0.19	2.12	9.08	9.08	#	#
Institution region⁶													
New England	5,690	590	4.99	5.01	4.80	0.02	0.37	0.02	0.37	5.09	5.09	#	#
Mideast	16,960	1,650	14.22	14.29	13.47	0.07	0.52	0.07	0.52	14.45	14.45	#	#
Great Lakes	17,040	2,190	14.91	15.16	12.43	0.25*	1.62	0.25*	1.62	14.87	14.87	#	#
Plains	8,130	560	8.67	9.06	4.73	0.39*	4.30	0.39*	4.30	8.71	8.71	#	#
Southeast	25,770	2,500	22.28	22.89	16.08	0.61*	2.68	0.61*	2.68	22.56	22.56	#	#
Southwest	15,740	1,810	14.55	14.14	18.72	-0.41	-2.91	-0.41	-2.91	14.22	14.22	#	#
Rocky Mountains	4,900	470	3.92	3.96	3.48	0.04	1.08	0.04	1.08	4.00	4.00	#	#
Far West	16,840	2,760	16.46	15.49	26.30	-0.97*	-6.27	-0.97*	-6.27	16.12	16.12	#	#
Student type													
Undergraduate student	95,100	11,790	86.29	85.70	92.28	-0.59*	-0.69	-0.59*	-0.69	85.66	85.66	#	#
Graduate student	14,030	680	12.16	12.66	7.15	0.50*	3.92	0.50*	3.92	12.70	12.70	#	#
First-professional	1,930	70	1.55	1.64	0.57	0.10*	5.87	0.10*	5.87	1.64	1.64	#	#
CPS record available													
Yes	86,480	4,470	67.40	72.65	14.38	5.24*	7.21	5.24*	7.21	67.33	67.54	0.21	0.31
No	24,570	8,070	32.60	27.35	85.62	-5.24*	-19.16	-5.24*	-19.16	32.67	32.46	-0.21	-0.64

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Federal aid status													
Received	73,740	170	58.06	63.63	1.68	5.57*	8.76	5.57*	8.76	58.21	58.21	#	#
Did not receive	27,950	620	28.31	30.52	5.93	2.21*	7.25	2.21*	7.25	28.72	33.85	5.13*	15.14
Unknown	9,370	11,760	13.63	5.85	92.39	-7.78*	-133.10	-7.78*	-133.10	13.07	7.95	-5.13*	-64.51
Pell Grant status													
Received	54,830	3,200	38.16	40.91	10.24	2.76*	6.74	2.76*	6.74	38.28	38.28	#	#
Did not receive	56,230	9,340	61.84	59.09	89.76	-2.76*	-4.67	-2.76*	-4.67	61.72	61.72	#	#
Total Pell Grant amount received⁷													
\$0 or unknown	56,230	9,340	61.84	59.09	89.76	-2.76*	-4.67	-2.76*	-4.67	61.72	61.72	#	#
\$1–\$2,774	16,840	1,320	11.75	12.54	3.74	0.79*	6.31	0.79*	6.31	11.86	11.86	#	#
\$2,775–\$5,549	21,750	1,140	15.35	16.46	4.07	1.11*	6.77	1.11*	6.77	15.30	15.30	#	#
\$5,550 or more	16,240	750	11.06	11.92	2.43	0.85*	7.16	0.85*	7.16	11.12	11.12	#	#
Stafford Loan status													
Received	62,320	3,020	46.61	50.23	10.00	3.62*	7.20	3.62*	7.20	46.39	46.39	#	#
Did not receive	48,740	9,520	53.39	49.77	90.00	-3.62*	-7.27	-3.62*	-7.27	53.61	53.61	#	#
Total Stafford Loan amount received⁸													
\$0 or unknown	48,740	9,520	53.39	49.77	90.00	-3.62*	-7.27	-3.62*	-7.27	53.61	53.61	#	#
\$1–\$4,699	15,210	1,050	10.81	11.57	3.11	0.76*	6.58	0.76*	6.58	10.68	10.68	#	#
\$4,700–\$6,500	16,880	620	12.06	13.00	2.56	0.94*	7.22	0.94*	7.22	11.94	11.94	#	#
\$6,501–\$9,500	18,350	850	11.87	12.82	2.34	0.94*	7.35	0.94*	7.35	11.83	11.83	#	#
\$9,501 or more	11,880	500	11.87	12.84	1.99	0.98*	7.60	0.98*	7.60	11.94	11.94	#	#
Institution total enrollment⁷													
0–2,628	26,610	4,090	11.42	11.41	11.48	-0.01	-0.05	-0.01	-0.05	11.70	11.70	#	#
2,629–10,233	28,430	2,350	22.33	22.82	17.40	0.49*	2.13	0.49*	2.13	22.47	22.47	#	#
10,234–26,884	27,770	3,200	31.67	31.58	32.64	-0.10	-0.30	-0.10	-0.30	31.45	31.45	#	#
26,885 or more	28,250	2,900	34.58	34.19	38.48	-0.39	-1.13	-0.39	-1.13	34.37	34.37	#	#
Sampled FTB Status													
FTB	51,120	6,070	12.64	12.82	10.82	0.18*	1.40	0.18*	1.40	13.04	13.04	#	#
Not FTB	59,940	6,480	87.36	87.18	89.18	-0.18*	-0.21	-0.18*	-0.21	86.96	86.96	#	#

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Age as of Dec 31, 2011														
15–23	62,170	6,540	51.99	52.24	49.41	0.25*	0.49	0.25*	0.49	51.46	51.46	#	#	
24–29	21,380	2,600	21.07	21.04	21.43	-0.04	-0.17	-0.04	-0.17	21.26	21.26	#	#	
30 or more	27,510	3,400	26.94	26.72	29.16	-0.22*	-0.82	-0.22*	-0.82	27.28	27.28	#	#	
Institution aid status														
Received	20,900	300	20.50	22.19	3.43	1.69*	7.60	1.69*	7.60	20.68	20.68	#	#	
Did not receive	78,760	5,600	69.74	70.26	64.44	0.52*	0.74	0.52*	0.74	69.59	69.59	#	#	
Unknown	11,400	6,650	9.77	7.55	32.13	-2.21*	-29.26	-2.21*	-29.26	9.73	9.73	#	#	
State aid status														
Received	14,570	150	13.61	14.81	1.48	1.20*	8.10	1.20*	8.10	13.83	13.83	#	#	
Did not receive	87,600	6,360	79.19	79.85	72.50	0.66*	0.83	0.66*	0.83	79.14	79.14	#	#	
Unknown	8,890	6,040	7.20	5.34	26.02	-1.86*	-34.84	-1.86*	-34.84	7.03	7.03	#	#	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	420	60	0.59	0.59	0.64	#	-0.68	#	-0.68	0.60	0.59	-0.01	-1.55	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	1,200	90	1.90	1.91	1.73	0.01	0.76	0.01	0.76	1.88	1.86	-0.02	-1.14	
Communications Technologies/Technicians and Support Services	460	60	0.31	0.31	0.39	-0.01	-2.20	-0.01	-2.20	0.32	0.37	0.05	12.53	
Computer and Information Sciences and Support Services	5,810	1,180	3.59	3.49	4.71	-0.10	-2.74	-0.10	-2.74	3.64	3.63	-0.01	-0.38	
Personal and Culinary Services	4,380	280	2.13	2.16	1.77	0.03	1.43	0.03	1.43	2.16	2.15	-0.01	-0.53	
Education	4,890	250	6.80	7.06	3.85	0.25*	3.57	0.25*	3.57	6.83				

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Esti-mated bias ¹	Rela-tive bias ²	Esti-mated bias ³	Rela-tive bias ²	Full sample, base weighted	Respond-ents, non-response adjusted ⁴	Esti-mated bias ⁵	Rela-tive bias ²	
Engineering														
Technologies/Technicians	3,150	1,400	1.79	1.60	4.01	-0.19*	-11.88	-0.19*	-11.88	1.79	1.73	-0.07	-3.80	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	820	110	1.10	1.11	1.07	#	0.23	#	0.23	1.10	1.11	0.02	1.51	
Legal Professions and Studies	1,340	110	1.19	1.20	1.06	0.01	0.98	0.01	0.98	1.21	1.20	-0.02	-1.48	
English Language and Literature/Letters	1,060	60	1.44	1.49	0.90	0.05*	3.12	0.05*	3.12	1.44	1.46	0.01	0.93	
Liberal Arts and Sciences, General Studies and Humanities	10,450	1,200	14.91	14.59	18.63	-0.32	-2.18	-0.32	-2.18	14.59	14.67	0.08	0.54	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Biological and Biomedical Sciences	2,680	110	3.30	3.42	1.80	0.13*	3.74	0.13*	3.74	3.22	3.26	0.04	1.12	
Mathematics and Statistics	470	40	0.59	0.58	0.65	-0.01	-0.94	-0.01	-0.94	0.59	0.57	-0.02	-3.35	
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	1,540	150	2.14	2.09	2.71	-0.05	-2.35	-0.05	-2.35	2.08	2.03	-0.04	-2.15	
Parks, Recreation, Leisure, and Fitness Studies	890	60	1.25	1.26	1.13	0.01	0.80	0.01	0.80	1.22	1.21	-0.01	-0.70	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Physical Sciences	1,050	40	1.13	1.16	0.73	0.03*	2.94	0.03*	2.94	1.12	1.14	0.02	1.83	
Science Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	3,050	120	3.24	3.34	2.02	0.10*	3.12	0.10*	3.12	3.25	3.24	-0.01	-0.43	
Security and Protective Services	4,250	730	3.70	3.61	4.71	-0.09	-2.38	-0.09	-2.38	3.71	3.68	-0.04	-0.96	
Public Administration and Social Service Professions	1,300	70	1.67	1.73	0.94	0.06*	3.57	0.06*	3.57	1.70	1.68	-0.02	-1.28	
Social Sciences	1,880	120	3.01	3.08	2.26	0.06*	2.09	0.06*	2.09	3.02	3.03	0.01	0.42	
Construction Trades	660	190	0.37	0.31	1.07	-0.06*	-19.16	-0.06*	-19.16	0.37	0.33	-0.04*	-12.39	
Mechanic and Repair Technologies/Technicians	2,660	240	1.38	1.36	1.62	-0.02	-1.55	-0.02	-1.55	1.43	1.42	-0.02	-1.20	
Precision Production	780	140	0.39	0.36	0.79	-0.03*	-9.50	-0.03*	-9.50	0.41	0.38	-0.02	-5.87	

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Transportation and Materials Moving	210	70	0.16	0.14	0.33	-0.01	-10.18	-0.01	-10.18	0.16	0.16	-0.01	-3.50	
Visual and Performing Arts	4,490	520	3.92	3.90	4.18	-0.02	-0.55	-0.02	-0.55	3.99	3.94	-0.05	-1.36	
Health Professions and Related Clinical Sciences	19,990	1,270	16.34	16.46	14.94	0.12	0.73	0.12	0.73	16.38	16.53	0.15*	0.91	
Business, Management, Marketing, and Related Support Services	12,260	1,130	15.24	15.22	15.58	-0.03*	-0.19	-0.03*	-0.19	15.32	15.36	0.04	0.28	
History (new)	530	30	0.87	0.89	0.65	0.02*	2.13	0.02*	2.13	0.88	0.89	#	0.50	
Residency Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	21,460	2,310	9.54	9.19	13.04	-0.36	-3.91	-0.36	-3.91	9.76	9.56	-0.20	-2.09	
Associate's Degree	33,610	5,660	36.32	35.96	39.84	-0.36*	-1.00	-0.36*	-1.00	36.41	36.88	0.48*	1.29	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1,520	240	1.09	1.05	1.41	-0.03	-3.13	-0.03	-3.13	1.07	1.06	-0.01	-0.62	
Bachelor's Degree or equivalent	33,700	2,050	45.95	47.79	28.00	1.84*	3.85	1.84*	3.85	46.18	46.47	0.29	0.62	
Not in a postsecondary award, certificate, diploma, or degree program	3,540	1,080	7.10	6.01	17.71	-1.09*	-18.12	-1.09*	-18.12	6.59	6.03	-0.56*	-9.26	
Class level of undergraduates														
First year	55,950	7,570	43.24	42.20	53.92	-1.04*	-2.46	-1.04*	-2.46	43.28	42.64	-0.64*	-1.50	
Second year	14,440	1,710	26.71	26.76	26.16	0.05	0.20	0.05	0.20	26.55	26.96	0.42*	1.55	
Third year	5,930	650	12.71	13.11	8.60	0.40*	3.05	0.40*	3.05	12.56	12.57	0.01	0.08	
Fourth year	6,810	430	15.62	16.18	9.89	0.56*	3.44	0.56*	3.44	15.89	16.10	0.20*	1.26	
Fifth year or higher	850	80	1.72	1.75	1.42	0.03	1.63	0.03	1.63	1.71	1.72	0.01	0.61	

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	31,430	4,390	34.78	33.98	42.81	-0.80*	-2.35	-0.80*	-2.35	34.40	34.51	0.11	0.33
65–80	31,530	4,940	29.30	28.70	35.35	-0.60*	-2.10	-0.60*	-2.10	29.27	29.19	-0.08	-0.28
81–92	28,720	2,080	21.22	21.96	13.76	0.74*	3.37	0.74*	3.37	21.54	21.49	-0.05	-0.24
93 or more	17,710	1,010	14.71	15.36	8.08	0.66*	4.29	0.66*	4.29	14.79	14.81	0.02	0.12
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	32,080	5,070	33.25	32.21	43.91	-1.03*	-3.20	-1.03*	-3.20	32.76	32.82	0.06	0.18
25–42	25,300	3,770	23.91	23.60	27.12	-0.31	-1.31	-0.31	-1.31	23.97	23.91	-0.07	-0.28
43–60	19,610	1,310	20.48	21.16	13.48	0.68*	3.20	0.68*	3.20	20.62	20.53	-0.09	-0.44
61 or more	23,760	1,450	22.36	23.03	15.49	0.66*	2.89	0.66*	2.89	22.65	22.75	0.10	0.43
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	12,470	2,370	22.55	20.85	37.85	-1.71*	-8.20	-1.71*	-8.20	22.20	21.72	-0.49*	-2.24
14–23	14,870	1,660	25.23	25.59	22.07	0.35	1.38	0.35	1.38	25.22	25.61	0.39	1.51
24–32	15,200	1,370	26.31	26.93	20.76	0.62	2.30	0.62	2.30	26.46	26.61	0.15	0.58
33 or more	13,910	1,230	25.90	26.64	19.32	0.74*	2.76	0.74*	2.76	26.11	26.06	-0.05	-0.20
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	9,960	530	27.20	27.57	22.08	0.37*	1.33	0.37*	1.33	27.32	27.43	0.12	0.42
64–79	10,080	700	27.09	26.85	30.42	-0.24	-0.89	-0.24	-0.89	26.67	26.74	0.07	0.25
80–98	14,020	710	29.16	29.54	23.95	0.37*	1.27	0.37*	1.27	29.34	29.28	-0.06	-0.20
99 or more	17,960	3,580	16.55	16.04	23.55	-0.50	-3.13	-0.50	-3.13	16.68	16.55	-0.12	-0.74

See notes at end of table.

Table J-23. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment						After nonresponse weight adjustment						
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting)⁷													
\$4,144 or less	15,350	2,400	24.54	23.67	32.35	-0.87*	-3.69	-0.87*	-3.69	24.04	24.07	0.03	0.13
\$4,145–\$5,619	13,310	1,940	24.17	23.60	29.28	-0.57*	-2.42	-0.57*	-2.42	24.16	23.99	-0.17	-0.69
\$5,620–\$7,662	12,780	1,230	24.04	24.38	21.02	0.34	1.38	0.34	1.38	24.18	24.17	-0.01	-0.03
\$7,663 or more	15,010	1,060	27.26	28.36	17.35	1.11*	3.90	1.11*	3.90	27.63	27.77	0.14	0.51
Private institution instructional expenses per FTE enrollment (FASB reporting)⁷													
\$3,121 or less	17,500	2,550	30.70	30.63	31.65	-0.07	-0.22	-0.07	-0.22	31.00	31.01	0.01	0.04
\$3,122–\$5,426	13,810	1,740	18.93	18.21	29.06	-0.73	-3.99	-0.73	-3.99	18.83	18.95	0.12	0.63
\$5,427–\$8,864	10,240	410	19.68	20.21	12.32	0.53*	2.61	0.53*	2.61	19.39	19.27	-0.12	-0.64
\$8,865 or more	10,480	810	30.68	30.94	26.97	0.27*	0.86	0.27*	0.86	30.78	30.77	-0.01	-0.03

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	40	40	3.78	2.79	10.52	-0.99	-35.41	-0.99	-35.41	3.78	3.53	-0.25	-7.12	
CPS record available														
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
No	100	100	25.18	16.00	87.81	-9.18*	-57.38	-9.18*	-57.38	24.52	22.88	-1.64	-7.19	
Federal aid status														
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Unknown	30	110	15.60	3.23	100.00	12.37*	-383.39	12.37*	-383.39	14.74	7.81	-6.93*	-88.81	
Pell Grant status														
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Did not receive	180	100	36.42	28.82	88.26	-7.60*	-26.37	-7.60*	-26.37	36.31	36.43	0.12	0.33	
Total Pell Grant amount received⁷														
\$0 or unknown	180	100	36.42	28.82	88.26	-7.60*	-26.37	-7.60*	-26.37	36.31	36.43	0.12	0.33	
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$2,775–\$5,549	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Stafford Loan status														
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Did not receive	300	100	51.85	46.16	90.69	-5.69*	-12.34	-5.69*	-12.34	51.68	49.57	-2.10	-4.24	

See notes at end of table.

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ⁶													
\$0 or unknown	300	100	51.85	46.16	90.69	-5.69*	-12.34	-5.69*	-12.34	51.68	49.57	-2.10	-4.24
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment ⁷													
0–2,628	490	70	98.20	99.36	90.26	1.16	1.17	1.16	1.17	98.30	98.58	0.28	0.29
2,629–10,233	†	†	†	†	†	†	†	†	†	†	†	†	†
10,234–26,884	20	40	1.80	0.64	9.74	-1.16	-182.16	-1.16	-182.16	1.70	1.42	-0.28	-20.06
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	330	40	21.74	23.22	11.61	1.48*	6.39	1.48*	6.39	22.49	23.27	0.79	3.38
Not FTB	180	70	78.26	76.78	88.39	-1.48*	-1.93	-1.48*	-1.93	77.51	76.73	-0.79	-1.02
Age as of Dec 31, 2011													
15–23	250	40	34.79	32.51	50.37	-2.28	-7.03	-2.28*	-7.03	34.36	31.10	-3.26*	-10.48
24–29	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
30 or more	160	50	42.77	43.57	37.31	0.80	1.84	0.80	1.84	42.86	44.27	1.41	3.18
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	460	60	92.11	94.86	73.30	2.76	2.91	2.76	2.91	92.06	90.34	-1.72	-1.91
Unknown	30	50	5.86	3.23	23.84	-2.64	-81.65	-2.64	-81.65	5.84	7.81	1.97	25.17
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	400	60	76.43	76.88	73.36	0.45	0.59	0.45	0.59	76.36	74.55	-1.81	-2.43
Unknown	30	50	5.86	3.23	23.84	-2.64	-81.65	-2.64	-81.65	5.84	7.81	1.97	25.17

See notes at end of table.

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†	
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†	
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†	
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Science														
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†	
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†	
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public Administration and Social Service Professions	†	†	†	†	†	†	†	†	†	†	†	†	†	
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mechanic and Repair														
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials														
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Health Professions and Related Clinical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	440	100	70.31	68.33	83.82	-1.98	-2.90	-1.98	-2.90	70.52	71.60	1.08	1.51	
Associate's Degree	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years														
Bachelor's Degree or equivalent	†	†	†	†	†	†	†	†	†	†	†	†	†	
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Class level of undergraduates														
First year	400	80	73.02	73.23	71.15	0.22	0.30	0.22	0.30	72.83	71.46	-1.37	-1.91	
Second year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Third year	†	†	†	†	†	†	†	†	†	†	†	†	†	
Fourth year	†	†	†	†	†	†	†	†	†	†	†	†	†	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid⁷														
64 or less	160	60	44.96	44.91	45.33	-0.05	-0.12	-0.05	-0.12	45.25	47.12	1.87	3.97	
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-24. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷														
13 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
14–23	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
24–32	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
33 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷														
\$4,144 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$4,145–\$5,619	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$5,620–\$7,662	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$7,663 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	1,120	110	3.57	3.77	2.37	0.19*	5.16	0.19*	5.16	3.68	3.81	0.13	3.43
Mideast	3,430	620	11.05	11.35	9.16	0.30	2.68	0.30	2.68	11.34	11.49	0.15	1.28
Great Lakes	5,790	860	15.28	15.72	12.58	0.44	2.77	0.44	2.77	15.29	15.34	0.05	0.34
Plains	1,980	170	7.06	7.45	4.67	0.39*	5.17	0.39*	5.17	7.15	6.93	-0.22	-3.11
Southeast	6,780	660	18.89	20.10	11.42	1.21*	6.00	1.21*	6.00	19.50	19.66	0.15	0.78
Southwest	4,500	870	17.45	17.24	18.76	-0.21	-1.22	-0.21	-1.22	16.88	17.05	0.18	1.04
Rocky Mountains	1,030	190	2.62	2.56	2.99	-0.06	-2.34	-0.06	-2.34	2.66	2.56	-0.09	-3.55
Far West	5,170	1,430	24.08	21.82	38.06	-2.25*	-10.33	-2.25*	-10.33	23.51	23.15	-0.35	-1.53
CPS record available													
Yes	22,740	670	63.94	72.65	9.97	8.70*	11.98	8.70*	11.98	64.20	64.47	0.27	0.42
No	7,050	4,230	36.06	27.35	90.03	-8.70*	-31.82	-8.70*	-31.82	35.80	35.53	-0.27	-0.76
Federal aid status													
Received	18,310	50	50.52	58.47	1.16	7.96*	13.61	7.96*	13.61	50.90	50.85	-0.04	-0.09
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unknown	2,130	4,830	20.03	7.34	98.70	-12.69*	172.71	12.69*	-172.71	18.84	10.21	-8.64*	-84.65
Pell Grant status													
Received	16,320	490	44.66	50.79	6.67	6.13*	12.06	6.13*	12.06	45.55	45.63	0.08	0.19
Did not receive	13,470	4,410	55.34	49.21	93.33	-6.13*	-12.45	-6.13*	-12.45	54.45	54.37	-0.08	-0.16
Total Pell Grant amount received⁷													
\$0 or unknown	13,470	4,410	55.34	49.21	93.33	-6.13*	-12.45	-6.13*	-12.45	54.45	54.37	-0.08	-0.16
\$1–\$2,774	5,970	200	15.97	18.07	2.94	2.10*	11.63	2.10*	11.63	16.51	16.50	-0.01	-0.05
\$2,775–\$5,549	6,860	220	18.79	21.39	2.63	2.61*	12.18	2.61*	12.18	19.10	19.19	0.10	0.50
\$5,550 or more	3,480	70	9.90	11.32	1.10	1.42*	12.53	1.42*	12.53	9.94	9.93	#	-0.02
Stafford Loan status													
Received	8,690	180	26.51	30.31	2.96	3.80*	12.53	3.80*	12.53	25.35	25.50	0.15	0.57
Did not receive	21,110	4,720	73.49	69.69	97.04	-3.80*	-5.45	-3.80*	-5.45	74.65	74.50	-0.15	-0.20

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received³													
\$0 or unknown	21,110	4,720	73.49	69.69	97.04	-3.80*	-5.45	-3.80*	-5.45	74.65	74.50	-0.15	-0.20
\$1–\$4,699	4,280	110	11.71	13.39	1.33	1.67*	12.51	1.67*	12.51	11.73	11.87	0.14	1.16
\$4,700–\$6,500	2,160	50	6.18	7.01	1.04	0.83*	11.83	0.83*	11.83	5.75	5.76	0.02	0.30
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	770	120	2.20	2.30	1.61	0.10	4.14	0.10	4.14	2.28	2.28	#	0.11
2,629–10,233	8,000	980	22.56	23.39	17.42	0.83*	3.54	0.83*	3.54	23.15	23.05	-0.10	-0.44
10,234–26,884	12,600	2,110	42.39	42.68	40.60	0.29	0.68	0.29	0.68	42.18	42.27	0.09	0.21
26,885 or more	8,420	1,690	32.85	31.64	40.37	-1.21*	-3.83	-1.21*	-3.83	32.40	32.41	0.01	0.03
Sampled FTB Status													
FTB	14,830	2,610	13.87	14.08	12.59	0.21*	1.46	0.21*	1.46	14.66	14.53	-0.13	-0.89
Not FTB	14,960	2,290	86.13	85.92	87.41	-0.21*	-0.24	-0.21*	-0.24	85.34	85.47	0.13	0.15
Age as of Dec 31, 2011													
15–23	18,230	2,870	51.40	51.45	51.07	0.05	0.10	0.05	0.10	50.93	50.79	-0.15	-0.29
24–29	4,720	750	19.95	20.01	19.54	0.07	0.33	0.07	0.33	20.03	20.25	0.22	1.08
30 or more	6,840	1,280	28.65	28.53	29.39	-0.12	-0.42	-0.12	-0.42	29.04	28.96	-0.07	-0.25
Institution aid status													
Received	3,570	120	11.94	13.49	2.31	1.55*	11.50	1.55*	11.50	12.07	11.99	-0.08	-0.70
Did not receive	24,270	3,340	79.16	79.91	74.48	0.75	0.94	0.75	0.94	79.45	79.12	-0.33	-0.42
Unknown	1,950	1,440	8.91	6.60	23.20	-2.30*	-34.90	-2.30*	-34.90	8.48	8.90	0.42	4.69
State aid status													
Received	4,750	80	12.06	13.80	1.27	1.74*	12.61	1.74*	12.61	12.83	12.81	-0.02	-0.12
Did not receive	23,100	3,370	79.03	79.60	75.53	0.56	0.71	0.56	0.71	78.69	78.29	-0.40	-0.51
Unknown	1,950	1,440	8.91	6.60	23.20	-2.30*	-34.90	-2.30*	-34.90	8.48	8.90	0.42	4.69

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	130	40	0.56	0.50	1.01	-0.06	-11.55	-0.06	-11.55	0.57	0.49	-0.07	-14.94
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	880	130	3.66	3.70	3.36	0.04*	1.07	0.04*	1.07	3.74	3.80	0.06	1.55
Personal and Culinary Services	640	80	1.77	1.80	1.58	0.03	1.43	0.03	1.43	1.85	1.84	-0.01	-0.61
Education	650	70	2.75	2.83	2.15	0.08*	2.77	0.08*	2.77	2.73	2.76	0.04	1.36
Engineering	200	40	0.96	0.96	0.97	#	-0.17	#	-0.17	0.91	0.90	-0.01	-1.24
Engineering Technologies/Technicians	810	130	2.83	2.67	4.02	-0.16	-5.82	-0.16	-5.82	2.87	2.81	-0.07	-2.33
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	410	80	1.60	1.57	1.87	-0.03	-2.22	-0.03	-2.22	1.62	1.64	0.02	1.10
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	7,640	1,000	36.07	36.42	33.41	0.35*	0.96	0.35*	0.96	35.79	36.04	0.25*	0.69

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	200	30	1.12	1.10	1.32	-0.03	-2.42	-0.03	-2.42	1.05	1.09	0.04	3.97
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	400	80	1.97	1.88	2.70	-0.10	-5.06	-0.10	-5.06	1.93	1.86	-0.07	-4.03
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Security and Protective Services	1,080	190	4.21	4.04	5.52	-0.17	-4.24	-0.17	-4.24	4.26	4.15	-0.11	-2.59
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Construction Trades	340	160	0.91	0.77	1.98	-0.14*	-18.24	-0.14*	-18.24	0.94	0.82	-0.11*	-13.72
Mechanic and Repair Technologies/Technicians	1,000	150	2.55	2.51	2.90	-0.05	-1.81	-0.05	-1.81	2.68	2.60	-0.08	-3.00
Precision Production	470	110	0.97	0.87	1.72	-0.10	-11.30	-0.10	-11.30	1.02	0.92	-0.09*	-9.97
Transportation and Materials Moving	100	30	0.21	0.19	0.39	-0.02	-12.01	-0.02	-12.01	0.23	0.22	-0.01	-3.95
Visual and Performing Arts	620	130	2.77	2.60	4.04	-0.17	-6.40	-0.17	-6.40	2.77	2.72	-0.05	-1.95

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	3,930	390	16.34	16.96	11.59	0.62*	3.66	0.62*	3.66	16.50	16.71	0.20	1.22	
Business, Management, Marketing, and Related Support Services	2,650	400	11.55	11.50	11.92	-0.05*	-0.42	-0.05*	-0.42	11.51	11.48	-0.02	-0.20	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	6,980	1,220	11.89	11.89	11.94	-0.01	-0.07	-0.01	-0.07	12.18	12.01	-0.16	-1.36	
Associate's Degree	18,440	2,270	72.63	74.99	57.37	2.36*	3.15	2.36*	3.15	73.46	74.71	1.25*	1.67	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	830	170	1.60	1.54	2.04	-0.07	-4.41	-0.07	-4.41	1.55	1.51	-0.04	-2.83	
Bachelor's Degree or equivalent	170	70	1.48	1.09	4.01	-0.39	-36.06	-0.39	-36.06	1.34	1.26	-0.08	-6.63	
Not in a postsecondary award, certificate, diploma, or degree program	2,000	810	12.40	10.50	24.63	-1.89*	-18.04	-1.89*	-18.04	11.47	10.51	-0.96*	-9.09	
Class level of undergraduates														
First year	19,930	3,120	59.58	59.12	62.78	-0.46	-0.78	-0.46	-0.78	59.67	58.69	-0.98*	-1.67	
Second year	6,470	860	37.14	37.60	33.96	0.46*	1.22	0.46*	1.22	37.21	38.04	0.82*	2.17	
Third year	330	50	2.35	2.29	2.73	-0.05	-2.40	-0.05	-2.40	2.25	2.34	0.09	3.91	
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	13,120	2,520	49.30	48.24	55.82	-1.05*	-2.18	-1.05*	-2.18	48.73	48.67	-0.06	-0.12
65–80	10,400	1,680	33.46	33.54	32.97	0.08	0.24	0.08	0.24	33.51	33.69	0.18	0.54
81–92	4,030	490	11.95	12.56	8.17	0.61*	4.86	0.61*	4.86	12.27	12.18	-0.09	-0.73
93 or more	2,150	200	5.29	5.66	3.05	0.36*	6.41	0.36*	6.41	5.49	5.46	-0.03	-0.63
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	21,910	3,530	72.34	73.16	67.21	0.83*	1.13	0.83*	1.13	72.20	72.77	0.57	0.78
25–42	6,640	1,120	24.25	23.56	28.48	-0.68	-2.91	-0.68	-2.91	24.34	24.05	-0.30	-1.23
43–60	890	160	2.80	2.66	3.65	-0.14	-5.13	-0.14	-5.13	2.82	2.54	-0.28*	-11.07
61 or more	250	80	0.62	0.61	0.66	-0.01	-1.06	-0.01	-1.06	0.63	0.64	0.01	1.93
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	10,690	2,270	40.22	38.01	53.94	-2.22*	-5.83	-2.22*	-5.83	39.95	38.88	-1.07*	-2.75
14–23	9,160	1,270	30.13	31.36	22.57	1.22*	3.90	1.22*	3.90	30.18	31.18	0.99*	3.19
24–32	7,080	820	20.68	21.65	14.65	0.97*	4.50	0.97*	4.50	20.82	21.20	0.38	1.79
33 or more	2,760	530	8.96	8.98	8.84	0.02	0.22	0.02	0.22	9.04	8.74	-0.30	-3.47

See notes at end of table.

Table J-25. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	13,730	2,240	43.82	43.86	43.57	0.04	0.09	0.04	0.09	43.29	43.59	0.31	0.70
\$4,145–\$5,619	10,780	1,670	38.65	38.92	36.92	0.28	0.71	0.28	0.71	38.89	38.58	-0.30	-0.79
\$5,620–\$7,662	4,140	710	14.39	14.14	15.92	-0.25	-1.75	-0.25	-1.75	14.55	14.52	-0.03	-0.24
\$7,663 or more	1,040	270	3.15	3.08	3.59	-0.07	-2.28	-0.07	-2.28	3.28	3.31	0.03	1.00

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	330	30	4.54	4.47	5.40	-0.07	-1.56	-0.07	-1.56	4.57	4.54	-0.03	-0.65
Mideast	1,360	100	18.25	18.10	20.13	-0.15	-0.83	-0.15	-0.83	18.24	18.38	0.14	0.77
Great Lakes	940	50	13.38	13.78	8.46	0.39*	2.86	0.39*	2.86	13.27	13.35	0.07	0.54
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	2,310	140	30.01	30.65	22.08	0.63	2.07	0.63*	2.07	30.41	30.30	-0.11	-0.36
Southwest	500	50	6.06	5.85	8.68	-0.21	-3.58	-0.21	-3.58	5.95	6.07	0.12	1.98
Rocky Mountains	470	40	7.03	6.98	7.66	-0.05	-0.73	-0.05	-0.73	7.19	7.07	-0.12	-1.72
Far West	990	140	16.76	16.24	23.31	-0.52	-3.23	-0.52	-3.23	16.53	16.64	0.11	0.67
Student type													
Undergraduate student	6,240	510	92.81	92.77	93.36	-0.04	-0.05	-0.04	-0.05	92.57	92.65	0.08	0.08
Graduate student	940	70	7.17	7.21	6.64	0.04	0.59	0.04	0.59	7.42	7.34	-0.08	-1.06
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
CPS record available													
Yes	5,160	40	66.35	71.12	6.71	4.77*	6.71	4.77*	6.71	66.18	66.33	0.14	0.22
No	2,030	540	33.65	28.88	93.29	-4.77*	-16.53	-4.77*	-16.53	33.82	33.67	-0.14	-0.43
Federal aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	2,430	50	31.42	33.55	4.84	2.13*	6.34	2.13*	6.34	31.62	37.21	5.59*	15.03
Unknown	190	530	9.48	2.65	94.81	-6.83*	-257.58	-6.83*	-257.58	9.23	3.57	-5.66*	-158.62
Pell Grant status													
Received	2,900	30	39.33	41.99	6.09	2.66*	6.33	2.66*	6.33	39.60	39.34	-0.26	-0.65
Did not receive	4,280	550	60.67	58.01	93.91	-2.66*	-4.59	-2.66*	-4.59	60.40	60.66	0.26	0.42
Total Pell Grant amount received⁷													
\$0 or unknown	4,280	550	60.67	58.01	93.91	-2.66*	-4.59	-2.66*	-4.59	60.40	60.66	0.26	0.42
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	3,370	50	44.15	47.13	6.96	2.98*	6.32	2.98*	6.32	43.64	43.54	-0.10	-0.23
Did not receive	3,820	540	55.85	52.87	93.04	-2.98*	-5.63	-2.98*	-5.63	56.36	56.46	0.10	0.18
Total Stafford Loan amount received³													
\$0 or unknown	3,820	540	55.85	52.87	93.04	-2.98*	-5.63	-2.98*	-5.63	56.36	56.46	0.10	0.18
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
2,629–10,233	2,700	200	35.71	35.92	33.18	0.20	0.56	0.20	0.56	35.64	35.71	0.07	0.18
10,234–26,884	2,840	230	40.50	40.88	35.78	0.38	0.92	0.38	0.92	40.50	40.93	0.43	1.06
26,885 or more	1,380	140	20.25	19.64	27.91	-0.61	-3.12	-0.61	-3.12	20.43	19.96	-0.47	-2.37
Sampled FTB Status													
FTB	2,330	190	13.31	13.52	10.71	0.21*	1.54	0.21*	1.54	13.70	13.63	-0.07	-0.51
Not FTB	4,850	390	86.69	86.48	89.29	-0.21*	-0.24	-0.21*	-0.24	86.30	86.37	0.07	0.08
Age as of Dec 31, 2011													
15–23	4,510	300	58.70	59.54	48.22	0.84*	1.41	0.84*	1.41	58.60	59.34	0.74*	1.26
24–29	1,280	110	18.99	18.93	19.78	-0.06	-0.33	-0.06	-0.33	18.93	18.69	-0.24	-1.31
30 or more	1,400	180	22.31	21.53	31.99	-0.77*	-3.60	-0.77*	-3.60	22.47	21.97	-0.50*	-2.28
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	5,700	450	81.99	82.06	81.08	0.07	0.09	0.07	0.09	81.78	81.72	-0.07	-0.08
Unknown	320	120	4.16	3.23	15.89	-0.94*	-29.09	-0.94*	-29.09	4.17	4.24	0.06	1.47
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	5,590	500	78.42	77.83	85.82	-0.59	-0.76	-0.59	-0.76	78.26	78.20	-0.07	-0.08
Unknown	160	70	2.84	2.16	11.31	-0.68	-31.33	-0.68*	-31.33	2.81	2.89	0.08	2.68

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	180	50	2.85	2.62	5.95	-0.23	-8.69	-0.23	-8.69	2.87	2.70	-0.17	-6.31
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	1,260	90	20.16	20.20	19.66	0.04	0.18	0.04	0.18	19.97	20.03	0.05	0.27
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Health Professions and Related Clinical Sciences	710	30	11.64	11.95	7.35	0.32*	2.64	0.32*	2.64	11.54	11.84	0.29	2.49	

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Business, Management, Marketing, and Related Support Services	710	70	13.57	13.31	17.14	-0.26	-1.97	-0.26	-1.97	13.56	13.58	0.02	0.17
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	230	70	3.32	3.14	5.50	-0.17	-5.51	-0.17	-5.51	3.32	3.28	-0.04	-1.17
Associate's Degree	1,940	130	32.03	32.23	29.50	0.20	0.62	0.20	0.62	32.51	32.68	0.17	0.52
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	3,620	220	59.06	59.80	49.64	0.75	1.25	0.75*	1.25	58.91	59.20	0.29	0.48
Not in a postsecondary award, certificate, diploma, or degree program	330	70	5.36	4.61	14.81	-0.75*	-16.25	-0.75*	-16.25	5.03	4.64	-0.39*	-8.49
Class level of undergraduates													
First year	3,020	300	35.12	34.21	46.91	-0.91*	-2.67	-0.91*	-2.67	35.38	34.20	-1.18*	-3.46
Second year	1,220	70	25.42	25.88	19.48	0.46*	1.78	0.46*	1.78	25.39	25.95	0.56*	2.16
Third year	720	50	15.63	15.83	13.12	0.19	1.23	0.19	1.23	15.27	15.58	0.32	2.05
Fourth year	970	60	20.90	21.18	17.20	0.29	1.35	0.29	1.35	21.06	21.45	0.39	1.82
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	2,120	200	30.21	30.30	29.12	0.09	0.28	0.09	0.28	29.96	30.48	0.52	1.71
65–80	2,900	240	42.09	41.68	47.18	-0.40	-0.97	-0.40	-0.97	42.05	41.85	-0.20	-0.48
81–92	1,600	90	21.92	22.24	17.80	0.33	1.46	0.33	1.46	22.12	21.76	-0.37	-1.68
93 or more	510	50	5.78	5.78	5.90	-0.01	-0.16	-0.01	-0.16	5.86	5.91	0.04	0.74
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	1,010	110	18.06	17.33	27.57	-0.73	-4.20	-0.73	-4.20	17.89	17.10	-0.79*	-4.63
25–42	3,360	270	46.18	46.48	42.30	0.30	0.64	0.30	0.64	46.62	46.90	0.28	0.60
43–60	1,990	120	26.84	27.33	20.37	0.50	1.81	0.50	1.81	26.65	27.01	0.36	1.32
61 or more	740	60	8.93	8.86	9.76	-0.06	-0.72	-0.06	-0.72	8.84	9.00	0.15	1.71
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
14–23	1,970	170	25.38	25.19	27.76	-0.19	-0.76	-0.19	-0.76	25.47	24.90	-0.57	-2.28
24–32	1,980	230	30.28	29.72	37.19	-0.56	-1.88	-0.56	-1.88	30.21	30.01	-0.20	-0.68
33 or more	2,670	160	37.53	38.12	30.18	0.59	1.56	0.59	1.56	37.27	37.89	0.61	1.61

See notes at end of table.

Table J-26. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	1,460	130	19.36	19.15	21.99	-0.21	-1.11	-0.21	-1.11	19.48	18.89	-0.60	-3.15
\$4,145–\$5,619	1,650	200	25.86	25.51	30.23	-0.35	-1.38	-0.35	-1.38	26.15	25.82	-0.33	-1.28
\$5,620–\$7,662	2,310	110	32.08	32.89	22.14	0.80*	2.44	0.80*	2.44	31.84	32.59	0.75	2.29
\$7,663 or more	1,700	150	22.69	22.46	25.63	-0.24	-1.06	-0.24	-1.06	22.53	22.70	0.18	0.79

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	650	40	3.34	3.33	3.58	-0.01	-0.45	-0.01	-0.45	3.38	3.34	-0.04	-1.34	
Mideast	2,320	140	10.75	10.59	13.27	-0.16	-1.50	-0.16	-1.50	10.93	10.96	0.03	0.24	
Great Lakes	3,440	190	16.52	16.60	15.38	0.07	0.43	0.07	0.43	16.59	16.31	-0.28	-1.71	
Plains	1,480	90	8.22	8.34	6.18	0.13	1.53	0.13	1.53	8.27	8.25	-0.02	-0.19	
Southeast	5,850	300	28.63	28.67	28.09	0.03	0.12	0.03	0.12	28.68	28.56	-0.12	-0.43	
Southwest	3,230	210	15.17	15.04	17.24	-0.13	-0.87	-0.13	-0.87	14.73	14.68	-0.05	-0.34	
Rocky Mountains	1,010	60	4.38	4.38	4.36	#	0.04	#	0.04	4.48	4.55	0.06	1.38	
Far West	1,910	110	12.99	13.06	11.89	0.07	0.53	0.07	0.53	12.92	13.34	0.42*	3.16	
Student type														
Undergraduate student	14,120	880	77.09	76.91	79.83	-0.17	-0.22	-0.17	-0.22	76.01	76.09	0.09	0.11	
Graduate student	4,830	230	20.37	20.46	18.89	0.09	0.45	0.09	0.45	21.31	21.22	-0.09	-0.43	
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
CPS record available														
Yes	13,200	60	64.32	68.10	4.20	3.77*	5.54	3.77*	5.54	63.86	64.01	0.15	0.24	
No	6,670	1,070	35.68	31.90	95.80	-3.77*	-11.82	-3.77*	-11.82	36.14	35.99	-0.15	-0.42	
Federal aid status														
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Did not receive	7,490	220	34.36	35.49	16.47	1.12*	3.16	1.12*	3.16	34.66	38.77	4.10*	10.58	
Unknown	620	890	7.88	3.27	81.44	-4.61*	141.17	-4.61*	-141.17	7.77	3.68	-4.10*	-111.40	
Pell Grant status														
Received	5,450	40	28.35	29.93	3.20	1.58*	5.27	1.58*	5.27	28.02	28.04	0.03	0.09	
Did not receive	14,430	1,090	71.65	70.07	96.80	-1.58*	-2.25	-1.58*	-2.25	71.98	71.96	-0.03	-0.04	
Total Pell Grant amount received⁷														
\$0 or unknown	14,430	1,090	71.65	70.07	96.80	-1.58*	-2.25	-1.58*	-2.25	71.98	71.96	-0.03	-0.04	
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$2,775–\$5,549	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	10,430	70	51.21	54.04	6.13	2.83*	5.23	2.83*	5.23	51.06	51.02	-0.03	-0.06
Did not receive	9,450	1,060	48.79	45.96	93.87	-2.83*	-6.15	-2.83*	-6.15	48.94	48.98	0.03	0.06
Total Stafford Loan amount received⁶													
\$0 or unknown	9,450	1,060	48.79	45.96	93.87	-2.83*	-6.15	-2.83*	-6.15	48.94	48.98	0.03	0.06
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
2,629–10,233	1,470	50	7.31	7.48	4.53	0.17*	2.33	0.17*	2.33	7.31	7.38	0.07	0.97
10,234–26,884	7,200	370	35.93	36.24	31.00	0.31	0.85	0.31	0.85	36.19	36.05	-0.15	-0.41
26,885 or more	11,090	720	56.36	55.85	64.47	-0.51*	-0.91	-0.51*	-0.91	56.08	56.14	0.06	0.10
Sampled FTB Status													
FTB	4,200	210	11.33	11.56	7.78	0.22*	1.93	0.22*	1.93	11.48	11.50	0.01	0.13
Not FTB	15,680	930	88.67	88.44	92.22	-0.22*	-0.25	-0.22*	-0.25	88.52	88.50	-0.01	-0.02
Age as of Dec 31, 2011													
15–23	11,830	670	60.91	61.07	58.29	0.16	0.27	0.16	0.27	60.31	60.42	0.11	0.19
24–29	4,140	230	21.04	21.00	21.69	-0.04	-0.19	-0.04	-0.19	21.43	21.25	-0.18	-0.84
30 or more	3,910	240	18.05	17.92	20.03	-0.12	-0.69	-0.12	-0.69	18.27	18.33	0.06	0.35
Institution aid status													
Received	6,300	70	26.27	27.55	5.85	1.28*	4.65	1.28*	4.65	26.54	26.57	0.03	0.12
Did not receive	12,140	680	65.92	66.00	64.53	0.09	0.13	0.09	0.13	65.42	65.71	0.30	0.45
Unknown	1,440	390	7.81	6.45	29.61	-1.37*	-21.21	-1.37*	-21.21	8.05	7.72	-0.33	-4.26
State aid status													
Received	3,950	40	18.76	19.73	3.30	0.97*	4.91	0.97*	4.91	18.72	18.72	#	#
Did not receive	15,330	940	77.64	77.20	84.62	-0.44	-0.57	-0.44	-0.57	77.67	77.86	0.18	0.24
Unknown	590	160	3.60	3.06	12.07	-0.53	-17.35	-0.53*	-17.35	3.60	3.42	-0.18	-5.38

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	580	40	3.63	3.61	3.96	-0.02	-0.54	-0.02	-0.54	3.58	3.56	-0.02	-0.43	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	470	40	2.78	2.73	3.68	-0.05	-1.98	-0.05	-1.98	2.85	2.84	-0.01	-0.36	
Personal and Culinary Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Education	1,700	70	8.62	8.72	6.95	0.10	1.15	0.10	1.15	8.68	8.67	#	-0.02	
Engineering	1,310	90	7.18	7.05	9.34	-0.13	-1.84	-0.13	-1.84	7.14	7.09	-0.05	-0.70	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	710	60	4.14	3.99	6.57	-0.15*	-3.67	-0.15*	-3.67	4.09	3.97	-0.13	-3.18
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	1,230	50	6.39	6.51	4.44	0.12*	1.81	0.12*	1.81	6.30	6.37	0.06	1.02
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	500	40	3.19	3.15	3.92	-0.04	-1.41	-0.04	-1.41	3.05	3.07	0.02	0.62
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Psychology	890	40	4.98	4.99	4.71	0.02	0.32	0.02	0.32	5.00	4.96	-0.04	-0.90
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	910	60	5.56	5.47	7.06	-0.09	-1.66	-0.09	-1.66	5.61	5.54	-0.08	-1.39
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Transportation and Materials	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	710	30	4.13	4.15	3.91	0.01	0.32	0.01	0.32	4.21	4.20	-0.01	-0.22

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	2,260	70	11.64	11.96	6.30	0.32*	2.69	0.32*	2.69	11.58	11.80	0.22*	1.90	
Business, Management, Marketing, and Related Support Services	2,200	170	15.39	15.12	19.80	-0.27*	-1.76	-0.27*	-1.76	15.49	15.46	-0.03	-0.20	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Associate's Degree	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	13,380	750	94.02	94.54	86.01	0.52	0.55	0.52	0.55	94.13	94.58	0.45	0.47	
Not in a postsecondary award, certificate, diploma, or degree program	700	110	4.64	4.18	11.74	-0.46*	-10.97	-0.46*	-10.97	4.51	4.10	-0.41*	-10.09	
Class level of undergraduates														
First year	4,330	270	19.89	19.68	23.27	-0.21	-1.05	-0.21	-1.05	20.01	19.54	-0.46*	-2.38	
Second year	2,490	140	19.18	19.32	16.92	0.14	0.72	0.14	0.72	18.76	18.75	-0.01	-0.06	
Third year	2,620	140	23.08	23.25	20.28	0.17	0.74	0.17	0.74	22.56	22.58	0.02	0.11	
Fourth year	3,970	250	35.59	35.52	36.72	-0.07	-0.20	-0.07	-0.20	36.37	36.83	0.46*	1.24	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	7,780	510	40.11	39.95	42.64	-0.16	-0.40	-0.16	-0.40	40.18	40.40	0.22	0.54
65–80	5,480	340	29.61	29.41	32.83	-0.20	-0.69	-0.20	-0.69	29.58	29.33	-0.25	-0.86
81–92	4,640	200	22.71	23.01	18.09	0.29	1.28	0.29	1.28	22.77	22.88	0.11	0.49
93 or more	1,530	70	7.56	7.63	6.44	0.07	0.93	0.07	0.93	7.47	7.39	-0.08	-1.07
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	350	30	2.21	2.13	3.50	-0.08	-3.85	-0.08	-3.85	2.25	2.15	-0.10	-4.64
25–42	3,990	250	21.38	21.30	22.66	-0.08	-0.38	-0.08	-0.38	21.36	21.36	#	0.01
43–60	7,290	390	37.05	37.32	32.79	0.27	0.72	0.27	0.72	37.11	37.08	-0.03	-0.07
61 or more	7,790	450	39.36	39.26	41.04	-0.11	-0.27	-0.11	-0.27	39.28	39.41	0.12	0.31
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	1,200	60	5.54	5.58	4.96	0.04	0.66	0.04	0.66	5.55	5.54	-0.01	-0.27
14–23	3,700	230	18.74	18.80	17.87	0.06	0.30	0.06	0.30	18.80	18.76	-0.03	-0.18
24–32	6,100	320	32.20	32.24	31.52	0.04	0.13	0.04	0.13	32.24	32.26	0.02	0.07
33 or more	8,330	510	43.52	43.39	45.66	-0.14	-0.31	-0.14	-0.31	43.41	43.44	0.02	0.06

See notes at end of table.

Table J-27. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,145–\$5,619	780	50	4.33	4.28	5.02	-0.04	-1.03	-0.04	-1.03	4.41	4.46	0.05	1.10
\$5,620–\$7,662	6,260	410	33.62	33.45	36.26	-0.17	-0.50	-0.17	-0.50	33.50	33.25	-0.25	-0.75
\$7,663 or more	12,140	630	60.88	61.21	55.63	0.33	0.54	0.33	0.54	60.90	61.19	0.29	0.48

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Midwest	240	30	15.71	14.91	32.79	-0.80	-5.38	-0.80	-5.38	16.17	15.22	-0.95	-6.23
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	†	†	†	†	†	†	†	†	†	†	†	†	†
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
CPS record available													
Yes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
No	170	60	19.92	18.39	52.36	-1.52	-8.28	-1.52	-8.28	20.40	21.78	1.38	6.32
Federal aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unknown	40	80	8.71	4.46	99.35	-4.25	-95.39	-4.25*	-95.39	8.76	5.35	-3.40	-63.51
Pell Grant status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	330	60	33.95	32.80	58.48	-1.15	-3.51	-1.15	-3.51	34.78	35.72	0.94	2.63
Total Pell Grant amount received⁷													
\$0 or unknown	330	60	33.95	32.80	58.48	-1.15	-3.51	-1.15	-3.51	34.78	35.72	0.94	2.63
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Stafford Loan status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	320	80	36.74	33.80	99.35	-2.94	-8.69	-2.94*	-8.69	37.96	37.66	-0.30	-0.80

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received³													
\$0 or unknown	320	80	36.74	33.80	99.35	-2.94	-8.69	-2.94*	-8.69	37.96	37.66	-0.30	-0.80
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	1,080	60	99.27	99.78	88.42	0.51	0.51	0.51	0.51	99.27	99.75	0.49	0.49
2,629–10,233	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10,234–26,884	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
26,885 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Sampled FTB Status													
FTB	670	70	21.85	21.20	35.79	-0.65	-3.09	-0.65	-3.09	22.45	21.42	-1.03*	-4.83
Not FTB	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Age as of Dec 31, 2011													
15–23	620	50	43.60	43.62	43.17	0.02	0.05	0.02	0.05	43.56	43.05	-0.51	-1.19
24–29	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
30 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	810	40	74.85	77.29	22.77	2.44	3.16	2.44*	3.16	74.33	76.42	2.09	2.73
Unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	880	60	81.89	83.52	47.11	1.63	1.95	1.63	1.95	82.11	83.43	1.32	1.58
Unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†	
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science	†	†	†	†	†	†	†	†	†	†	†	†	†
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Transportation and Materials	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Associate's Degree	420	50	37.12	35.04	81.40	-2.08	-5.93	-2.08*	-5.93	37.27	35.02	-2.25	-6.42	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	†	†	†	†	†	†	†	†	†	†	†	†	†	
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Class level of undergraduates														
First year	930	70	72.14	72.06	73.87	-0.08	-0.11	-0.08	-0.11	72.54	72.70	0.16	0.22	
Second year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fifth year or higher	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
65–80	300	30	26.99	26.72	32.79	-0.27	-1.02	-0.27	-1.02	25.95	25.15	-0.80	-3.17
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
43–60	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
61 or more	340	30	37.87	37.83	38.57	-0.03	-0.09	-0.03	-0.09	39.40	40.47	1.06	2.63
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80–98	360	30	30.99	30.91	32.79	-0.08	-0.27	-0.08	-0.27	30.01	29.20	-0.82	-2.79
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-28. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	250	40	15.39	14.42	36.18	-0.98	-6.77	-0.98	-6.77	15.92	14.91	-1.01	-6.77
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	730	50	10.49	10.38	12.97	-0.11	-1.06	-0.11	-1.06	10.72	10.66	-0.06	-0.56
Mideast	1,650	90	20.30	20.09	24.99	-0.21	-1.04	-0.21	-1.04	20.33	20.29	-0.04	-0.18
Great Lakes	1,550	320	23.36	23.15	28.02	-0.21	-0.90	-0.21	-0.90	23.26	23.19	-0.07	-0.32
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	1,280	90	19.82	20.13	12.90	0.31	1.53	0.31	1.53	20.14	20.15	0.01	0.05
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	670	60	9.05	8.84	13.79	-0.21	-2.39	-0.21	-2.39	8.91	8.82	-0.09	-0.98
Student type													
Undergraduate student	5,280	510	84.44	84.64	79.89	0.20	0.24	0.20	0.24	84.02	84.11	0.09	0.10
Graduate student	1,630	110	15.53	15.33	20.11	-0.20	-1.33	-0.20	-1.33	15.95	15.86	-0.09	-0.55
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
CPS record available													
Yes	5,310	330	75.41	77.81	21.42	2.40*	3.08	2.40*	3.08	75.17	75.03	-0.14	-0.18
No	1,600	280	24.59	22.19	78.58	-2.40*	-10.81	-2.40*	-10.81	24.83	24.97	0.14	0.55
Federal aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	1,710	90	23.54	23.87	16.20	0.33	1.37	0.33	1.37	23.86	26.17	2.32*	8.85
Unknown	650	510	7.51	4.34	78.96	-3.17*	-73.10	-3.17*	-73.10	7.45	5.23	-2.22*	-42.52
Pell Grant status													
Received	2,260	240	33.46	34.33	13.87	0.87*	2.53	0.87*	2.53	33.36	33.31	-0.05	-0.15
Did not receive	4,640	370	66.54	65.67	86.13	-0.87*	-1.32	-0.87*	-1.32	66.64	66.69	0.05	0.07
Total Pell Grant amount received⁷													
\$0 or unknown	4,640	370	66.54	65.67	86.13	-0.87*	-1.32	-0.87*	-1.32	66.64	66.69	0.05	0.07
\$1–\$2,774	610	140	9.14	9.26	6.34	0.12	1.34	0.12	1.34	9.16	9.14	-0.02	-0.21
\$2,775–\$5,549	840	80	12.45	12.85	3.41	0.40*	3.13	0.40*	3.13	12.35	12.37	0.02	0.19
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	4,540	220	65.56	67.61	19.36	2.05*	3.04	2.05*	3.04	65.32	65.13	-0.19	-0.30
Did not receive	2,370	390	34.44	32.39	80.64	-2.05*	-6.34	-2.05*	-6.34	34.68	34.87	0.19	0.55
Total Stafford Loan amount received⁶													
\$0 or unknown	2,370	390	34.44	32.39	80.64	-2.05*	-6.34	-2.05*	-6.34	34.68	34.87	0.19	0.55
\$1–\$4,699	650	100	8.44	8.48	7.49	0.04	0.50	0.04	0.50	8.12	7.91	-0.20	-2.56
\$4,700–\$6,500	1,760	60	22.05	22.77	5.92	0.72*	3.15	0.72*	3.15	22.17	22.10	-0.07	-0.34
\$6,501–\$9,500	1,060	50	19.05	19.73	3.66	0.68*	3.46	0.68*	3.46	18.94	18.95	0.01	0.07
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	3,410	130	49.84	50.90	26.07	1.06*	2.07	1.06*	2.07	50.33	51.04	0.71*	1.39
2,629–10,233	3,020	430	41.27	40.86	50.47	-0.41	-1.00	-0.41	-1.00	40.89	40.51	-0.38	-0.94
10,234–26,884	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
26,885 or more	190	40	3.13	2.55	16.02	-0.57	-22.43	-0.57	-22.43	3.04	2.60	-0.44	-16.91
Sampled FTB Status													
FTB	2,680	340	16.05	16.33	9.91	0.27*	1.67	0.27*	1.67	16.57	16.64	0.07	0.42
Not FTB	4,220	270	83.95	83.67	90.09	-0.27*	-0.33	-0.27*	-0.33	83.43	83.36	-0.07	-0.08
Age as of Dec 31, 2011													
15–23	4,460	310	64.49	65.72	36.82	1.23*	1.87	1.23*	1.87	64.27	64.79	0.52	0.80
24–29	960	110	13.31	13.05	19.07	-0.26	-1.96	-0.26	-1.96	13.26	13.21	-0.06	-0.42
30 or more	1,490	190	22.20	21.23	44.11	-0.97*	-4.58	-0.97*	-4.58	22.47	22.00	-0.47	-2.11
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	2,470	100	38.70	38.46	44.23	-0.25	-0.64	-0.25	-0.64	38.53	38.95	0.42	1.07
Unknown	880	490	8.03	6.24	48.23	-1.79*	-28.61	-1.79*	-28.61	8.07	7.47	-0.60*	-7.99
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	4,990	220	74.39	74.59	69.94	0.20	0.27	0.20	0.27	74.37	74.77	0.40	0.54
Unknown	640	400	5.12	4.01	30.06	-1.11*	-27.66	-1.11*	-27.66	5.13	4.70	-0.43	-9.15

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	280	30	1.70	1.67	2.55	-0.04	-2.15	-0.04	-2.15	1.72	1.73	0.02	1.00	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Security and Protective Services	140	30	2.92	2.86	4.36	-0.06	-2.12	-0.06	-2.12	2.95	2.85	-0.10	-3.49
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Construction Trades	†	†	†	†	†	†	†	†	†	†	†	†	†
Mechanic and Repair Technologies/Technicians	40	40	0.60	0.55	1.74	-0.05	-8.60	-0.05	-8.60	0.64	0.58	-0.06	-10.03
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	710	120	11.98	11.86	14.81	-0.12	-1.00	-0.12	-1.00	11.47	11.27	-0.20	-1.76	
Business, Management, Marketing, and Related Support Services	680	60	17.64	17.45	22.03	-0.18	-1.06	-0.18	-1.06	17.72	17.98	0.26	1.45	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	270	200	1.16	1.18	0.81	0.01	1.20	0.01	1.20	1.20	1.21	0.01	0.92	
Associate's Degree	450	90	8.07	7.32	26.65	-0.76*	-10.34	-0.76*	-10.34	8.17	7.40	-0.77*	-10.41	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	4,500	190	85.93	86.84	63.58	0.91*	1.05	0.91*	1.05	86.02	86.78	0.76*	0.88	
Not in a postsecondary award, certificate, diploma, or degree program	230	30	3.71	3.50	8.82	-0.21	-5.95	-0.21	-5.95	3.51	3.48	-0.03	-0.93	
Class level of undergraduates														
First year	2,670	360	26.97	26.77	32.21	-0.21	-0.78	-0.21	-0.78	27.47	27.15	-0.32	-1.18	
Second year	910	50	22.33	22.20	25.49	-0.13	-0.56	-0.13	-0.56	22.34	22.28	-0.06	-0.28	
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fourth year	820	40	26.54	26.70	22.66	0.15	0.58	0.15	0.58	26.36	26.79	0.43	1.61	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	680	40	10.61	10.53	12.70	-0.09	-0.82	-0.09	-0.82	10.71	10.86	0.15	1.37
65–80	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
81–92	1,370	260	18.01	17.31	35.20	-0.71*	-4.10	-0.71*	-4.10	18.35	17.79	-0.57	-3.19
93 or more	4,200	290	62.81	63.41	48.42	0.59*	0.94	0.59*	0.94	62.31	62.55	0.24	0.39
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	630	360	6.37	5.58	25.65	-0.79	-14.17	-0.79*	-14.17	6.50	6.26	-0.23	-3.69
25–42	1,210	70	18.66	18.53	21.91	-0.13	-0.72	-0.13	-0.72	18.53	18.21	-0.32	-1.75
43–60	2,370	90	37.84	38.33	25.94	0.49*	1.27	0.49*	1.27	37.75	37.95	0.20	0.52
61 or more	2,550	80	37.13	37.56	26.49	0.44	1.16	0.44*	1.16	37.23	37.58	0.35	0.94
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	2,570	70	39.53	40.22	22.22	0.69*	1.71	0.69*	1.71	39.58	40.33	0.75*	1.86
64–79	2,330	150	35.51	35.67	31.66	0.15	0.43	0.15	0.43	35.19	34.99	-0.20	-0.56
80–98	1,620	200	24.04	23.16	46.12	-0.88*	-3.80	-0.88*	-3.80	24.29	23.71	-0.58	-2.43
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-29. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	330	50	5.79	5.17	21.27	-0.62	-11.91	-0.62	-11.91	5.73	5.22	-0.52	-9.90
\$3,122–\$5,426	1,320	90	19.68	19.71	18.93	0.03	0.15	0.03	0.15	19.61	20.06	0.45	2.26
\$5,427–\$8,864	2,650	120	40.87	41.14	34.22	0.26	0.64	0.26	0.64	40.78	40.50	-0.28	-0.70
\$8,865 or more	2,330	160	33.66	33.98	25.59	0.32	0.95	0.32	0.95	33.88	34.23	0.35	1.02

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	1,470	150	12.22	11.68	20.60	-0.53	-4.56	-0.53	-4.56	12.25	12.12	-0.12	-1.02	
Mideast	3,750	280	32.37	31.56	45.10	-0.81	-2.57	-0.81*	-2.57	32.66	32.05	-0.61	-1.91	
Great Lakes	1,450	130	14.01	14.31	9.30	0.30	2.09	0.30	2.09	13.96	14.32	0.36	2.50	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	1,500	40	16.11	16.66	7.48	0.55*	3.30	0.55*	3.30	16.13	16.27	0.13	0.83	
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	700	30	10.60	10.76	8.11	0.16	1.48	0.16	1.48	10.43	10.56	0.13	1.25	
Student type														
Undergraduate student	4,690	400	56.55	56.25	61.29	-0.30	-0.54	-0.30	-0.54	55.50	55.73	0.23	0.42	
Graduate student	4,550	230	35.31	35.41	33.77	0.10	0.28	0.10	0.28	36.00	35.79	-0.22	-0.60	
First-professional	940	40	8.14	8.34	4.93	0.20*	2.44	0.20*	2.44	8.50	8.48	-0.02	-0.20	
CPS record available														
Yes	6,080	140	62.39	65.60	12.04	3.20*	4.89	3.20*	4.89	61.85	61.98	0.14	0.22	
No	4,100	530	37.61	34.40	87.96	-3.20*	-9.32	-3.20*	-9.32	38.15	38.02	-0.14	-0.36	
Federal aid status														
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Did not receive	4,090	190	32.08	32.49	25.76	0.40	1.24	0.40	1.24	32.71	34.60	1.89*	5.46	
Unknown	730	470	11.41	7.48	73.11	-3.93*	-52.48	-3.93*	-52.48	11.23	9.27	-1.96*	-21.10	
Pell Grant status														
Received	1,450	60	16.70	17.49	4.24	0.79*	4.53	0.79*	4.53	16.48	16.59	0.12	0.71	
Did not receive	8,730	610	83.30	82.51	95.76	-0.79*	-0.96	-0.79*	-0.96	83.52	83.41	-0.12	-0.14	
Total Pell Grant amount received⁷														
\$0 or unknown	8,730	610	83.30	82.51	95.76	-0.79*	-0.96	-0.79*	-0.96	83.52	83.41	-0.12	-0.14	
\$1–\$2,774	380	30	4.73	4.90	2.04	0.17*	3.49	0.17*	3.49	4.62	4.66	0.05	1.00	
\$2,775–\$5,549	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	5,140	100	55.14	57.99	10.31	2.85*	4.92	2.85*	4.92	54.71	54.80	0.09	0.16
Did not receive	5,040	570	44.86	42.01	89.69	-2.85*	-6.79	-2.85*	-6.79	45.29	45.20	-0.09	-0.20
Total Stafford Loan amount received⁶													
\$0 or unknown	5,040	570	44.86	42.01	89.69	-2.85*	-6.79	-2.85*	-6.79	45.29	45.20	-0.09	-0.20
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment⁷													
0–2,628	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
2,629–10,233	4,710	270	44.57	45.35	32.36	0.78*	1.71	0.78*	1.71	44.17	44.45	0.28	0.62
10,234–26,884	3,070	230	29.89	29.42	37.23	-0.47	-1.59	-0.47	-1.59	29.87	29.59	-0.28	-0.95
26,885 or more	1,680	150	17.06	16.44	26.83	-0.62	-3.78	-0.62	-3.78	17.30	17.17	-0.13	-0.78
Sampled FTB Status													
FTB	3,240	290	10.22	10.32	8.67	0.10	0.95	0.10	0.95	10.33	10.42	0.09	0.90
Not FTB	6,940	370	89.78	89.68	91.33	-0.10	-0.11	-0.10	-0.11	89.67	89.58	-0.09	-0.11
Age as of Dec 31, 2011													
15–23	4,820	300	49.09	49.38	44.47	0.29	0.60	0.29	0.60	48.41	48.34	-0.06	-0.13
24–29	2,640	180	24.67	24.50	27.37	-0.17	-0.70	-0.17	-0.70	24.95	24.74	-0.21	-0.85
30 or more	2,720	180	26.24	26.12	28.16	-0.12	-0.47	-0.12	-0.47	26.65	26.92	0.27	1.00
Institution aid status													
Received	4,900	40	40.95	42.98	9.15	2.02*	4.71	2.02*	4.71	40.72	40.75	0.03	0.08
Did not receive	3,730	170	43.14	43.86	31.77	0.72*	1.65	0.72*	1.65	43.24	43.38	0.14	0.33
Unknown	1,550	460	15.91	13.16	59.08	-2.75*	-20.88	-2.75*	-20.88	16.05	15.87	-0.18	-1.11
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	8,460	400	81.29	82.20	67.05	0.91	1.10	0.91	1.10	81.60	81.67	0.07	0.08
Unknown	720	260	8.72	7.19	32.89	-1.54*	-21.41	-1.54*	-21.41	8.63	8.54	-0.09	-1.10

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	300	40	2.34	2.23	4.49	-0.12	-5.28	-0.12	-5.28	2.37	2.45	0.08	3.42	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	910	30	10.23	10.49	5.40	0.26*	2.52	0.26*	2.52	10.04	10.04	#	0.02	
Engineering	720	40	4.89	4.76	7.31	-0.13	-2.79	-0.13	-2.79	4.88	4.82	-0.06	-1.32	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public Administration and Social Service	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Construction Trades	†	†	†	†	†	†	†	†	†	†	†	†	†
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†
Transportation and Materials	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Health Professions and Related Clinical Sciences	1,330	40	16.78	17.15	10.21	0.36*	2.10	0.36*	2.10	16.81	16.96	0.15	0.91
Business, Management, Marketing, and Related Support Services	950	130	17.71	17.08	29.28	-0.63	-3.71	-0.63*	-3.71	17.81	17.67	-0.15	-0.83
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Associate's Degree	190	50	2.58	2.60	2.29	0.02	0.76	0.02	0.76	2.60	2.62	0.02	0.82
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	4,020	240	87.01	88.13	70.65	1.12	1.27	1.12	1.27	87.18	88.20	1.02*	1.15
Not in a postsecondary award, certificate, diploma, or degree program	220	50	6.75	5.68	22.39	-1.07*	-18.85	-1.07*	-18.85	6.58	5.57	-1.01*	-18.19
Class level of undergraduates													
First year	2,780	230	24.35	24.03	29.82	-0.31	-1.31	-0.31	-1.31	24.47	23.98	-0.49	-2.04
Second year	680	30	21.79	22.16	15.31	0.37*	1.68	0.37*	1.68	21.86	22.59	0.73*	3.24
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	2,520	170	23.29	22.87	29.68	-0.42	-1.82	-0.42	-1.82	23.78	23.67	-0.11	-0.46
65–80	1,510	100	14.97	15.08	13.31	0.11	0.72	0.11	0.72	15.21	15.34	0.13	0.85
81–92	1,490	160	15.69	15.58	17.39	-0.11	-0.71	-0.11	-0.71	15.61	15.58	-0.03	-0.22
93 or more	4,050	210	46.05	46.47	39.62	0.42	0.90	0.42	0.90	45.40	45.42	0.01	0.03
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	670	120	7.82	7.85	7.46	0.02	0.30	0.02	0.30	7.87	7.90	0.03	0.37
43–60	2,500	150	28.20	28.07	30.24	-0.13	-0.47	-0.13	-0.47	27.86	27.56	-0.30	-1.09
61 or more	6,280	360	62.04	62.06	61.73	0.02	0.03	0.02	0.03	62.21	62.46	0.25	0.40
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	5,490	340	47.21	46.82	53.53	-0.39	-0.83	-0.39	-0.83	47.87	47.90	0.02	0.05
64–79	2,500	120	27.88	28.07	24.81	0.19	0.68	0.19	0.68	27.28	26.96	-0.32	-1.19
80–98	2,060	120	24.90	25.10	21.66	0.20	0.80	0.20	0.80	24.84	25.14	0.30	1.18
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-30. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	870	50	9.91	9.98	8.79	0.07	0.69	0.07	0.69	9.75	10.00	0.25	2.53
\$5,427–\$8,864	2,360	80	24.31	24.68	18.32	0.37	1.50	0.37	1.50	23.86	23.73	-0.12	-0.52
\$8,865 or more	6,700	430	63.41	62.96	70.68	-0.45	-0.72	-0.45	-0.72	63.96	63.89	-0.07	-0.11

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southwest	660	100	35.32	26.90	81.62	-8.42	-31.31	-8.42*	-31.31	34.71	34.35	-0.35	-1.03
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
CPS record available													
Yes	4,170	90	84.85	88.58	64.39	3.72*	4.20	3.72	4.20	84.72	86.42	1.70	1.97
No	370	110	15.15	11.42	35.61	-3.72*	-32.60	-3.72	-32.60	15.28	13.58	-1.70	-12.51
Federal aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unknown	220	200	35.21	23.42	99.97	11.78*	-50.31	11.78*	-50.31	34.33	32.24	-2.09*	-6.47
Pell Grant status													
Received	3,690	110	71.84	75.56	51.40	3.72*	4.92	3.72*	4.92	72.13	70.99	-1.15*	-1.61
Did not receive	850	90	28.16	24.44	48.60	-3.72*	-15.22	-3.72*	-15.22	27.87	29.01	1.15*	3.95
Total Pell Grant amount received⁷													
\$0 or unknown	850	90	28.16	24.44	48.60	-3.72*	-15.22	-3.72*	-15.22	27.87	29.01	1.15*	3.95
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$2,775–\$5,549	1,500	50	32.83	34.14	25.62	1.31*	3.84	1.31*	3.84	32.28	31.57	-0.71*	-2.25
\$5,550 or more	1,230	40	22.52	23.67	16.26	1.14	4.82	1.14*	4.82	23.03	22.88	-0.15	-0.67
Stafford Loan status													
Received	3,850	110	75.45	79.99	50.51	4.54*	5.67	4.54*	5.67	75.83	74.50	-1.34*	-1.79
Did not receive	700	90	24.55	20.01	49.49	-4.54*	-22.68	-4.54*	-22.68	24.17	25.50	1.34*	5.24

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	700	90	24.55	20.01	49.49	-4.54*	-22.68	-4.54*	-22.68	24.17	25.50	1.34*	5.24
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	960	30	19.52	19.50	19.66	-0.02	-0.13	-0.02	-0.13	19.68	18.38	-1.30*	-7.05
\$6,501–\$9,500	1,730	50	31.47	34.66	13.93	3.19	9.20	3.19*	9.20	31.42	32.52	1.10	3.38
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment ⁷													
0–2,628	4,440	200	98.05	97.69	99.97	-0.35	-0.36	-0.35	-0.36	97.96	97.92	-0.04	-0.04
2,629–10,233	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10,234–26,884	†	†	†	†	†	†	†	†	†	†	†	†	†
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	2,730	100	21.05	22.51	13.05	1.46*	6.47	1.46*	6.47	21.50	21.88	0.37	1.71
Not FTB	1,820	100	78.95	77.49	86.95	-1.46*	-1.88	-1.46*	-1.88	78.50	78.12	-0.37	-0.48
Age as of Dec 31, 2011													
15–23	2,500	120	46.68	45.34	54.00	-1.33	-2.94	-1.33*	-2.94	46.10	43.10	-3.00	-6.97
24–29	950	30	25.29	26.25	20.03	0.96	3.65	0.96*	3.65	25.46	26.52	1.06	4.00
30 or more	1,100	50	28.03	28.41	25.97	0.37	1.32	0.37	1.32	28.44	30.38	1.94	6.39
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	4,240	90	66.41	75.21	18.05	8.80*	11.70	8.80*	11.70	67.13	67.59	0.46	0.68
Unknown	180	110	31.77	22.70	81.64	-9.07*	-39.97	-9.07*	-39.97	31.01	30.58	-0.43	-1.41
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	4,260	90	66.66	75.45	18.36	8.79*	11.65	8.79*	11.65	67.38	67.79	0.41	0.61
Unknown	180	110	31.77	22.70	81.64	-9.07*	-39.97	-9.07*	-39.97	31.01	30.58	-0.43	-1.41

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†	
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Personal and Culinary Services	1,600	40	37.17	43.09	5.64	5.92*	13.74	5.92*	13.74	37.60	38.10	0.51	1.33	
Education	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Family and Consumer Sciences/Human Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†	†	†	†	†	†	†	†	†
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science	†	†	†	†	†	†	†	†	†	†	†	†	†
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†
Security and Protective Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Public Administration and Social Service	†	†	†	†	†	†	†	†	†	†	†	†	†
Professions	†	†	†	†	†	†	†	†	†	†	†	†	†
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†
Transportation and Materials	†	†	†	†	†	†	†	†	†	†	†	†	†
Moving	†	†	†	†	†	†	†	†	†	†	†	†	†
Visual and Performing Arts	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment										After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	2,280	150	58.34	51.71	93.69	-6.64*	-12.83	-6.64*	-12.83	57.78	57.07	-0.71	-1.25	
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	4,410	190	88.82	88.62	89.95	-0.21	-0.23	-0.21	-0.23	88.84	84.60	-4.24	-5.01	
Associate's Degree	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	†	†	†	†	†	†	†	†	†	†	†	†	†	
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Class level of undergraduates														
First year	4,320	180	93.53	93.03	96.26	-0.50	-0.54	-0.50	-0.54	93.38	93.19	-0.19	-0.20	
Second year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷														
64 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
65–80	1,840	130	60.24	54.30	92.25	-5.94*	-10.94	-5.94*	-10.94	59.77	59.62	-0.15	-0.26	
81–92	1,940	40	28.34	32.52	5.78	4.19*	12.87	4.19*	12.87	28.72	28.95	0.23	0.80	
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷														
24 or less	†	†	†	†	†	†	†	†	†	†	†	†	†	
25–42	†	†	†	†	†	†	†	†	†	†	†	†	†	
43–60	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
61 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷														
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
64–79	630	120	44.82	36.50	85.74	-8.31*	-22.77	-8.31*	-22.77	43.97	43.56	-0.41	-0.95	
80–98	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-31. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	1,640	150	61.98	56.13	90.77	-5.85*	-10.42	-5.85*	-10.42	61.29	60.65	-0.64	-1.06
\$5,427–\$8,864	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Midwest	1,490	240	19.53	18.86	26.78	-0.67	-3.54	-0.67	-3.54	19.66	19.38	-0.28	-1.44
Great Lakes	930	40	14.17	14.51	10.44	0.34	2.37	0.34	2.37	14.24	13.85	-0.39	-2.83
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	1,190	100	24.42	24.83	19.95	0.41	1.66	0.41	1.66	23.89	24.57	0.68	2.76
Southwest	950	100	11.21	11.25	10.76	0.04	0.37	0.04	0.37	11.44	11.50	0.05	0.45
Rocky Mountains	480	100	4.87	3.80	16.53	-1.07	-28.28	-1.07	-28.28	4.81	4.62	-0.20	-4.23
Far West	2,470	110	21.55	22.11	15.46	0.56	2.53	0.56	2.53	21.66	21.56	-0.11	-0.49
CPS record available													
Yes	7,400	430	88.14	91.81	48.27	3.67*	3.99	3.67*	3.99	88.28	88.72	0.43	0.49
No	460	260	11.86	8.19	51.73	-3.67*	-44.78	-3.67*	-44.78	11.72	11.28	-0.43	-3.84
Federal aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unknown	770	680	16.63	9.04	99.19	-7.59*	-84.04	-7.59*	-84.04	16.40	13.90	-2.50*	-17.98
Pell Grant status													
Received	6,200	380	72.41	74.95	44.79	2.54*	3.39	2.54*	3.39	72.31	72.04	-0.27	-0.38
Did not receive	1,670	310	27.59	25.05	55.21	-2.54*	-10.14	-2.54*	-10.14	27.69	27.96	0.27	0.98
Total Pell Grant amount received⁷													
\$0 or unknown	1,670	310	27.59	25.05	55.21	-2.54*	-10.14	-2.54*	-10.14	27.69	27.96	0.27	0.98
\$1–\$2,774	1,660	130	21.40	22.05	14.32	0.65*	2.95	0.65*	2.95	21.66	21.51	-0.14	-0.66
\$2,775–\$5,549	2,390	140	26.69	27.40	18.91	0.72	2.61	0.72	2.61	26.17	25.69	-0.48	-1.87
\$5,550 or more	2,140	110	24.33	25.50	11.56	1.17*	4.61	1.17*	4.61	24.49	24.84	0.35	1.40
Stafford Loan status													
Received	6,700	380	80.35	83.04	51.19	2.68*	3.23	2.68*	3.23	80.36	80.10	-0.26	-0.32
Did not receive	1,170	310	19.65	16.96	48.81	-2.68*	-15.81	-2.68*	-15.81	19.64	19.90	0.26	1.29

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received³													
\$0 or unknown	1,170	310	19.65	16.96	48.81	-2.68*	-15.81	-2.68*	-15.81	19.64	19.90	0.26	1.29
\$1–\$4,699	1,530	100	22.48	23.04	16.39	0.56	2.43	0.56	2.43	22.62	22.42	-0.20	-0.88
\$4,700–\$6,500	1,610	80	16.85	17.27	12.23	0.42	2.46	0.42	2.46	16.73	16.56	-0.17	-1.01
\$6,501–\$9,500	2,910	150	29.76	31.08	15.37	1.32*	4.26	1.32*	4.26	29.59	29.41	-0.18	-0.62
\$9,501 or more	650	40	11.27	11.65	7.20	0.37	3.22	0.37*	3.22	11.42	11.71	0.29	2.49
Institution total enrollment⁷													
0–2,628	5,720	600	76.27	75.44	85.32	-0.83	-1.10	-0.83	-1.10	75.71	75.65	-0.06	-0.08
2,629–10,233	2,030	90	22.67	23.41	14.68	0.73	3.14	0.73	3.14	23.20	23.25	0.06	0.24
10,234–26,884	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	5,640	380	20.86	21.65	12.23	0.79*	3.66	0.79*	3.66	21.25	22.04	0.79*	3.60
Not FTB	2,220	310	79.14	78.35	87.77	-0.79*	-1.01	-0.79*	-1.01	78.75	77.96	-0.79*	-1.02
Age as of Dec 31, 2011													
15–23	4,740	380	47.14	47.10	47.59	-0.04	-0.09	-0.04	-0.09	46.92	47.16	0.23	0.49
24–29	1,420	170	23.66	22.87	32.32	-0.80	-3.48	-0.80	-3.48	23.59	23.09	-0.50	-2.14
30 or more	1,710	140	29.19	30.03	20.09	0.84*	2.79	0.84*	2.79	29.49	29.75	0.26	0.88
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	6,780	180	81.97	85.83	40.07	3.85*	4.49	3.85*	4.49	81.93	81.68	-0.25	-0.30
Unknown	710	510	12.41	8.22	57.99	-4.19*	-51.03	-4.19*	-51.03	12.36	12.72	0.36	2.80
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	6,850	180	82.24	85.98	41.49	3.75*	4.36	3.75*	4.36	82.14	81.77	-0.37	-0.46
Unknown	710	510	12.41	8.22	57.99	-4.19*	-51.03	-4.19*	-51.03	12.36	12.72	0.36	2.80

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†	
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Computer and Information Sciences and Support Services	160	50	2.73	2.50	5.63	-0.23	-9.28	-0.23	-9.28	2.73	2.76	0.03	0.95	
Personal and Culinary Services	750	120	12.41	11.62	22.24	-0.79	-6.77	-0.79	-6.77	11.53	11.01	-0.52	-4.72	
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering Technologies/Technicians	190	70	1.92	1.68	4.98	-0.24	-14.60	-0.24	-14.60	1.91	1.87	-0.05	-2.45	
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Family and Consumer Sciences/Human Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†	†	†	†	†	†	†	†	†	
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†	
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†	
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Science	†	†	†	†	†	†	†	†	†	†	†	†	†	
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†	
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†	
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public Administration and Social Service Professions	†	†	†	†	†	†	†	†	†	†	†	†	†	
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment										After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Health Professions and Related Clinical Sciences	4,280	250	49.05	49.93	38.04	0.88	1.76	0.88*	1.76	49.18	49.98	0.80	1.60	
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	6,020	440	60.91	61.08	59.02	0.18	0.29	0.18	0.29	61.21	60.33	-0.88	-1.46	
Associate's Degree	1,470	200	34.31	34.48	32.44	0.17	0.50	0.17	0.50	34.04	34.63	0.59	1.72	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	330	50	4.69	4.34	8.54	-0.36	-8.22	-0.36	-8.22	4.66	4.93	0.27	5.52	
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Not in a postsecondary award, certificate, diploma, or degree program	†	†	†	†	†	†	†	†	†	†	†	†	†	
Class level of undergraduates														
First year	6,190	480	78.87	79.10	76.22	0.23	0.29	0.23	0.29	78.67	78.63	-0.04	-0.05	
Second year	640	80	17.73	17.80	16.88	0.07	0.41	0.07	0.41	17.89	18.01	0.12	0.66	
Third year	120	50	3.17	2.90	6.24	-0.27	-9.24	-0.27	-9.24	3.20	3.11	-0.09	-2.75	
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	1,620	290	17.91	16.55	32.69	-1.36	-8.21	-1.36	-8.21	18.22	18.65	0.43	2.30
65–80	2,640	330	35.31	33.79	51.82	-1.52	-4.49	-1.52	-4.49	34.70	34.14	-0.56	-1.64
81–92	2,580	40	29.25	31.38	6.12	2.13*	6.78	2.13*	6.78	29.42	29.89	0.47	1.57
93 or more	1,020	40	17.53	18.28	9.37	0.75	4.10	0.75*	4.10	17.65	17.31	-0.34	-1.95
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	630	150	8.76	8.49	11.66	-0.27	-3.19	-0.27	-3.19	8.50	8.36	-0.15	-1.76
43–60	2,370	170	33.78	34.67	24.28	0.89	2.56	0.89	2.56	33.39	33.43	0.04	0.11
61 or more	4,730	360	56.25	55.66	62.57	-0.59	-1.06	-0.59	-1.06	56.89	56.65	-0.24	-0.42
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	900	60	18.29	18.21	19.11	-0.08	-0.43	-0.08	-0.43	18.36	18.01	-0.35	-1.93
64–79	1,210	230	18.96	18.05	28.59	-0.91	-5.04	-0.91	-5.04	19.35	19.27	-0.08	-0.42
80–98	1,430	60	16.98	17.56	10.77	0.59	3.34	0.59	3.34	17.22	17.69	0.47	2.63
99 or more	3,850	330	45.77	46.17	41.54	0.40	0.87	0.40	0.87	45.07	45.03	-0.04	-0.08

See notes at end of table.

Table J-32. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment						After nonresponse weight adjustment						
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	3,780	420	54.28	54.72	49.71	0.43	0.79	0.43	0.79	53.81	53.95	0.14	0.25
\$3,122–\$5,426	2,150	120	30.08	30.38	26.85	0.30	1.00	0.30	1.00	30.43	30.89	0.46	1.50
\$5,427–\$8,864	1,030	70	6.79	6.62	8.59	-0.17	-2.57	-0.17	-2.57	6.74	6.76	0.02	0.35
\$8,865 or more	440	80	8.85	8.29	14.85	-0.57	-6.84	-0.57	-6.84	9.02	8.40	-0.62	-7.42

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	700	190	1.70	1.53	4.05	-0.18	-11.63	-0.18	-11.63	1.72	1.66	-0.06	-3.55
Mideast	1,890	110	4.35	4.55	1.73	0.20	4.35	0.20	4.35	4.38	4.42	0.04	0.94
Great Lakes	2,110	600	8.30	7.95	12.85	-0.34	-4.32	-0.34	-4.32	8.18	8.38	0.19	2.29
Plains	2,520	220	24.42	25.87	5.31	1.44*	5.58	1.44*	5.58	24.43	25.50	1.07	4.21
Southeast	5,530	1,120	17.95	17.03	30.15	-0.92*	-5.41	-0.92*	-5.41	18.01	17.56	-0.46	-2.59
Southwest	5,130	470	27.94	28.21	24.37	0.27	0.96	0.27	0.96	28.00	27.37	-0.64	-2.34
Rocky Mountains	1,080	50	4.74	5.03	0.91	0.29	5.75	0.29	5.75	4.68	4.74	0.06	1.19
Far West	4,140	810	10.60	9.84	20.63	-0.76*	-7.71	-0.76*	-7.71	10.58	10.37	-0.21	-2.03
Student type													
Undergraduate student	20,970	3,520	83.92	83.12	94.53	-0.80*	-0.96	-0.80*	-0.96	83.80	83.13	-0.67*	-0.81
Graduate student	2,080	50	15.95	16.74	5.47	0.79*	4.73	0.79*	4.73	16.06	16.73	0.67*	4.02
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
CPS record available													
Yes	21,100	2,680	80.70	83.64	41.84	2.94*	3.51	2.94*	3.51	80.37	80.50	0.13	0.16
No	2,010	890	19.30	16.36	58.16	-2.94*	-17.95	-2.94*	-17.95	19.63	19.50	-0.13	-0.67
Federal aid status													
Received	17,210	60	74.12	79.21	6.68	5.09*	6.43	5.09*	6.43	73.95	73.90	-0.06	-0.08
Did not receive	1,910	50	13.96	14.64	4.94	0.68*	4.65	0.68*	4.65	14.27	16.62	2.34*	14.10
Unknown	3,990	3,460	11.92	6.15	88.39	-5.78*	-93.97	-5.78*	-93.97	11.77	9.49	-2.28*	-24.07
Pell Grant status													
Received	15,480	1,830	51.78	53.46	29.52	1.68*	3.14	1.68*	3.14	51.20	51.40	0.20	0.39
Did not receive	7,640	1,740	48.22	46.54	70.48	-1.68*	-3.61	-1.68*	-3.61	48.80	48.60	-0.20	-0.42
Total Pell Grant amount received⁷													
\$0 or unknown	7,640	1,740	48.22	46.54	70.48	-1.68*	-3.61	-1.68*	-3.61	48.80	48.60	-0.20	-0.42
\$1–\$2,774	4,850	770	16.26	16.56	12.28	0.30	1.82	0.30	1.82	16.20	16.44	0.24	1.44
\$2,775–\$5,549	6,040	600	20.63	21.40	10.39	0.77*	3.62	0.77*	3.62	19.98	19.92	-0.06	-0.31
\$5,550 or more	4,590	460	14.89	15.50	6.86	0.61*	3.92	0.61*	3.92	15.02	15.04	0.03	0.17

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	18,630	1,910	71.21	73.86	36.10	2.65*	3.59	2.65*	3.59	70.99	71.05	0.06	0.09
Did not receive	4,480	1,660	28.79	26.14	63.90	-2.65*	-10.15	-2.65*	-10.15	29.01	28.95	-0.06	-0.21
Total Stafford Loan amount received⁹													
\$0 or unknown	4,480	1,660	28.79	26.14	63.90	-2.65*	-10.15	-2.65*	-10.15	29.01	28.95	-0.06	-0.21
\$1–\$4,699	4,320	660	15.59	15.75	13.53	0.16	0.99	0.16	0.99	15.54	15.39	-0.15	-1.00
\$4,700–\$6,500	3,800	340	10.63	11.08	4.64	0.45*	4.08	0.45*	4.08	10.56	10.64	0.08	0.80
\$6,501–\$9,500	6,780	540	17.85	18.49	9.29	0.65*	3.50	0.65*	3.50	17.69	17.62	-0.07	-0.38
\$9,501 or more	3,730	380	27.15	28.54	8.65	1.40*	4.90	1.40*	4.90	27.20	27.40	0.20	0.72
Institution total enrollment⁷													
0–2,628	9,610	2,870	19.62	17.47	48.05	-2.15*	-12.29	-2.15*	-12.29	19.63	18.92	-0.70	-3.72
2,629–10,233	6,370	310	14.97	15.29	10.79	0.32	2.06	0.32	2.06	14.92	14.93	0.01	0.06
10,234–26,884	1,650	220	7.26	7.08	9.66	-0.18	-2.56	-0.18	-2.56	7.27	7.15	-0.11	-1.59
26,885 or more	5,490	170	58.15	60.16	31.49	2.01*	3.35	2.01*	3.35	58.19	59.00	0.81	1.37
Sampled FTB Status													
FTB	14,470	1,850	6.76	6.86	5.54	0.09	1.35	0.09	1.35	6.89	6.94	0.05	0.70
Not FTB	8,640	1,730	93.24	93.14	94.46	-0.09	-0.10	-0.09	-0.10	93.11	93.06	-0.05	-0.05
Age as of Dec 31, 2011													
15–23	10,220	1,500	18.23	17.67	25.60	-0.56*	-3.15	-0.56*	-3.15	18.03	17.91	-0.12	-0.68
24–29	4,970	980	27.16	26.98	29.62	-0.19	-0.69	-0.19	-0.69	27.23	27.32	0.09	0.34
30 or more	7,930	1,090	54.61	55.35	44.79	0.74*	1.34	0.74*	1.34	54.74	54.77	0.03	0.05
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	18,160	500	83.59	86.42	46.19	2.83*	3.27	2.83*	3.27	83.55	83.43	-0.12	-0.15
Unknown	4,310	3,070	12.69	9.61	53.47	-3.08*	-32.05	-3.08*	-32.05	12.70	12.73	0.03	0.23
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	17,750	550	88.55	91.36	51.32	2.81*	3.08	2.81*	3.08	88.60	89.21	0.61*	0.68
Unknown	3,870	3,020	8.30	5.26	48.54	-3.04*	-57.84	-3.04*	-57.84	8.20	7.59	-0.62*	-8.11

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	3,500	880	9.95	9.24	19.31	-0.70*	-7.61	-0.70*	-7.61	9.93	9.53	-0.40*	-4.18	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering Technologies/Technicians	1,640	1,120	2.75	1.89	14.24	-0.86*	-45.71	-0.86*	-45.71	2.75	2.47	-0.28	-11.13	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	390	50	1.36	1.41	0.72	0.05	3.41	0.05	3.41	1.33	1.35	0.03	1.95	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Security and Protective Services	2,180	450	10.55	10.25	14.46	-0.29*	-2.87	-0.29*	-2.87	10.47	10.53	0.06	0.60
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†
Transportation and Materials Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	1,970	280	5.34	5.18	7.51	-0.16	-3.15	-0.16	-3.15	5.42	5.18	-0.25	-4.75

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Health Professions and Related Clinical Sciences	4,040	200	16.06	16.56	9.45	0.50*	3.00	0.50*	3.00	16.23	16.20	-0.02	-0.15
Business, Management, Marketing, and Related Support Services	4,650	290	29.69	30.30	21.69	0.60*	1.98	0.60*	1.98	29.58	30.20	0.62	2.04
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	2,450	50	2.41	2.50	1.37	0.09	3.56	0.09	3.56	2.36	2.41	0.05	2.03
Associate's Degree	10,460	2,850	40.41	39.07	56.02	-1.34*	-3.43	-1.34*	-3.43	40.30	39.48	-0.82*	-2.07
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	8,010	580	56.57	57.80	42.15	1.24	2.14	1.24	2.14	56.82	57.56	0.74	1.28
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Class level of undergraduates													
First year	11,390	2,490	48.24	48.00	50.74	-0.24*	-0.50	-0.24*	-0.50	47.30	47.77	0.47	0.99
Second year	1,640	460	20.85	20.60	23.42	-0.25*	-1.20	-0.25*	-1.20	21.06	20.83	-0.23	-1.10
Third year	1,070	320	17.75	17.96	15.53	0.21	1.19	0.21	1.19	18.20	17.93	-0.27*	-1.52
Fourth year	490	40	9.40	9.64	6.92	0.24	2.48	0.24	2.48	9.67	9.56	-0.11	-1.15
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	2,920	580	12.49	12.35	14.31	-0.14	-1.12	-0.14	-1.12	12.59	12.80	0.21	1.64
65–80	5,900	2,060	20.64	18.88	43.92	-1.76*	-9.33	-1.76*	-9.33	20.83	20.22	-0.61	-3.01
81–92	10,470	800	55.40	56.94	35.02	1.54*	2.71	1.54*	2.71	55.13	55.22	0.09	0.17
93 or more	3,800	130	11.47	11.83	6.75	0.36	3.02	0.36	3.02	11.45	11.76	0.31	2.61
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	7,840	1,020	60.59	61.15	51.88	0.57	0.93	0.57	0.93	60.38	60.15	-0.23	-0.38
25–42	8,730	1,790	32.68	32.13	41.06	-0.55	-1.70	-0.55	-1.70	32.84	33.06	0.22	0.67
43–60	1,910	230	4.78	4.77	5.01	-0.02	-0.32	-0.02	-0.32	4.85	4.81	-0.04	-0.87
61 or more	1,070	30	1.95	1.95	2.04	-0.01	-0.29	-0.01	-0.29	1.93	1.98	0.05	2.56
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
64–79	3,360	70	18.44	19.35	6.38	0.92	4.73	0.92	4.73	18.21	19.04	0.84	4.39
80–98	7,310	270	40.38	41.18	29.86	0.80	1.94	0.80	1.94	40.60	40.26	-0.34	-0.85
99 or more	11,820	3,220	40.34	38.58	63.62	-1.77*	-4.58	-1.77*	-4.58	40.36	39.86	-0.50	-1.26

See notes at end of table.

Table J-33. Student nonresponse bias analysis before and after weight adjustment, by select variables for students in private private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment						After nonresponse weight adjustment						
	Un-weighted study respondents	Un-weighted study non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. non-respondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	11,270	2,050	76.48	76.71	73.52	0.22	0.29	0.22	0.29	76.58	76.89	0.31	0.40
\$3,122–\$5,426	7,600	1,290	17.06	16.83	20.15	-0.23	-1.39	-0.23	-1.39	16.89	16.74	-0.15	-0.88
\$5,427–\$8,864	3,130	120	5.42	5.49	4.51	0.07	1.26	0.07	1.26	5.53	5.46	-0.07	-1.30
\$8,865 or more	850	110	1.03	0.98	1.82	-0.06	-6.08	-0.06	-6.08	1.00	0.91	-0.09	-10.05

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted non-response rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and non-response.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-34. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution type					
Public					
Less-than-2-year	0.21	0.21	0.33	-0.12*	-0.12*
2-year	32.40	32.40	36.00	-3.60*	-3.60*
4-year non-doctorate-granting	10.21	10.21	9.96	0.25	0.25
4-year doctorate-granting	25.68	25.68	23.55	2.13*	2.13*
Private nonprofit					
Less-than-4-year	0.27	0.27	0.33	-0.06*	-0.06
4-year non-doctorate-granting	6.47	6.47	6.10	0.37*	0.37*
4-year doctorate-granting	11.04	11.04	10.43	0.61*	0.61*
Private for-profit					
Less-than-2-year	2.35	2.35	1.76	0.59	0.59
2-year	2.29	2.29	2.64	-0.35*	-0.35*
4-year	9.08	9.08	8.91	0.17	0.17
Institution region²					
New England	5.09	5.09	4.97	0.12	0.12
Mideast	14.45	14.45	14.39	0.06	0.06
Great Lakes	14.87	14.87	14.97	-0.10	-0.10
Plains	8.71	8.71	7.89	0.82	0.82
Southeast	22.56	22.56	23.01	-0.45	-0.45
Southwest	14.22	14.22	14.76	-0.54	-0.54
Rocky Mountains	4.00	4.00	4.12	-0.12	-0.12
Far West	16.12	16.12	15.88	0.24	0.24
Student type					
Undergraduate student	85.66	85.66	86.23	-0.57*	-0.57*
Graduate student	12.70	12.70	12.39	0.31	0.31
First-professional	1.64	1.64	1.38	0.26*	0.26*
CPS record available					
Yes	67.54	67.33	64.10	3.44*	3.23*
No	32.46	32.67	35.90	-3.44*	-3.23*
Federal aid status					
Received	58.21	58.21	53.67	4.54*	4.54*
Did not receive	33.85	28.72	39.26	-5.41*	-10.54*
Unknown	7.95	13.07	7.07	0.88	6.00*
Pell Grant status					
Received	38.28	38.28	35.58	2.70*	2.70*
Did not receive	61.72	61.72	64.42	-2.70*	-2.70*
Total Pell Grant amount received³					
\$0 or unknown	61.72	61.72	64.42	-2.70*	-2.70*
\$1-\$2,774	11.86	11.86	12.52	-0.66*	-0.66*
\$2,775-\$5,549	15.30	15.30	13.95	1.35*	1.35*
\$5,550 or more	11.12	11.12	9.11	2.01*	2.01*
Stafford Loan status					
Received	46.39	46.39	40.51	5.88*	5.88*
Did not receive	53.61	53.61	59.49	-5.88*	-5.88*

See notes at end of table.

Table J-34. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total Stafford Loan amount received³					
\$0 or unknown	53.61	53.61	59.49	-5.88*	-5.88*
\$1–\$4,699	10.68	10.68	10.75	-0.07	-0.07
\$4,700–\$6,500	11.94	11.94	10.54	1.40*	1.40*
\$6,501–\$9,500	11.83	11.83	9.61	2.22*	2.22*
\$9,501 or more	11.94	11.94	9.62	2.32*	2.32*
Institution total enrollment³					
0–2,628	11.70	11.70	11.34	0.36	0.36
2,629–10,233	22.47	22.47	23.02	-0.55*	-0.55
10,234–26,884	31.45	31.45	32.01	-0.56	-0.56
26,885 or more	34.37	34.37	33.63	0.74	0.74
Sampled FTB Status					
FTB	13.04	13.04	13.58	-0.54*	-0.54*
Not FTB	86.96	86.96	86.42	0.54*	0.54*
Age as of Dec 31, 2011					
15–23	51.46	51.46	50.02	1.44*	1.44*
24–29	21.26	21.26	21.45	-0.19	-0.19
30 or more	27.28	27.28	28.52	-1.24*	-1.24*
Institution aid status					
Received	20.68	20.68	18.73	1.95*	1.95*
Did not receive	69.59	69.59	72.42	-2.83*	-2.83*
Unknown	9.73	9.73	8.85	0.88	0.88
State aid status					
Received	13.83	13.83	12.65	1.18*	1.18*
Did not receive	79.14	79.14	81.05	-1.91*	-1.91*
Unknown	7.03	7.03	6.30	0.73	0.73
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	0.59	0.60	0.53	0.06*	0.07*
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	1.86	1.88	1.74	0.12*	0.14*
Communications Technologies/Technicians and Support Services	0.37	0.32	0.33	0.04	-0.01
Computer and Information Sciences and Support Services	3.63	3.64	3.85	-0.22*	-0.21*
Personal and Culinary Services	2.15	2.16	2.28	-0.13*	-0.12
Education	6.85	6.83	6.54	0.31*	0.29*
Engineering	3.01	3.03	2.79	0.22*	0.24*
Engineering Technologies/Technicians	1.73	1.79	1.91	-0.18*	-0.12*
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	1.11	1.10	1.15	-0.04	-0.05
Legal Professions and Studies	1.20	1.21	1.13	0.07*	0.08*
English Language and Literature/Letters	1.46	1.44	1.38	0.08*	0.06*
Liberal Arts and Sciences, General Studies and Humanities	14.67	14.59	16.04	-1.37*	-1.45*
Library Science	‡	‡	‡	‡	‡

See notes at end of table.

Table J-34. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Biological and Biomedical Sciences	3.26	3.22	3.00	0.26*	0.22*	
Mathematics and Statistics	0.57	0.59	0.52	0.05*	0.07*	
Military Technologies	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	2.03	2.08	2.05	-0.02	0.03	
Parks, Recreation, Leisure, and Fitness Studies	1.21	1.22	1.11	0.10*	0.11*	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	
Physical Sciences	1.14	1.12	1.07	0.07*	0.05	
Science Technologies/Technicians	‡	‡	‡	‡	‡	
Psychology	3.24	3.25	2.98	0.26*	0.27*	
Security and Protective Services	3.68	3.71	3.88	-0.20*	-0.17	
Public Administration and Social Service Professions	1.68	1.70	1.61	0.07*	0.09*	
Social Sciences	3.03	3.02	2.77	0.26*	0.25*	
Construction Trades	0.33	0.37	0.38	-0.05*	-0.01	
Mechanic and Repair Technologies/Technicians	1.42	1.43	1.59	-0.17*	-0.16*	
Precision Production	0.38	0.41	0.47	-0.09*	-0.06*	
Transportation and Materials Moving	0.16	0.16	0.21	-0.05*	-0.05	
Visual and Performing Arts	3.94	3.99	3.77	0.17*	0.22*	
Health Professions and Related Clinical Sciences	16.53	16.38	16.20	0.33	0.18	
Business, Management, Marketing, and Related Support Services	15.36	15.32	15.49	-0.13	-0.17	
History (new)	0.89	0.88	0.83	0.06*	0.05	
Residency Programs	‡	‡	‡	‡	‡	
Degree Program (undergraduates only)						
Postsecondary award, certificate or diploma of less than 2 academic years	9.56	9.76	10.40	-0.84*	-0.64	
Associate's Degree	36.88	36.41	39.06	-2.18*	-2.65*	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1.06	1.07	1.17	-0.11*	-0.10*	
Bachelor's Degree or equivalent	46.47	46.18	42.37	4.10*	3.81*	
Not in a postsecondary award, certificate, diploma, or degree program	6.03	6.59	7.01	-0.98*	-0.42*	
Class level of undergraduates						
First year	42.64	43.28	46.07	-3.43*	-2.79*	
Second year	26.96	26.55	26.25	0.71*	0.30	
Third year	12.57	12.56	11.41	1.16*	1.15*	
Fourth year	16.10	15.89	14.55	1.55*	1.34*	
Fifth year or higher	1.72	1.71	1.72	#	-0.01	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³						
64 or less	34.51	34.40	35.37	-0.86*	-0.97*	
65–80	29.19	29.27	28.86	0.33	0.41	
81–92	21.49	21.54	21.35	0.14	0.19	
93 or more	14.81	14.79	14.42	0.39	0.37	

See notes at end of table.

Table J-34. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	32.82	32.76	35.41	-2.59*	-2.65*
25–42	23.91	23.97	24.23	-0.32	-0.26
43–60	20.53	20.62	19.47	1.06*	1.15*
61 or more	22.75	22.65	20.89	1.86*	1.76*
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	21.72	22.20	22.83	-1.11*	-0.63*
14–23	25.61	25.22	26.15	-0.54*	-0.93*
24–32	26.61	26.46	26.14	0.47	0.32
33 or more	26.06	26.11	24.87	1.19	1.24*
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	27.43	27.32	27.18	0.25*	0.14*
64–79	26.74	26.67	24.08	2.66	2.59
80–98	29.28	29.34	30.76	-1.48	-1.42
99 or more	16.55	16.68	17.99	-1.44	-1.31
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	24.07	24.04	25.91	-1.84*	-1.87*
\$4,145–\$5,619	23.99	24.16	25.35	-1.36*	-1.19*
\$5,620–\$7,662	24.17	24.18	23.63	0.54	0.55
\$7,663 or more	27.77	27.63	25.11	2.66*	2.52*
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	31.01	31.00	32.38	-1.37	-1.38
\$3,122–\$5,426	18.95	18.83	18.60	0.35	0.23
\$5,427–\$8,864	19.27	19.39	19.43	-0.16*	-0.04*
\$8,865 or more	30.77	30.78	29.59	1.18*	1.19*

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-35. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	3.53	3.78	6.06	-2.53	-2.28
CPS record available					
Yes	‡	‡	‡	‡	‡
No	22.88	24.52	25.78	-2.90	-1.26
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡
Unknown	7.81	14.74	5.82	1.99	8.92*
Pell Grant status					
Received	‡	‡	‡	‡	‡
Did not receive	36.43	36.31	43.05	-6.62	-6.74
Total Pell Grant amount received³					
\$0 or unknown	36.43	36.31	43.05	-6.62	-6.74
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	‡	‡	‡	‡	‡
Did not receive	49.57	51.68	79.64	-30.07*	-27.96*
Total Stafford Loan amount received³					
\$0 or unknown	49.57	51.68	79.64	-30.07*	-27.96*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	98.58	98.30	97.02	1.56	1.28
2,629–10,233	†	†	†	†	†
10,234–26,884	1.42	1.70	2.98	-1.56	-1.28
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	23.27	22.49	25.25	-1.98	-2.76
Not FTB	76.73	77.51	74.75	1.98	2.76
Age as of Dec 31, 2011					
15–23	31.10	34.36	41.02	-9.92*	-6.66*
24–29	‡	‡	‡	‡	‡
30 or more	44.27	42.86	36.53	7.74*	6.33*

See notes at end of table.

Table J-35. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	90.34	92.06	91.99	-1.65	0.07
Unknown	7.81	5.84	5.82	1.99	0.02
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	74.55	76.36	74.99	-0.44	1.37
Unknown	7.81	5.84	5.82	1.99	0.02
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	†	†	†	†	†
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	‡	‡	‡	‡	‡

See notes at end of table.

Table J-35. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	71.60	70.52	80.29	-8.69	-9.77
Associate's Degree	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	†	†	†	†	†
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	71.46	72.83	68.91	2.55	3.92
Second year	‡	‡	‡	‡	‡
Third year	†	†	†	†	†
Fourth year	†	†	†	†	†
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	47.12	45.25	57.11	-9.99	-11.86
65–80	‡	‡	‡	‡	‡
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	‡	‡	‡	‡	‡
14–23	‡	‡	‡	‡	‡
24–32	‡	‡	‡	‡	‡
33 or more	‡	‡	‡	‡	‡
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	‡	‡	‡	‡	‡
\$5,620–\$7,662	‡	‡	‡	‡	‡
\$7,663 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-36. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	3.81	3.68	3.83	-0.02	-0.15
Mideast	11.49	11.34	11.43	0.06	-0.09
Great Lakes	15.34	15.29	15.47	-0.13	-0.18
Plains	6.93	7.15	6.73	0.20	0.42
Southeast	19.66	19.50	19.47	0.19	0.03
Southwest	17.05	16.88	17.71	-0.66*	-0.83*
Rocky Mountains	2.56	2.66	2.84	-0.28	-0.18
Far West	23.15	23.51	22.51	0.64	1.00
CPS record available					
Yes	64.47	64.20	58.61	5.86*	5.59*
No	35.53	35.80	41.39	-5.86*	-5.59*
Federal aid status					
Received	50.85	50.90	42.50	8.35*	8.40*
Did not receive	‡	‡	‡	‡	‡
Unknown	10.21	18.84	8.98	1.23*	9.86*
Pell Grant status					
Received	45.63	45.55	37.47	8.16*	8.08*
Did not receive	54.37	54.45	62.53	-8.16*	-8.08*
Total Pell Grant amount received³					
\$0 or unknown	54.37	54.45	62.53	-8.16*	-8.08*
\$1–\$2,774	16.50	16.51	16.21	0.29	0.30
\$2,775–\$5,549	19.19	19.10	14.89	4.30*	4.21*
\$5,550 or more	9.93	9.94	6.37	3.56*	3.57*
Stafford Loan status					
Received	25.50	25.35	17.81	7.69*	7.54*
Did not receive	74.50	74.65	82.19	-7.69*	-7.54*
Total Stafford Loan amount received³					
\$0 or unknown	74.50	74.65	82.19	-7.69*	-7.54*
\$1–\$4,699	11.87	11.73	9.80	2.07*	1.93*
\$4,700–\$6,500	5.76	5.75	3.81	1.95*	1.94*
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	2.28	2.28	2.22	0.06	0.06
2,629–10,233	23.05	23.15	23.68	-0.63	-0.53
10,234–26,884	42.27	42.18	41.86	0.41	0.32
26,885 or more	32.41	32.40	32.25	0.16	0.15
Sampled FTB Status					
FTB	14.53	14.66	14.94	-0.41*	-0.28
Not FTB	85.47	85.34	85.06	0.41*	0.28
Age as of Dec 31, 2011					
15–23	50.79	50.93	49.72	1.07*	1.21*
24–29	20.25	20.03	20.58	-0.33	-0.55*
30 or more	28.96	29.04	29.70	-0.74*	-0.66*

See notes at end of table.

Table J-36. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	11.99	12.07	10.98	1.01*	1.09*
Did not receive	79.12	79.45	81.09	-1.97*	-1.64*
Unknown	8.90	8.48	7.93	0.97*	0.55
State aid status					
Received	12.81	12.83	10.69	2.12*	2.14*
Did not receive	78.29	78.69	81.38	-3.09*	-2.69*
Unknown	8.90	8.48	7.93	0.97*	0.55
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	0.49	0.57	0.51	-0.02	0.06
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	3.80	3.74	4.07	-0.27*	-0.33*
Personal and Culinary Services	1.84	1.85	1.76	0.08	0.09
Education	2.76	2.73	2.53	0.23*	0.20*
Engineering	0.90	0.91	0.90	#	0.01
Engineering Technologies/Technicians	2.81	2.87	3.10	-0.29*	-0.23*
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	1.64	1.62	1.68	-0.04	-0.06
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	36.04	35.79	36.20	-0.16	-0.41
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	1.09	1.05	1.06	0.03	-0.01
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	1.86	1.93	1.80	0.06	0.13
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡
Security and Protective Services	4.15	4.26	4.24	-0.09	0.02
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡
Construction Trades	0.82	0.94	0.86	-0.04	0.08
Mechanic and Repair Technologies/Technicians	2.60	2.68	2.67	-0.07	0.01
Precision Production	0.92	1.02	1.05	-0.13*	-0.03

See notes at end of table.

Table J-36. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Transportation and Materials Moving	0.22	0.23	0.26	-0.04	-0.03
Visual and Performing Arts	2.72	2.77	2.57	0.15*	0.20*
Precision Production	0.92	1.02	1.05	-0.13*	-0.03
Transportation and Materials Moving	0.22	0.23	0.26	-0.04	-0.03
Visual and Performing Arts	2.72	2.77	2.57	0.15*	0.20*
Health Professions and Related Clinical Sciences	16.71	16.50	16.32	0.39	0.18
Business, Management, Marketing, and Related Support Services	11.48	11.51	11.61	-0.13	-0.10
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	12.01	12.18	12.79	-0.78*	-0.61*
Associate's Degree	74.71	73.46	72.94	1.77*	0.52
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1.51	1.55	1.54	-0.03	0.01
Bachelor's Degree or equivalent	1.26	1.34	0.84	0.42	0.50
Not in a postsecondary award, certificate, diploma, or degree program	10.51	11.47	11.90	-1.39*	-0.43
Class level of undergraduates					
First year	58.69	59.67	61.36	-2.67*	-1.69*
Second year	38.04	37.21	35.36	2.68*	1.85*
Third year	2.34	2.25	2.33	0.01	-0.08
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	48.67	48.73	49.69	-1.02*	-0.96
65–80	33.69	33.51	32.91	0.78	0.60
81–92	12.18	12.27	11.99	0.19	0.28
93 or more	5.46	5.49	5.41	0.05	0.08
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	72.77	72.20	73.33	-0.56	-1.13
25–42	24.05	24.34	23.40	0.65	0.94
43–60	2.54	2.82	2.57	-0.03	0.25
61 or more	0.64	0.63	0.70	-0.06	-0.07
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	38.88	39.95	38.17	0.71	1.78*
14–23	31.18	30.18	31.11	0.07	-0.93
24–32	21.20	20.82	21.77	-0.57	-0.95*
33 or more	8.74	9.04	8.95	-0.21	0.09

See notes at end of table.

Table J-36. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Difference	
				Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	43.59	43.29	43.24	0.35	0.05
\$4,145–\$5,619	38.58	38.89	38.54	0.04	0.35
\$5,620–\$7,662	14.52	14.55	15.05	-0.53	-0.50
\$7,663 or more	3.31	3.28	3.17	0.14	0.11

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-37. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	4.54	4.57	4.23	0.31*	0.34
Mideast	18.38	18.24	18.26	0.12	-0.02
Great Lakes	13.35	13.27	13.30	0.05	-0.03
Plains	‡	‡	‡	‡	‡
Southeast	30.30	30.41	31.64	-1.34*	-1.23
Southwest	6.07	5.95	6.44	-0.37	-0.49
Rocky Mountains	7.07	7.19	7.62	-0.55	-0.43
Far West	16.64	16.53	15.08	1.56	1.45
Student type					
Undergraduate student	92.65	92.57	91.89	0.76*	0.68*
Graduate student	7.34	7.42	8.10	-0.76*	-0.68*
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	66.33	66.18	63.73	2.60*	2.45*
No	33.67	33.82	36.27	-2.60*	-2.45*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	37.21	31.62	42.06	-4.85*	-10.44*
Unknown	3.57	9.23	2.92	0.65	6.31*
Pell Grant status					
Received	39.34	39.60	37.14	2.20*	2.46*
Did not receive	60.66	60.40	62.86	-2.20*	-2.46*
Total Pell Grant amount received³					
\$0 or unknown	60.66	60.40	62.86	-2.20*	-2.46*
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	43.54	43.64	38.03	5.51*	5.61*
Did not receive	56.46	56.36	61.97	-5.51*	-5.61*
Total Stafford Loan amount received³					
\$0 or unknown	56.46	56.36	61.97	-5.51*	-5.61*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	‡	‡	‡	‡	‡
2,629–10,233	35.71	35.64	35.29	0.42	0.35
10,234–26,884	40.93	40.50	41.47	-0.54	-0.97
26,885 or more	19.96	20.43	19.91	0.05	0.52
Sampled FTB Status					
FTB	13.63	13.70	13.86	-0.23	-0.16
Not FTB	86.37	86.30	86.14	0.23	0.16

See notes at end of table.

Table J-37. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	59.34	58.60	56.78	2.56*	1.82*
24–29	18.69	18.93	19.51	-0.82*	-0.58
30 or more	21.97	22.47	23.71	-1.74*	-1.24*
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	81.72	81.78	83.54	-1.82*	-1.76*
Unknown	4.24	4.17	3.92	0.32	0.25
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	78.20	78.26	80.32	-2.12*	-2.06*
Unknown	2.89	2.81	2.34	0.55	0.47
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	2.70	2.87	2.79	-0.09	0.08
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	20.03	19.97	21.68	-1.65*	-1.71*
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡

See notes at end of table.

Table J-37. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	11.84	11.54	12.40	-0.56	-0.86*
Business, Management, Marketing, and Related Support Services	13.58	13.56	13.54	0.04	0.02
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	3.28	3.32	3.42	-0.14	-0.10
Associate's Degree	32.68	32.51	33.78	-1.10	-1.27
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	59.20	58.91	57.50	1.70*	1.41
Not in a postsecondary award, certificate, diploma, or degree program	4.64	5.03	5.13	-0.49	-0.10
Class level of undergraduates					
First year	34.20	35.38	36.79	-2.59*	-1.41
Second year	25.95	25.39	24.36	1.59*	1.03
Third year	15.58	15.27	15.13	0.45*	0.14
Fourth year	21.45	21.06	20.68	0.77*	0.38
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	30.48	29.96	29.68	0.80	0.28
65–80	41.85	42.05	42.18	-0.33	-0.13
81–92	21.76	22.12	22.28	-0.52	-0.16
93 or more	5.91	5.86	5.87	0.04	-0.01
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	17.10	17.89	17.38	-0.28	0.51
25–42	46.90	46.62	48.57	-1.67	-1.95*
43–60	27.01	26.65	25.86	1.15*	0.79
61 or more	9.00	8.84	8.20	0.80*	0.64*
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	‡	‡	‡	‡	‡
14–23	24.90	25.47	27.04	-2.14*	-1.57*
24–32	30.01	30.21	28.67	1.34	1.54
33 or more	37.89	37.27	36.58	1.31	0.69

See notes at end of table.

Table J-37. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	18.89	19.48	20.57	-1.68*	-1.09
\$4,145–\$5,619	25.82	26.15	25.55	0.27	0.60
\$5,620–\$7,662	32.59	31.84	31.51	1.08	0.33
\$7,663 or more	22.70	22.53	22.38	0.32	0.15

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-38. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	3.34	3.38	3.46	-0.12	-0.08
Mideast	10.96	10.93	11.31	-0.35	-0.38
Great Lakes	16.31	16.59	16.34	-0.03	0.25
Plains	8.25	8.27	7.98	0.27	0.29
Southeast	28.56	28.68	29.44	-0.88*	-0.76*
Southwest	14.68	14.73	14.96	-0.28	-0.23
Rocky Mountains	4.55	4.48	4.67	-0.12	-0.19
Far West	13.34	12.92	11.84	1.50*	1.08*
Student type					
Undergraduate student	76.09	76.01	75.71	0.38	0.30
Graduate student	21.22	21.31	21.97	-0.75*	-0.66*
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	64.01	63.86	62.46	1.55*	1.40*
No	35.99	36.14	37.54	-1.55*	-1.40*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	38.77	34.66	40.67	-1.90*	-6.01*
Unknown	3.68	7.77	3.41	0.27	4.36*
Pell Grant status					
Received	28.04	28.02	27.87	0.17	0.15
Did not receive	71.96	71.98	72.13	-0.17	-0.15
Total Pell Grant amount received³					
\$0 or unknown	71.96	71.98	72.13	-0.17	-0.15
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	51.02	51.06	49.61	1.41*	1.45*
Did not receive	48.98	48.94	50.39	-1.41*	-1.45*
Total Stafford Loan amount received³					
\$0 or unknown	48.98	48.94	50.39	-1.41*	-1.45*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	‡	‡	‡	‡	‡
2,629–10,233	7.38	7.31	7.47	-0.09	-0.16
10,234–26,884	36.05	36.19	36.70	-0.65*	-0.51
26,885 or more	56.14	56.08	55.42	0.72*	0.66
Sampled FTB Status					
FTB	11.50	11.48	11.93	-0.43*	-0.45*
Not FTB	88.50	88.52	88.07	0.43*	0.45*

See notes at end of table.

Table J-38. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	60.42	60.31	59.40	1.02*	0.91*
24–29	21.25	21.43	21.27	-0.02	0.16
30 or more	18.33	18.27	19.33	-1.00*	-1.06*
Institution aid status					
Received	26.57	26.54	25.46	1.11*	1.08*
Did not receive	65.71	65.42	67.02	-1.31*	-1.60*
Unknown	7.72	8.05	7.53	0.19	0.52
State aid status					
Received	18.72	18.72	18.50	0.22	0.22
Did not receive	77.86	77.67	78.28	-0.42	-0.61*
Unknown	3.42	3.60	3.22	0.20	0.38
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	3.56	3.58	3.62	-0.06	-0.04
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	2.84	2.85	2.90	-0.06	-0.05
Personal and Culinary Services	†	†	†	†	†
Education	8.67	8.68	8.73	-0.06	-0.05
Engineering	7.09	7.14	7.02	0.07	0.12
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	3.97	4.09	4.21	-0.24*	-0.12
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	6.37	6.30	6.26	0.11	0.04
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	3.07	3.05	3.10	-0.03	-0.05
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	4.96	5.00	4.87	0.09	0.13
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	5.54	5.61	5.52	0.02	0.09

See notes at end of table.

Table J-38. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/ Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	4.20	4.21	4.17	0.03	0.04
Health Professions and Related Clinical Sciences	11.80	11.58	11.68	0.12	-0.10
Business, Management, Marketing, and Related Support Services	15.46	15.49	15.72	-0.26	-0.23
History (new)	‡	‡	‡	‡	‡
Residency Programs	‡	‡	‡	‡	‡
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡
Associate's Degree	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	94.58	94.13	94.08	0.50*	0.05
Not in a postsecondary award, certificate, diploma, or degree program	4.10	4.51	4.40	-0.30*	0.11
Class level of undergraduates					
First year	19.54	20.01	21.06	-1.52*	-1.05*
Second year	18.75	18.76	18.63	0.12	0.13
Third year	22.58	22.56	21.92	0.66*	0.64*
Fourth year	36.83	36.37	36.11	0.72*	0.26
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	40.40	40.18	39.29	1.11*	0.89
65–80	29.33	29.58	29.84	-0.51	-0.26
81–92	22.88	22.77	23.47	-0.59*	-0.70*
93 or more	7.39	7.47	7.40	-0.01	0.07
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	2.15	2.25	2.38	-0.23	-0.13
25–42	21.36	21.36	21.88	-0.52	-0.52
43–60	37.08	37.11	37.59	-0.51	-0.48
61 or more	39.41	39.28	38.15	1.26*	1.13*
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁵					
13 or less	5.54	5.55	5.50	0.04	0.05
14–23	18.76	18.80	18.01	0.75	0.79
24–32	32.26	32.24	31.97	0.29	0.27
33 or more	43.44	43.41	44.51	-1.07*	-1.10*

See notes at end of table.

Table J-38. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	4.46	4.41	4.74	-0.28*	-0.33
\$5,620–\$7,662	33.25	33.50	33.72	-0.47	-0.22
\$7,663 or more	61.19	60.90	60.25	0.94*	0.65

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-39. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	15.22	16.17	14.82	0.40	1.35
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	†	†	†	†	†
Far West	‡	‡	‡	‡	‡
CPS record available					
Yes	‡	‡	‡	‡	‡
No	21.78	20.40	29.43	-7.65*	-9.03*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡
Unknown	5.35	8.76	6.34	-0.99	2.42
Pell Grant status					
Received	‡	‡	‡	‡	‡
Did not receive	35.72	34.78	45.98	-10.26*	-11.20*
Total Pell Grant amount received³					
\$0 or unknown	35.72	34.78	45.98	-10.26*	-11.20*
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	‡	‡	‡	‡	‡
Did not receive	37.66	37.96	51.79	-14.13*	-13.83*
Total Stafford Loan amount received³					
\$0 or unknown	37.66	37.96	51.79	-14.13*	-13.83*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	99.75	99.27	99.74	0.01	-0.47
2,629–10,233	‡	‡	‡	‡	‡
10,234–26,884	†	†	†	†	†
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	21.42	22.45	19.51	1.91	2.94*
Not FTB	‡	‡	‡	‡	‡
Age as of Dec 31, 2011					
15–23	43.05	43.56	41.20	1.85	2.36
24–29	‡	‡	‡	‡	‡
30 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-39. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	76.42	74.33	75.85	0.57	-1.52
Unknown	‡	‡	‡	‡	‡
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	83.43	82.11	84.97	-1.54	-2.86*
Unknown	‡	‡	‡	‡	‡
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	†	†	†	†	†
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡

See notes at end of table.

Table J-39. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	‡	‡	‡	‡	‡
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡
Associate's Degree	35.02	37.27	32.27	2.75	5.00
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	72.70	72.54	72.16	0.54	0.38
Second year	‡	‡	‡	‡	‡
Third year	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	†	†	†	†	†
Percentage of full-time, first-time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	25.15	25.95	25.96	-0.81	-0.01
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25–42	‡	‡	‡	‡	‡
43–60	‡	‡	‡	‡	‡
61 or more	40.47	39.40	42.66	-2.19	-3.26
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	‡	‡	‡	‡	‡
80–98	29.20	30.01	28.42	0.78	1.59
99 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-39. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	14.91	15.92	15.26	-0.35	0.66
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-40. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	10.66	10.72	10.55	0.11	0.17
Mideast	20.29	20.33	19.40	0.89	0.93
Great Lakes	23.19	23.26	22.92	0.27	0.34
Plains	‡	‡	‡	‡	‡
Southeast	20.15	20.14	20.37	-0.22	-0.23
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	8.82	8.91	8.77	0.05	0.14
Student type					
Undergraduate student	84.11	84.02	84.42	-0.31	-0.40
Graduate student	15.86	15.95	15.55	0.31	0.40
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	75.03	75.17	71.01	4.02*	4.16*
No	24.97	24.83	28.99	-4.02*	-4.16*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	26.17	23.86	30.13	-3.96*	-6.27*
Unknown	5.23	7.45	6.08	-0.85	1.37*
Pell Grant status					
Received	33.31	33.36	33.20	0.11	0.16
Did not receive	66.69	66.64	66.80	-0.11	-0.16
Total Pell Grant amount received³					
\$0 or unknown	66.69	66.64	66.80	-0.11	-0.16
\$1–\$2,774	9.14	9.16	9.63	-0.49	-0.47
\$2,775–\$5,549	12.37	12.35	12.77	-0.40	-0.42
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	65.13	65.32	59.16	5.97*	6.16*
Did not receive	34.87	34.68	40.84	-5.97*	-6.16*
Total Stafford Loan amount received³					
\$0 or unknown	34.87	34.68	40.84	-5.97*	-6.16*
\$1–\$4,699	7.91	8.12	9.85	-1.94*	-1.73*
\$4,700–\$6,500	22.10	22.17	20.26	1.84*	1.91*
\$6,501–\$9,500	18.95	18.94	15.77	3.18*	3.17*
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	51.04	50.33	50.60	0.44	-0.27
2,629–10,233	40.51	40.89	40.07	0.44	0.82
10,234–26,884	‡	‡	‡	‡	‡
26,885 or more	2.60	3.04	3.30	-0.70	-0.26
Sampled FTB Status					
FTB	16.64	16.57	16.51	0.13	0.06
Not FTB	83.36	83.43	83.49	-0.13	-0.06

See notes at end of table.

Table J-40. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	64.79	64.27	60.30	4.49*	3.97*
24–29	13.21	13.26	13.93	-0.72*	-0.67
30 or more	22.00	22.47	25.77	-3.77*	-3.30*
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	38.95	38.53	43.58	-4.63*	-5.05*
Unknown	7.47	8.07	8.14	-0.67	-0.07
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	74.77	74.37	75.26	-0.49	-0.89
Unknown	4.70	5.13	5.54	-0.84	-0.41
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	1.73	1.72	1.95	-0.22	-0.23
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡
Security and Protective Services	2.85	2.95	3.14	-0.29	-0.19

See notes at end of table.

Table J-40. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public Administration and Social Service					
Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡
Construction Trades	†	†	†	†	†
Mechanic and Repair Technologies/Technicians	0.58	0.64	0.67	-0.09	-0.03
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	11.27	11.47	11.88	-0.61	-0.41
Business, Management, Marketing, and Related Support Services	17.98	17.72	18.46	-0.48	-0.74
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	1.21	1.20	1.69	-0.48	-0.49
Associate's Degree	7.40	8.17	9.11	-1.71*	-0.94*
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	86.78	86.02	84.11	2.67*	1.91
Not in a postsecondary award, certificate, diploma, or degree program	3.48	3.51	3.87	-0.39	-0.36
Class level of undergraduates					
First year	27.15	27.47	30.47	-3.32*	-3.00*
Second year	22.28	22.34	21.21	1.07*	1.13*
Third year	‡	‡	‡	‡	‡
Fourth year	26.79	26.36	25.58	1.21*	0.78
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	10.86	10.71	10.85	0.01	-0.14
65–80	‡	‡	‡	‡	‡
81–92	17.79	18.35	17.64	0.15	0.71
93 or more	62.55	62.31	62.80	-0.25	-0.49
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	6.26	6.50	7.17	-0.91	-0.67
25–42	18.21	18.53	19.54	-1.33*	-1.01
43–60	37.95	37.75	38.42	-0.47	-0.67
61 or more	37.58	37.23	34.87	2.71*	2.36*

See notes at end of table.

Table J-40. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	40.33	39.58	39.06	1.27*	0.52
64–79	34.99	35.19	36.74	-1.75*	-1.55
80–98	23.71	24.29	22.86	0.85	1.43*
99 or more	‡	‡	‡	‡	‡
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	5.22	5.73	6.31	-1.09*	-0.58
\$3,122–\$5,426	20.06	19.61	21.96	-1.90*	-2.35*
\$5,427–\$8,864	40.50	40.78	39.75	0.75	1.03
\$8,865 or more	34.23	33.88	31.97	2.26*	1.91*

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB

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

Table J-41. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	12.12	12.25	12.03	0.09	0.22
Mideast	32.05	32.66	31.75	0.30	0.91
Great Lakes	14.32	13.96	14.94	-0.62	-0.98*
Plains	‡	‡	‡	‡	‡
Southeast	16.27	16.13	16.29	-0.02	-0.16
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	‡	‡	‡	‡	‡
Far West	10.56	10.43	10.08	0.48	0.35
Student type					
Undergraduate student	55.73	55.50	55.45	0.28	0.05
Graduate student	35.79	36.00	36.70	-0.91	-0.70
First-professional	8.48	8.50	7.85	0.63*	0.65*
CPS record available					
Yes	61.98	61.85	59.97	2.01*	1.88*
No	38.02	38.15	40.03	-2.01*	-1.88*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	34.60	32.71	36.03	-1.43*	-3.32*
Unknown	9.27	11.23	9.59	-0.32	1.64*
Pell Grant status					
Received	16.59	16.48	18.06	-1.47*	-1.58*
Did not receive	83.41	83.52	81.94	1.47*	1.58*
Total Pell Grant amount received³					
\$0 or unknown	83.41	83.52	81.94	1.47*	1.58*
\$1–\$2,774	4.66	4.62	5.34	-0.68*	-0.72*
\$2,775–\$5,549	‡	‡	‡	‡	‡
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	54.80	54.71	53.11	1.69*	1.60*
Did not receive	45.20	45.29	46.89	-1.69*	-1.60*
Total Stafford Loan amount received³					
\$0 or unknown	45.20	45.29	46.89	-1.69*	-1.60*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	‡	‡	‡	‡	‡
2,629–10,233	44.45	44.17	45.09	-0.64	-0.92
10,234–26,884	29.59	29.87	29.41	0.18	0.46
26,885 or more	17.17	17.30	17.26	-0.09	0.04
Sampled FTB Status					
FTB	10.42	10.33	10.30	0.12	0.03
Not FTB	89.58	89.67	89.70	-0.12	-0.03

See notes at end of table.

Table J-41. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	48.34	48.41	45.97	2.37*	2.44*
24–29	24.74	24.95	24.82	-0.08	0.13
30 or more	26.92	26.65	29.20	-2.28*	-2.55*
Institution aid status					
Received	40.75	40.72	38.66	2.09*	2.06*
Did not receive	43.38	43.24	45.26	-1.88*	-2.02*
Unknown	15.87	16.05	16.08	-0.21	-0.03
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	81.67	81.60	81.43	0.24	0.17
Unknown	8.54	8.63	8.86	-0.32	-0.23
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	2.45	2.37	2.41	0.04	-0.04
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	10.04	10.04	10.06	-0.02	-0.02
Engineering	4.82	4.88	4.69	0.13	0.19
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	†	†	†	†	†
Psychology	‡	‡	‡	‡	‡
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡

See notes at end of table.

Table J-41. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	†	†	†	†	†
Mechanic and Repair Technologies/Technicians	†	†	†	†	†
Precision Production	†	†	†	†	†
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	16.96	16.81	16.90	0.06	-0.09
Business, Management, Marketing, and Related Support Services	17.67	17.81	19.03	-1.36*	-1.22*
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡
Associate's Degree	2.62	2.60	3.36	-0.74	-0.76
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	88.20	87.18	87.06	1.14	0.12
Not in a postsecondary award, certificate, diploma, or degree program	5.57	6.58	5.83	-0.26	0.75
Class level of undergraduates					
First year	23.98	24.47	26.26	-2.28*	-1.79*
Second year	22.59	21.86	21.91	0.68	-0.05
Third year	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	23.67	23.78	23.03	0.64	0.75
65–80	15.34	15.21	15.07	0.27	0.14
81–92	15.58	15.61	16.23	-0.65	-0.62
93 or more	45.42	45.40	45.67	-0.25	-0.27
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25–42	7.90	7.87	8.45	-0.55	-0.58
43–60	27.56	27.86	27.99	-0.43	-0.13
61 or more	62.46	62.21	61.17	1.29*	1.04
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	47.90	47.87	47.21	0.69	0.66
64–79	26.96	27.28	27.05	-0.09	0.23
80–98	25.14	24.84	25.74	-0.60	-0.90
99 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-41. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	10.00	9.75	10.58	-0.58	-0.83*
\$5,427–\$8,864	23.73	23.86	24.43	-0.70	-0.57
\$8,865 or more	63.89	63.96	62.67	1.22*	1.29*

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-42. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	‡	‡	‡	‡	‡
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	‡	‡	‡	‡	‡
Southwest	34.35	34.71	15.33	19.02	19.38
Rocky Mountains	‡	‡	‡	‡	‡
Far West	‡	‡	‡	‡	‡
CPS record available					
Yes	86.42	84.72	84.33	2.09*	0.39
No	13.58	15.28	15.67	-2.09*	-0.39
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡
Unknown	32.24	34.33	10.70	21.54	23.63
Pell Grant status					
Received	70.99	72.13	75.58	-4.59	-3.45
Did not receive	29.01	27.87	24.42	4.59	3.45
Total Pell Grant amount received³					
\$0 or unknown	29.01	27.87	24.42	4.59	3.45
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	31.57	32.28	33.07	-1.50	-0.79
\$5,550 or more	22.88	23.03	22.96	-0.08	0.07
Stafford Loan status					
Received	74.50	75.83	74.73	-0.23	1.10
Did not receive	25.50	24.17	25.27	0.23	-1.10
Total Stafford Loan amount received³					
\$0 or unknown	25.50	24.17	25.27	0.23	-1.10
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	18.38	19.68	19.55	-1.17	0.13
\$6,501–\$9,500	32.52	31.42	28.58	3.94*	2.84*
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	97.92	97.96	97.49	0.43	0.47
2,629–10,233	‡	‡	‡	‡	‡
10,234–26,884	†	†	†	†	†
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	21.88	21.50	27.99	-6.11	-6.49
Not FTB	78.12	78.50	72.01	6.11	6.49
Age as of Dec 31, 2011					
15–23	43.10	46.10	46.75	-3.65	-0.65
24–29	26.52	25.46	24.39	2.13	1.07
30 or more	30.38	28.44	28.86	1.52	-0.42

See notes at end of table.

Table J-42. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	67.59	67.13	87.46	-19.87	-20.33
Unknown	30.58	31.01	9.89	20.69	21.12
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	67.79	67.38	87.84	-20.05	-20.46
Unknown	30.58	31.01	9.89	20.69	21.12
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	38.10	37.60	52.52	-14.42	-14.92
Education	†	†	†	†	†
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	†	†	†	†	†
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	†	†	†	†	†
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡

See notes at end of table.

Table J-42. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Precision Production	†	†	†	†	†
Transportation and Materials Moving	†	†	†	†	†
Visual and Performing Arts	†	†	†	†	†
Health Professions and Related Clinical Sciences	57.07	57.78	40.54	16.53	17.24
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	84.60	88.84	92.80	-8.20	-3.96
Associate's Degree	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	93.19	93.38	93.76	-0.57	-0.38
Second year	‡	‡	‡	‡	‡
Third year	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	‡	‡	‡	‡	‡
65–80	59.62	59.77	45.79	13.83	13.98
81–92	28.95	28.72	39.11	-10.16	-10.39
93 or more	‡	‡	‡	‡	‡
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	†	†	†	†	†
25–42	†	†	†	†	†
43–60	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	43.56	43.97	24.04	19.52	19.93
80–98	‡	‡	‡	‡	‡
99 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-42. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	60.65	61.29	47.84	12.81	13.45
\$5,427–\$8,864	‡	‡	‡	‡	‡
\$8,865 or more	‡	‡	‡	‡	‡

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-43. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	19.38	19.66	18.63	0.75	1.03
Great Lakes	13.85	14.24	13.65	0.20	0.59
Plains	‡	‡	‡	‡	‡
Southeast	24.57	23.89	23.43	1.14	0.46
Southwest	11.50	11.44	11.97	-0.47	-0.53
Rocky Mountains	4.62	4.81	4.52	0.10	0.29
Far West	21.56	21.66	23.41	-1.85	-1.75
CPS record available					
Yes	88.72	88.28	82.74	5.98*	5.54*
No	11.28	11.72	17.26	-5.98*	-5.54*
Federal aid status					
Received	‡	‡	‡	‡	‡
Did not receive	‡	‡	‡	‡	‡
Unknown	13.90	16.40	13.69	0.21	2.71
Pell Grant status					
Received	72.04	72.31	60.62	11.42*	11.69*
Did not receive	27.96	27.69	39.38	-11.42*	-11.69*
Total Pell Grant amount received³					
\$0 or unknown	27.96	27.69	39.38	-11.42*	-11.69*
\$1–\$2,774	21.51	21.66	22.63	-1.12	-0.97
\$2,775–\$5,549	25.69	26.17	21.78	3.91*	4.39*
\$5,550 or more	24.84	24.49	16.22	8.62*	8.27*
Stafford Loan status					
Received	80.10	80.36	61.63	18.47*	18.73*
Did not receive	19.90	19.64	38.37	-18.47*	-18.73*
Total Stafford Loan amount received³					
\$0 or unknown	19.90	19.64	38.37	-18.47*	-18.73*
\$1–\$4,699	22.42	22.62	20.10	2.32*	2.52*
\$4,700–\$6,500	16.56	16.73	13.14	3.42*	3.59*
\$6,501–\$9,500	29.41	29.59	20.99	8.42*	8.60*
\$9,501 or more	11.71	11.42	7.41	4.30*	4.01*
Institution total enrollment³					
0–2,628	75.65	75.71	77.03	-1.38	-1.32
2,629–10,233	23.25	23.20	21.98	1.27	1.22
10,234–26,884	‡	‡	‡	‡	‡
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	22.04	21.25	21.34	0.70	-0.09
Not FTB	77.96	78.75	78.66	-0.70	0.09
Age as of Dec 31, 2011					
15–23	47.16	46.92	47.42	-0.26	-0.50
24–29	23.09	23.59	22.70	0.39	0.89
30 or more	29.75	29.49	29.88	-0.13	-0.39

See notes at end of table.

Table J-43. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	81.68	81.93	82.23	-0.55	-0.30
Unknown	12.72	12.36	12.34	0.38	0.02
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	81.77	82.14	82.92	-1.15	-0.78
Unknown	12.72	12.36	12.34	0.38	0.02
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	2.76	2.73	2.36	0.40	0.37
Personal and Culinary Services	11.01	11.53	11.28	-0.27	0.25
Education	‡	‡	‡	‡	‡
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	1.87	1.91	1.69	0.18	0.22
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	†	†	†	†	†
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡

See notes at end of table.

Table J-43. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	49.98	49.18	52.39	-2.41*	-3.21*
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	60.33	61.21	62.33	-2.00	-1.12
Associate's Degree	34.63	34.04	32.69	1.94	1.35
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	4.93	4.66	4.87	0.06	-0.21
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡
Not in a postsecondary award, certificate, diploma, or degree program	†	†	†	†	†
Class level of undergraduates					
First year	78.63	78.67	80.02	-1.39	-1.35
Second year	18.01	17.89	16.48	1.53	1.41
Third year	3.11	3.20	3.16	-0.05	0.04
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first-time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	18.65	18.22	18.28	0.37	-0.06
65–80	34.14	34.70	35.48	-1.34	-0.78
81–92	29.89	29.42	29.73	0.16	-0.31
93 or more	17.31	17.65	16.51	0.80	1.14
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	‡	‡	‡	‡	‡
25–42	8.36	8.50	7.12	1.24	1.38
43–60	33.43	33.39	31.56	1.87	1.83
61 or more	56.65	56.89	59.86	-3.21*	-2.97*
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	18.01	18.36	20.24	-2.23*	-1.88
64–79	19.27	19.35	18.88	0.39	0.47
80–98	17.69	17.22	19.61	-1.92	-2.39
99 or more	45.03	45.07	41.27	3.76*	3.80*

See notes at end of table.

Table J-43. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	53.95	53.81	55.50	-1.55	-1.69
\$3,122–\$5,426	30.89	30.43	28.37	2.52	2.06
\$5,427–\$8,864	6.76	6.74	7.34	-0.58	-0.60
\$8,865 or more	8.40	9.02	8.79	-0.39	0.23

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-44. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	1.66	1.72	2.00	-0.34	-0.28
Mideast	4.42	4.38	4.92	-0.50	-0.54
Great Lakes	8.38	8.18	7.92	0.46	0.26
Plains	25.50	24.43	18.29	7.21	6.14
Southeast	17.56	18.01	19.77	-2.21	-1.76
Southwest	27.37	28.00	32.33	-4.96*	-4.33*
Rocky Mountains	4.74	4.68	3.94	0.80	0.74
Far West	10.37	10.58	10.83	-0.46	-0.25
Student type					
Undergraduate student	83.13	83.80	81.52	1.61	2.28
Graduate student	16.73	16.06	18.33	-1.60	-2.27
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	80.50	80.37	81.06	-0.56	-0.69
No	19.50	19.63	18.94	0.56	0.69
Federal aid status					
Received	73.90	73.95	73.69	0.21	0.26
Did not receive	16.62	14.27	17.56	-0.94	-3.29*
Unknown	9.49	11.77	8.75	0.74	3.02*
Pell Grant status					
Received	51.40	51.20	51.89	-0.49	-0.69
Did not receive	48.60	48.80	48.11	0.49	0.69
Total Pell Grant amount received³					
\$0 or unknown	48.60	48.80	48.11	0.49	0.69
\$1–\$2,774	16.44	16.20	17.64	-1.20	-1.44
\$2,775–\$5,549	19.92	19.98	20.66	-0.74	-0.68
\$5,550 or more	15.04	15.02	13.60	1.44*	1.42*
Stafford Loan status					
Received	71.05	70.99	70.87	0.18	0.12
Did not receive	28.95	29.01	29.13	-0.18	-0.12
Total Stafford Loan amount received³					
\$0 or unknown	28.95	29.01	29.13	-0.18	-0.12
\$1–\$4,699	15.39	15.54	16.75	-1.36	-1.21
\$4,700–\$6,500	10.64	10.56	10.56	0.08	#
\$6,501–\$9,500	17.62	17.69	18.13	-0.51	-0.44
\$9,501 or more	27.40	27.20	25.43	1.97	1.77
Institution total enrollment³					
0–2,628	18.92	19.63	20.01	-1.09	-0.38
2,629–10,233	14.93	14.92	16.35	-1.42	-1.43
10,234–26,884	7.15	7.27	7.78	-0.63	-0.51
26,885 or more	59.00	58.19	55.86	3.14	2.33
Sampled FTB Status					
FTB	6.94	6.89	8.13	-1.19*	-1.24*
Not FTB	93.06	93.11	91.87	1.19*	1.24*

See notes at end of table.

Table J-44. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	17.91	18.03	18.71	-0.80	-0.68
24–29	27.32	27.23	27.73	-0.41	-0.50
30 or more	54.77	54.74	53.56	1.21	1.18
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	83.43	83.55	84.02	-0.59	-0.47
Unknown	12.73	12.70	12.59	0.14	0.11
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	89.21	88.60	89.53	-0.32	-0.93
Unknown	7.59	8.20	7.35	0.24	0.85
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	9.53	9.93	10.11	-0.58	-0.18
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	2.47	2.75	2.55	-0.08	0.20
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	1.35	1.33	1.54	-0.19	-0.21
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡
Mathematics and Statistics	†	†	†	†	†
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	‡	‡	‡	‡	‡
Security and Protective Services	10.53	10.47	10.95	-0.42	-0.48
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡
Construction Trades	‡	‡	‡	‡	‡

See notes at end of table.

Table J-44. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	†	†	†	†	†
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	5.18	5.42	5.45	-0.27	-0.03
Health Professions and Related Clinical Sciences	16.20	16.23	15.89	0.31	0.34
Business, Management, Marketing, and Related Support Services	30.20	29.58	30.12	0.08	-0.54
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	2.41	2.36	2.67	-0.26	-0.31
Associate's Degree	39.48	40.30	42.61	-3.13	-2.31
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	57.56	56.82	54.25	3.31	2.57*
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	47.77	47.30	50.39	-2.62	-3.09
Second year	20.83	21.06	19.81	1.02	1.25
Third year	17.93	18.20	16.59	1.34*	1.61*
Fourth year	9.56	9.67	9.20	0.36	0.47
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first-time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	12.80	12.59	14.58	-1.78	-1.99
65–80	20.22	20.83	19.28	0.94	1.55
81–92	55.22	55.13	53.99	1.23	1.14
93 or more	11.76	11.45	12.16	-0.40	-0.71
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	60.15	60.38	58.08	2.07	2.30
25–42	33.06	32.84	34.61	-1.55	-1.77
43–60	4.81	4.85	5.00	-0.19	-0.15
61 or more	1.98	1.93	2.31	-0.33	-0.38
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	‡	‡	‡	‡	‡
64–79	19.04	18.21	14.18	4.86	4.03
80–98	40.26	40.60	43.45	-3.19	-2.85
99 or more	39.86	40.36	41.40	-1.54	-1.04

See notes at end of table.

Table J-44. Student nonresponse bias after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	76.89	76.58	75.26	1.63	1.32
\$3,122–\$5,426	16.74	16.89	18.15	-1.41	-1.26
\$5,427–\$8,864	5.46	5.53	5.75	-0.29	-0.22
\$8,865 or more	0.91	1.00	0.84	0.07	0.16

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles computed at the institution level. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution type														
Public														
Less-than-2-year	390	220	0.21	0.18	0.28	-0.03	-15.85	-0.03	-15.85	0.21	0.19	-0.02	-10.23	
2-year	22,440	12,250	33.26	30.42	40.86	-2.85*	-9.36	-2.85*	-9.36	32.40	31.53	-0.87*	-2.75	
4-year non-doctorate-granting	5,770	2,010	10.13	10.41	9.38	0.28*	2.68	0.28*	2.68	10.21	10.27	0.06	0.63	
4-year doctorate-granting	16,880	4,130	25.61	27.96	19.36	2.34*	8.38	2.34*	8.38	25.68	27.10	1.42*	5.24	
Private nonprofit														
Less-than-4-year	740	440	0.26	0.23	0.36	-0.03*	-15.09	-0.03*	-15.09	0.27	0.22	-0.05*	-22.11	
4-year non-doctorate-granting	5,940	1,580	6.42	7.26	4.19	0.84*	11.53	0.84*	11.53	6.47	6.94	0.48*	6.84	
4-year doctorate-granting	8,870	1,980	10.81	11.99	7.66	1.18*	9.84	1.18*	9.84	11.04	11.74	0.70*	5.96	
Private for-profit														
Less-than-2-year	2,620	2,120	2.28	1.74	3.70	-0.53*	-30.52	-0.53*	-30.52	2.35	2.03	-0.32	-15.97	
2-year	4,860	3,700	2.21	1.73	3.49	-0.48*	-27.84	-0.48*	-27.84	2.29	1.83	-0.45*	-24.69	
4-year	16,510	10,180	8.80	8.09	10.71	-0.72*	-8.85	-0.72*	-8.85	9.08	8.14	-0.94*	-11.61	
Institution region⁶														
New England	4,560	1,720	4.99	5.06	4.81	0.07	1.33	0.07	1.33	5.09	5.10	0.01	0.20	
Mideast	13,060	5,550	14.22	14.36	13.84	0.14	0.98	0.14	0.98	14.45	14.54	0.09	0.61	
Great Lakes	13,090	6,150	14.91	15.11	14.39	0.20	1.29	0.20	1.29	14.87	14.79	-0.08	-0.54	
Plains	6,280	2,410	8.67	8.95	7.90	0.29	3.22	0.29	3.22	8.71	8.50	-0.21	-2.44	
Southeast	19,670	8,600	22.28	22.78	20.95	0.50*	2.20	0.50*	2.20	22.56	22.41	-0.15	-0.66	
Southwest	11,640	5,910	14.55	13.87	16.36	-0.68*	-4.89	-0.68*	-4.89	14.22	13.93	-0.28	-2.03	
Rocky Mountains	3,700	1,660	3.92	4.01	3.67	0.09	2.35	0.09	2.35	4.00	4.05	0.05	1.20	
Far West	13,010	6,590	16.46	15.86	18.09	-0.61*	-3.83	-0.61*	-3.83	16.12	16.69	0.57*	3.42	
Student type														
Undergraduate student	71,070	35,830	86.29	84.49	91.09	-1.80*	-2.13	-1.80*	-2.13	85.66	84.83	-0.83*	-0.98	
Graduate student	12,230	2,480	12.16	13.70	8.06	1.54*	11.22	1.54*	11.22	12.70	13.38	0.68*	5.08	
First-professional	1,710	290	1.55	1.81	0.84	0.26*	14.56	0.26*	14.56	1.64	1.79	0.15*	8.43	
CPS record available														
Yes	64,020	26,930	67.40	71.07	57.62	3.67*	5.16	3.67*	5.16	67.33	66.76	-0.57*	-0.86	
No	20,980	11,670	32.60	28.93	42.38	-3.67*	-12.68	-3.67*	-12.68	32.67	33.24	0.57*	1.72	

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Federal aid status														
Received	53,820	20,090	58.06	62.63	45.87	4.57*	7.30	4.57*	7.30	58.21	57.76	-0.44	-0.77	
Did not receive	22,100	6,460	28.31	30.50	22.47	2.19*	7.18	2.19*	7.18	28.72	33.18	4.46*	13.44	
Unknown	9,080	12,050	13.63	6.87	31.67	-6.76*	-98.33	-6.76*	-98.33	13.07	9.06	-4.01*	-44.32	
Pell Grant status														
Received	39,150	18,880	38.16	39.12	35.58	0.97*	2.47	0.97*	2.47	38.28	37.07	-1.21*	-3.27	
Did not receive	45,850	19,720	61.84	60.88	64.42	-0.97*	-1.59	-0.97*	-1.59	61.72	62.93	1.21*	1.93	
Total Pell Grant amount received⁷														
\$0 or unknown	45,850	19,720	61.84	60.88	64.42	-0.97*	-1.59	-0.97*	-1.59	61.72	62.93	1.21*	1.93	
\$1–\$2,774	10,960	7,200	11.75	11.28	13.00	-0.47*	-4.18	-0.47*	-4.18	11.86	10.78	-1.08*	-9.97	
\$2,775–\$5,549	15,530	7,360	15.35	15.67	14.49	0.32*	2.05	0.32*	2.05	15.30	14.74	-0.56*	-3.80	
\$5,550 or more	12,660	4,330	11.06	12.18	8.09	1.12*	9.16	1.12*	9.16	11.12	11.55	0.42*	3.67	
Stafford Loan status														
Received	46,870	18,480	46.61	50.19	37.06	3.58*	7.13	3.58*	7.13	46.39	46.93	0.55*	1.16	
Did not receive	38,140	20,120	53.39	49.81	62.94	-3.58*	-7.18	-3.58*	-7.18	53.61	53.07	-0.55*	-1.03	
Total Stafford Loan amount received⁸														
\$0 or unknown	38,140	20,120	53.39	49.81	62.94	-3.58*	-7.18	-3.58*	-7.18	53.61	53.07	-0.55*	-1.03	
\$1–\$4,699	10,060	6,200	10.81	10.63	11.29	-0.18	-1.69	-0.18	-1.69	10.68	9.87	-0.81*	-8.24	
\$4,700–\$6,500	12,800	4,700	12.06	13.09	9.31	1.03*	7.87	1.03*	7.87	11.94	12.18	0.24*	2.00	
\$6,501–\$9,500	14,010	5,190	11.87	12.99	8.89	1.12*	8.60	1.12*	8.60	11.83	12.17	0.35*	2.84	
\$9,501 or more	9,990	2,390	11.87	13.48	7.57	1.61*	11.96	1.61*	11.96	11.94	12.71	0.77*	6.04	
Institution total enrollment⁷														
0–2,628	19,280	11,430	11.42	10.95	12.67	-0.47*	-4.29	-0.47*	-4.29	11.70	11.38	-0.33	-2.88	
2,629–10,233	21,280	9,490	22.33	22.89	20.82	0.57*	2.47	0.57*	2.47	22.47	22.43	-0.04	-0.17	
10,234–26,884	21,930	9,040	31.67	31.74	31.49	0.07	0.22	0.07	0.22	31.45	31.57	0.12	0.38	
26,885 or more	22,510	8,650	34.58	34.41	35.02	-0.17	-0.48	-0.17	-0.48	34.37	34.62	0.25	0.71	
Sampled FTB Status														
FTB	36,620	20,560	12.64	12.50	13.00	-0.13*	-1.07	-0.13*	-1.07	13.04	12.82	-0.22*	-1.70	
Not FTB	48,380	18,040	87.36	87.50	87.00	0.13*	0.15	0.13*	0.15	86.96	87.18	0.22*	0.25	

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Age as of Dec 31, 2011													
15–23	47,210	21,500	51.99	52.66	50.20	0.67*	1.27	0.67*	1.27	51.46	52.15	0.69*	1.32
24–29	16,370	7,610	21.07	21.01	21.25	-0.07	-0.31	-0.07	-0.31	21.26	21.12	-0.14	-0.67
30 or more	21,420	9,490	26.94	26.34	28.55	-0.60*	-2.29	-0.60*	-2.29	27.28	26.73	-0.55*	-2.05
Institution aid status													
Received	17,920	3,280	20.50	23.63	12.13	3.14*	13.27	3.14*	13.27	20.68	22.22	1.54*	6.93
Did not receive	57,690	26,670	69.74	69.34	70.79	-0.40	-0.57	-0.40	-0.57	69.59	68.57	-1.02*	-1.49
Unknown	9,400	8,650	9.77	7.03	17.07	-2.74*	-38.99	-2.74*	-38.99	9.73	9.21	-0.52	-5.64
State aid status													
Received	11,540	3,170	13.61	15.30	9.10	1.69*	11.06	1.69*	11.06	13.83	14.39	0.57*	3.94
Did not receive	64,550	29,410	79.19	78.05	82.23	-1.14*	-1.46	-1.14*	-1.46	79.14	76.83	-2.32*	-3.02
Unknown	8,910	6,020	7.20	6.65	8.67	-0.55*	-8.29	-0.55*	-8.29	7.03	8.78	1.75*	19.94
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	330	140	0.59	0.58	0.63	-0.01	-2.32	-0.01	-2.32	0.60	0.58	-0.01	-2.20
Natural Resources and Conservation	310	80	0.50	0.54	0.36	0.05*	8.83	0.05*	8.83	0.50	0.54	0.03	6.36
Architecture and Related Services	190	60	0.36	0.38	0.30	0.02	5.45	0.02	5.45	0.37	0.38	0.01	2.17
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	980	310	1.90	1.99	1.66	0.09*	4.43	0.09*	4.43	1.88	1.93	0.05	2.69
Communications Technologies/Technicians and Support Services	330	190	0.31	0.31	0.32		-0.46	#	-0.46	0.32	0.39	0.07	17.73
Computer and Information Sciences and Support Services	4,510	2,480	3.59	3.44	4.01	-0.15*	-4.41	-0.15*	-4.41	3.64	3.61	-0.04	-1.09
Personal and Culinary Services	2,700	1,960	2.13	1.74	3.21	-0.39*	-22.67	-0.39*	-22.67	2.16	1.74	-0.42*	-24.14
Education	4,120	1,020	6.80	7.51	4.85	0.71*	9.44	0.71*	9.44	6.83	7.21	0.38*	5.26

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Engineering	2,250	560	3.06	3.23	2.57	0.18*	5.42	0.18*	5.42	3.03	3.18	0.14*	4.50	
Engineering Technologies/Technicians	2,550	2,000	1.79	1.58	2.36	-0.21*	-12.99	-0.21*	-12.99	1.79	1.73	-0.06	-3.52	
Foreign Languages, Literatures, and Linguistics	300	70	0.52	0.58	0.37	0.06*	9.68	0.06*	9.68	0.53	0.59	0.06*	10.24	
Family and Consumer Sciences/Human Sciences	650	270	1.10	1.15	0.98	0.04	3.81	0.04	3.81	1.10	1.15	0.06	5.10	
Legal Professions and Studies	1,060	390	1.19	1.26	1.02	0.06*	5.01	0.06*	5.01	1.21	1.25	0.03	2.45	
English Language and Literature/Letters	850	270	1.44	1.57	1.09	0.13*	8.08	0.13*	8.08	1.44	1.55	0.11*	7.17	
Liberal Arts and Sciences, General Studies and Humanities	7,990	3,660	14.91	13.98	17.47	-0.93*	-6.65	-0.93*	-6.65	14.59	13.98	-0.61*	-4.38	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Biological and Biomedical Sciences	2,300	490	3.30	3.61	2.44	0.31*	8.59	0.31*	8.59	3.22	3.47	0.25*	7.16	
Mathematics and Statistics	390	120	0.59	0.62	0.49	0.03*	5.52	0.03*	5.52	0.59	0.61	0.02	3.86	
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	1,220	470	2.14	2.10	2.22	-0.03	-1.49	-0.03	-1.49	2.08	2.06	-0.02	-1.08	
Parks, Recreation, Leisure, and Fitness Studies	720	230	1.25	1.34	1.00	0.09*	6.81	0.09*	6.81	1.22	1.30	0.08*	6.12	
Philosophy and Religious Studies	150	30	0.21	0.25	0.12	0.03*	13.59	0.03*	13.59	0.22	0.25	0.03*	12.78	
Theology and Religious Vocations	370	80	0.44	0.49	0.29	0.05*	10.68	0.05*	10.68	0.45	0.48	0.03	6.00	
Physical Sciences	920	170	1.13	1.26	0.78	0.13*	10.17	0.13*	10.17	1.12	1.23	0.12*	9.44	
Science Technologies/Technicians	70	40	0.13	0.13	0.13	#	1.07	#	1.07	0.13	0.15	0.01	9.30	
Psychology	2,550	610	3.24	3.50	2.51	0.27*	7.57	0.27*	7.57	3.25	3.41	0.16*	4.66	
Security and Protective Services	3,120	1,860	3.70	3.37	4.63	-0.33*	-9.95	-0.33*	-9.95	3.71	3.46	-0.25*	-7.33	
Public Administration and Social Service Professions	1,040	330	1.67	1.80	1.29	0.14*	7.64	0.14*	7.64	1.70	1.76	0.06	3.51	
Social Sciences	1,580	420	3.01	3.25	2.35	0.24*	7.38	0.24*	7.38	3.02	3.20	0.18*	5.68	
Construction Trades	400	440	0.37	0.25	0.70	-0.12*	-47.67	-0.12*	-47.67	0.37	0.27	-0.11*	-40.31	

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Mechanic and Repair Technologies/Technicians	1,650	1,250	1.38	1.11	2.11	-0.27*	-24.00	-0.27*	-24.00	1.43	1.16	-0.28*	-23.95	
Precision Production	490	430	0.39	0.28	0.70	-0.11*	-40.96	-0.11*	-40.96	0.41	0.30	-0.10*	-34.28	
Transportation and Materials Moving	160	120	0.16	0.14	0.19	-0.01	-9.00	-0.01	-9.00	0.16	0.16	#	-0.10	
Visual and Performing Arts	3,420	1,590	3.92	3.93	3.92	#	0.07	#	0.07	3.99	3.97	-0.02	-0.50	
Health Professions and Related Clinical Sciences	14,370	6,890	16.34	16.43	16.09	0.09	0.55	0.09	0.55	16.38	16.64	0.26	1.53	
Business, Management, Marketing, and Related Support Services	9,140	4,240	15.24	15.05	15.79	-0.20	-1.32	-0.20	-1.32	15.32	15.08	-0.24*	-1.58	
History (new)	430	140	0.87	0.90	0.80	0.03	2.97	0.03	2.97	0.88	0.89	#	0.45	
Residency Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	13,660	10,110	9.54	8.00	13.43	-1.54*	-19.27	-1.54*	-19.27	9.76	8.40	-1.36*	-16.24	
Associate's Degree	25,440	13,830	36.32	34.76	40.25	-1.56*	-4.49	-1.56*	-4.49	36.41	35.74	-0.66*	-1.86	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1,130	620	1.09	1.06	1.16	-0.03	-2.70	-0.03	-2.70	1.07	1.08	0.01	1.20	
Bachelor's Degree or equivalent	27,110	8,640	45.95	50.08	35.56	4.13*	8.24	4.13*	8.24	46.18	48.68	2.50*	5.14	
Not in a postsecondary award, certificate, diploma, or degree program	2,870	1,740	7.10	6.11	9.61	-1.00*	-16.30	-1.00*	-16.30	6.59	6.10	-0.49*	-8.05	
Class level of undergraduates														
First year	40,400	23,120	43.24	39.70	52.42	-3.54*	-8.91	-3.54*	-8.91	43.28	40.11	-3.17*	-7.91	
Second year	11,850	4,300	26.71	27.57	24.47	0.86*	3.13	0.86*	3.13	26.55	27.79	1.25*	4.49	
Third year	4,990	1,590	12.71	13.68	10.20	0.97*	7.08	0.97*	7.08	12.56	13.17	0.61*	4.60	
Fourth year	5,760	1,480	15.62	17.22	11.48	1.60*	9.28	1.60*	9.28	15.89	17.14	1.25*	7.29	
Fifth year or higher	710	230	1.72	1.83	1.43	0.11*	5.98	0.11*	5.98	1.71	1.79	0.07	3.98	

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment							After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	25,540	10,290	34.78	34.94	34.33	0.17	0.48	0.17	0.48	34.40	35.56	1.17*	3.28
65–80	23,980	12,490	29.30	28.37	31.79	-0.94*	-3.30	-0.94*	-3.30	29.27	28.92	-0.35	-1.20
81–92	20,420	10,390	21.22	21.01	21.77	-0.21	-0.98	-0.21	-0.98	21.54	20.48	-1.07*	-5.22
93 or more	13,680	5,050	14.71	15.68	12.11	0.98*	6.22	0.98*	6.22	14.79	15.05	0.25	1.67
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	23,830	13,320	33.25	30.60	40.50	-2.65*	-8.66	-2.65*	-8.66	32.76	31.29	-1.47*	-4.70
25–42	19,370	9,700	23.91	23.27	25.67	-0.64*	-2.76	-0.64*	-2.76	23.97	23.60	-0.37	-1.58
43–60	15,680	5,240	20.48	21.91	16.56	1.43*	6.54	1.43*	6.54	20.62	21.25	0.63*	2.96
61 or more	19,010	6,200	22.36	24.22	17.28	1.86*	7.68	1.86*	7.68	22.65	23.87	1.22*	5.10
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	9,700	5,140	22.55	20.69	27.45	-1.87*	-9.02	-1.87*	-9.02	22.20	21.82	-0.38	-1.75
14–23	11,550	4,980	25.23	24.91	26.08	-0.32	-1.30	-0.32	-1.30	25.22	24.83	-0.39	-1.57
24–32	11,940	4,630	26.31	27.02	24.46	0.71*	2.61	0.71*	2.61	26.46	26.57	0.10	0.39
33 or more	11,530	3,600	25.90	27.39	22.01	1.48*	5.41	1.48*	5.41	26.11	26.78	0.67*	2.49
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	8,220	2,270	27.20	29.83	19.92	2.63*	8.80	2.63*	8.80	27.32	29.49	2.17*	7.35
64–79	7,750	3,020	27.09	27.50	25.94	0.41	1.50	0.41	1.50	26.67	27.47	0.80	2.93
80–98	10,040	4,690	29.16	28.85	30.03	-0.31	-1.08	-0.31	-1.08	29.34	28.45	-0.88*	-3.10
99 or more	12,300	9,240	16.55	13.82	24.11	-2.73*	-19.74	-2.73*	-19.74	16.68	14.59	-2.09*	-14.32

See notes at end of table.

Table J-45. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in all institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting)⁷													
\$4,144 or less	11,370	6,380	24.54	22.45	30.03	-2.09*	-9.31	-2.09*	-9.31	24.04	22.95	-1.09*	-4.74
\$4,145–\$5,619	10,210	5,030	24.17	22.88	27.56	-1.29*	-5.64	-1.29*	-5.64	24.16	23.29	-0.86*	-3.71
\$5,620–\$7,662	10,460	3,540	24.04	25.14	21.14	1.11*	4.40	1.11*	4.40	24.18	24.92	0.74*	2.97
\$7,663 or more	12,670	3,400	27.26	29.53	21.28	2.28*	7.71	2.28*	7.71	27.63	28.84	1.21*	4.20
Private institution instructional expenses per FTE enrollment (FASB reporting)⁷													
\$3,121 or less	12,150	7,900	30.70	26.87	41.33	-3.83*	-14.26	-3.83*	-14.26	31.00	27.13	-3.87*	-14.28
\$3,122–\$5,426	9,890	5,660	18.93	17.96	21.63	-0.97	-5.41	-0.97	-5.41	18.83	19.07	0.24	1.24
\$5,427–\$8,864	7,380	3,260	19.68	21.04	15.91	1.36*	6.46	1.36*	6.46	19.39	20.06	0.67	3.35
\$8,865 or more	8,900	2,390	30.68	34.12	21.12	3.44*	10.09	3.44*	10.09	30.78	33.74	2.97*	8.79

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Midwest	60	30	15.11	17.70	10.73	2.60	14.66	2.60	14.66	15.06	23.52	8.46	35.97
Great Lakes	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Southeast	80	40	16.70	15.55	18.64	-1.15	-7.41	-1.15	-7.41	17.13	15.19	-1.94	-12.75
Southwest	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Rocky Mountains	90	50	33.02	29.48	39.00	-3.54	-12.02	-3.54	-12.02	32.55	25.82	-6.73	-26.07
Far West	30	50	3.78	2.57	5.83	-1.21	-47.29	-1.21	-47.29	3.78	3.57	-0.20	-5.73
CPS record available													
Yes	300	120	74.82	81.93	62.81	7.12*	8.69	7.12*	8.69	75.48	73.43	-2.05	-2.79
No	90	110	25.18	18.07	37.19	-7.12*	-39.38	-7.12*	-39.38	24.52	26.57	2.05	7.71
Federal aid status													
Received	270	90	68.03	78.08	51.07	10.05*	12.87	10.05*	12.87	68.23	68.32	0.10	0.14
Did not receive	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Unknown	40	110	15.60	4.58	34.20	11.02*	-240.74	-11.02*	-240.74	14.74	10.90	-3.84	-35.20
Pell Grant status													
Received	240	90	63.58	71.65	49.96	8.07*	11.27	8.07*	11.27	63.69	63.65	-0.04	-0.06
Did not receive	150	130	36.42	28.35	50.04	-8.07*	-28.47	-8.07*	-28.47	36.31	36.35	0.04	0.10
Total Pell Grant amount received⁷													
\$0 or unknown	150	130	36.42	28.35	50.04	-8.07*	-28.47	-8.07*	-28.47	36.31	36.35	0.04	0.10
\$1–\$2,774	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$2,775–\$5,549	110	30	27.48	37.70	10.24	10.21*	27.10	10.21*	27.10	26.25	31.87	5.62*	17.63
\$5,550 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Stafford Loan status													
Received	160	50	48.15	51.62	42.29	3.47	6.72	3.47	6.72	48.32	49.57	1.25	2.52
Did not receive	230	170	51.85	48.38	57.71	-3.47	-7.17	-3.47	-7.17	51.68	50.43	-1.25	-2.48

See notes at end of table.

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	230	170	51.85	48.38	57.71	-3.47	-7.17	-3.47	-7.17	51.68	50.43	-1.25	-2.48
\$1–\$4,699	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment ⁷													
0–2,628	370	190	98.20	99.06	96.74	0.86	0.87	0.86	0.87	98.30	98.02	-0.28	-0.28
2,629–10,233	†	†	†	†	†	†	†	†	†	†	†	†	†
10,234–26,884	20	40	1.80	0.94	3.26	-0.86	-91.86	-0.86	-91.86	1.70	1.98	0.28	14.03
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	250	120	21.74	17.19	29.41	-4.54	-26.43	-4.54	-26.43	22.49	17.86	-4.63	-25.92
Not FTB	140	110	78.26	82.81	70.59	4.54	5.49	4.54	5.49	77.51	82.14	4.63	5.63
Age as of Dec 31, 2011													
15–23	180	110	34.79	34.23	35.74	-0.57	-1.65	-0.57	-1.65	34.36	32.71	-1.65	-5.05
24–29	80	30	22.44	27.34	14.17	4.90	17.93	4.90	17.93	22.77	28.21	5.43	19.26
30 or more	130	80	42.77	38.44	50.09	-4.34	-11.28	-4.34	-11.28	42.86	39.08	-3.78	-9.68
Institution aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	350	170	92.11	93.63	89.54	1.52	1.63	1.52	1.63	92.06	87.32	-4.74	-5.43
Unknown	40	50	5.86	4.54	8.10	-1.33	-29.27	-1.33	-29.27	5.84	10.90	5.06	46.42
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	310	150	76.43	73.72	81.00	-2.71	-3.67	-2.71	-3.67	76.36	69.70	-6.66	-9.56
Unknown	40	50	5.86	4.54	8.10	-1.33	-29.27	-1.33	-29.27	5.84	10.90	5.06	46.42

See notes at end of table.

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Legal Professions and Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview non-respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science													
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	†	†	†	†	†	†	†	†	†	†	†	†	†
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair													
Technologies/Technicians	50	50	12.53	10.38	16.23	-2.15	-20.67	-2.15	-20.67	12.48	10.16	-2.32	-22.86
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Transportation and Materials													
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	130	40	31.67	40.88	15.79	9.21*	22.53	9.21*	22.53	31.98	41.56	9.57*	23.04
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	340	200	70.31	72.70	66.28	2.39	3.29	2.39	3.29	70.52	75.65	5.13	6.78
Associate's Degree	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	†	†	†	†	†	†	†	†	†	†	†	†	†
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Class level of undergraduates													
First year	310	160	73.02	74.74	70.12	1.73	2.31	1.73	2.31	72.83	75.14	2.31	3.08
Second year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Third year	†	†	†	†	†	†	†	†	†	†	†	†	†
Fourth year	†	†	†	†	†	†	†	†	†	†	†	†	†
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	120	90	44.96	45.93	42.86	0.97	2.11	0.97	2.11	45.25	45.74	0.49	1.08
65–80	60	30	6.63	5.28	9.55	-1.35	-25.61	-1.35	-25.61	6.24	4.62	-1.62	-34.96
81–92	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-46. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution tuition and fees as percent of core revenues (GASB reporting)⁷													
13 or less	40	30	8.33	6.20	13.10	-2.13	-34.39	-2.13	-34.39	7.97	5.04	-2.92	-57.94
14–23	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
24–32	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
33 or more	130	50	58.18	60.33	53.38	2.15*	3.56	2.15*	3.56	58.47	66.09	7.62*	11.53
Public institution instructional expenses per FTE enrollment (GASB reporting)⁷													
\$4,144 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$4,145–\$5,619	70	50	24.07	20.46	32.14	-3.60	-17.62	-3.60	-17.62	23.96	26.42	2.46	9.32
\$5,620–\$7,662	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$7,663 or more	90	50	50.86	53.42	45.13	2.56*	4.79	2.56*	4.79	51.47	50.63	-0.85	-1.67

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	860	370	3.57	3.81	3.10	0.24*	6.27	0.24*	6.27	3.68	3.82	0.14*	3.65
Mideast	2,590	1,460	11.05	11.08	10.99	0.03	0.28	0.03	0.28	11.34	11.20	-0.14	-1.29
Great Lakes	4,200	2,440	15.28	15.47	14.91	0.19	1.21	0.19	1.21	15.29	15.15	-0.14	-0.92
Plains	1,480	660	7.06	7.46	6.29	0.39*	5.26	0.39*	5.26	7.15	6.81	-0.34*	-4.96
Southeast	5,020	2,420	18.89	19.65	17.39	0.76*	3.86	0.76*	3.86	19.50	19.11	-0.40	-2.07
Southwest	3,300	2,070	17.45	16.71	18.94	-0.75*	-4.47	-0.75*	-4.47	16.88	16.19	-0.69*	-4.25
Rocky Mountains	790	420	2.62	2.57	2.70	-0.04	-1.63	-0.04	-1.63	2.66	2.55	-0.11	-4.16
Far West	4,190	2,400	24.08	23.26	25.70	-0.82*	-3.52	-0.82*	-3.52	23.51	25.18	1.67*	6.64
CPS record available													
Yes	16,310	7,100	63.94	69.69	52.53	5.75*	8.25	5.75*	8.25	64.20	61.87	-2.33*	-3.77
No	6,130	5,150	36.06	30.31	47.47	-5.75*	-18.96	-5.75*	-18.96	35.80	38.13	2.33*	6.12
Federal aid status													
Received	13,240	5,120	50.52	56.68	38.28	6.16*	10.87	6.16*	10.87	50.90	49.27	-1.62*	-3.29
Did not receive	7,140	2,230	29.45	34.39	19.65	4.94*	14.36	4.94*	14.36	30.26	38.86	8.60*	22.12
Unknown	2,060	4,900	20.03	8.93	42.08	-11.10*	-124.30	-11.10*	-124.30	18.84	11.87	-6.97*	-58.77
Pell Grant status													
Received	11,790	5,020	44.66	49.13	35.79	4.46*	9.09	4.46*	9.09	45.55	44.20	-1.35*	-3.05
Did not receive	10,660	7,230	55.34	50.87	64.21	-4.46*	-8.78	-4.46*	-8.78	54.45	55.80	1.35*	2.42
Total Pell Grant amount received⁷													
\$0 or unknown	10,660	7,230	55.34	50.87	64.21	-4.46*	-8.78	-4.46*	-8.78	54.45	55.80	1.35*	2.42
\$1–\$2,774	3,970	2,200	15.97	16.51	14.90	0.54*	3.26	0.54*	3.26	16.51	15.10	-1.41*	-9.33
\$2,775–\$5,549	5,040	2,040	18.79	20.81	14.77	2.02*	9.72	2.02*	9.72	19.10	18.67	-0.43*	-2.29
\$5,550 or more	2,780	780	9.90	11.81	6.13	1.90*	16.11	1.90*	16.11	9.94	10.42	0.49*	4.67
Stafford Loan status													
Received	6,390	2,480	26.51	29.75	20.09	3.23*	10.87	3.23*	10.87	25.35	25.10	-0.26	-1.02
Did not receive	16,050	9,770	73.49	70.25	79.91	-3.23*	-4.60	-3.23*	-4.60	74.65	74.90	0.26	0.34

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	16,050	9,770	73.49	70.25	79.91	-3.23*	-4.60	-3.23*	-4.60	74.65	74.90	0.26	0.34
\$1–\$4,699	3,020	1,370	11.71	12.80	9.56	1.09*	8.49	1.09*	8.49	11.73	11.31	-0.41*	-3.65
\$4,700–\$6,500	1,610	590	6.18	6.87	4.81	0.69*	10.05	0.69*	10.05	5.75	5.69	-0.06	-0.97
\$6,501–\$9,500	1,330	400	6.06	7.09	4.01	1.03*	14.54	1.03*	14.54	5.75	5.91	0.16	2.77
\$9,501 or more	430	120	2.56	2.99	1.72	0.43*	14.28	0.43*	14.28	2.13	2.18	0.05	2.24
Institution total enrollment ⁷													
0–2,628	560	330	2.20	2.19	2.22	-0.01	-0.45	-0.01	-0.45	2.28	2.21	-0.06	-2.87
2,629–10,233	5,890	3,090	22.56	23.07	21.55	0.51	2.20	0.51	2.20	23.15	22.42	-0.73*	-3.24
10,234–26,884	9,540	5,160	42.39	42.95	41.26	0.57	1.32	0.57	1.32	42.18	42.57	0.39	0.92
26,885 or more	6,450	3,660	32.85	31.79	34.96	-1.06*	-3.35	-1.06*	-3.35	32.40	32.79	0.40	1.21
Sampled FTB Status													
FTB	10,840	6,600	13.87	13.48	14.65	-0.39*	-2.93	-0.39*	-2.93	14.66	14.05	-0.62*	-4.38
Not FTB	11,600	5,650	86.13	86.52	85.35	0.39*	0.46	0.39*	0.46	85.34	85.95	0.62*	0.72
Age as of Dec 31, 2011													
15–23	13,630	7,470	51.40	50.89	52.41	-0.51	-1.00	-0.51	-1.00	50.93	50.51	-0.43	-0.85
24–29	3,520	1,960	19.95	20.07	19.71	0.12	0.59	0.12	0.59	20.03	20.17	0.14	0.70
30 or more	5,300	2,820	28.65	29.04	27.87	0.39	1.35	0.39	1.35	29.04	29.32	0.29	0.98
Institution aid status													
Received	2,630	1,060	11.94	12.99	9.85	1.05*	8.09	1.05*	8.09	12.07	11.53	-0.55*	-4.73
Did not receive	17,820	9,790	79.16	78.43	80.60	-0.73*	-0.92	-0.73*	-0.92	79.45	77.03	-2.42*	-3.15
Unknown	1,990	1,410	8.91	8.58	9.56	-0.33	-3.80	-0.33	-3.80	8.48	11.45	2.97*	25.93
State aid status													
Received	3,550	1,280	12.06	13.87	8.45	1.82*	13.09	1.82*	13.09	12.83	12.86	0.03	0.22
Did not receive	16,910	9,560	79.03	77.54	81.99	-1.49*	-1.92	-1.49*	-1.92	78.69	75.69	-3.00*	-3.96
Unknown	1,990	1,410	8.91	8.58	9.56	-0.33	-3.80	-0.33	-3.80	8.48	11.45	2.97*	25.93

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	100	80	0.56	0.43	0.84	-0.13*	-31.49	-0.13*	-31.49	0.57	0.44	-0.13*	-28.34
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	80	50	0.56	0.51	0.65	-0.05	-9.46	-0.05	-9.46	0.54	0.52	-0.02	-3.51
Communications Technologies/Technicians and Support Services	100	50	0.54	0.59	0.44	0.05	8.36	0.05	8.36	0.56	0.83	0.27	32.25
Computer and Information Sciences and Support Services	660	350	3.66	3.72	3.53	0.06	1.66	0.06	1.66	3.74	3.80	0.06	1.62
Personal and Culinary Services	480	240	1.77	1.85	1.61	0.08	4.30	0.08	4.30	1.85	1.91	0.06	3.27
Education	500	210	2.75	2.97	2.31	0.22*	7.29	0.22*	7.29	2.73	2.89	0.16	5.53
Engineering	160	80	0.96	0.93	1.03	-0.03	-3.50	-0.03	-3.50	0.91	0.88	-0.04	-4.17
Engineering Technologies/Technicians	590	350	2.83	2.75	2.99	-0.08	-2.78	-0.08	-2.78	2.87	2.88	#	0.09
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	320	170	1.60	1.68	1.44	0.08	4.73	0.08	4.73	1.62	1.74	0.11	6.61
Legal Professions and Studies	110	40	0.70	0.73	0.63	0.03	4.32	0.03	4.32	0.72	0.74	0.03	3.79
English Language and Literature/Letters	130	90	0.65	0.62	0.71	-0.03	-4.73	-0.03	-4.73	0.64	0.63	-0.01	-1.94
Liberal Arts and Sciences, General Studies and Humanities	5,730	2,910	36.07	35.92	36.38	-0.15	-0.41	-0.15	-0.41	35.79	35.22	-0.57*	-1.63
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Biological and Biomedical Sciences	160	70	1.12	1.07	1.23	-0.05	-4.73	-0.05	-4.73	1.05	1.12	0.07	6.58
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	310	160	1.97	1.87	2.19	-0.11	-5.66	-0.11	-5.66	1.93	1.88	-0.05	-2.67
Parks, Recreation, Leisure, and Fitness Studies	80	50	0.51	0.47	0.59	-0.04	-8.89	-0.04	-8.89	0.49	0.51	0.01	2.68
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Science													
Technologies/Technicians	60	30	0.28	0.31	0.21	0.03	10.90	0.03*	10.90	0.28	0.34	0.05	16.26
Psychology	120	40	0.71	0.81	0.50	0.10*	12.53	0.10*	12.53	0.69	0.80	0.11*	13.32
Security and Protective Services	770	500	4.21	3.80	5.06	-0.41*	-10.85	-0.41*	-10.85	4.26	3.91	-0.35*	-8.96
Public Administration and Social Service Professions	130	70	0.79	0.85	0.66	0.06	7.49	0.06	7.49	0.82	0.82	#	-0.47
Social Sciences	160	70	0.95	1.08	0.69	0.13*	11.97	0.13*	11.97	0.89	0.98	0.10	9.78
Construction Trades	230	270	0.91	0.66	1.43	-0.25*	-38.53	-0.25*	-38.53	0.94	0.69	-0.24*	-35.34
Mechanic and Repair													
Technologies/Technicians	650	500	2.55	2.26	3.16	-0.29*	-12.85	-0.29*	-12.85	2.68	2.34	-0.34*	-14.51
Precision Production	310	270	0.97	0.76	1.40	-0.21*	-27.92	-0.21*	-27.92	1.02	0.81	-0.21*	-26.23
Transportation and Materials													
Moving	60	70	0.21	0.17	0.31	-0.05*	-27.35	-0.05*	-27.35	0.23	0.20	-0.03	-13.00
Visual and Performing Arts	480	270	2.77	2.70	2.91	-0.07	-2.61	-0.07	-2.61	2.77	2.87	0.10	3.36
Health Professions and Related													
Clinical Sciences	2,940	1,380	16.34	17.29	14.38	0.95*	5.49	0.95*	5.49	16.50	17.19	0.69*	3.99
Business, Management, Marketing, and Related													
Support Services	1,990	1,060	11.55	11.60	11.44	0.05	0.46	0.05	0.46	11.51	11.52	0.01	0.12
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	5,010	3,190	11.89	11.60	12.48	-0.29	-2.52	-0.29	-2.52	12.18	11.77	-0.41	-3.47
Associate's Degree	13,950	6,760	72.63	74.81	68.30	2.18*	2.91	2.18*	2.91	73.46	74.33	0.87	1.16
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	650	360	1.60	1.58	1.64	-0.02	-1.20	-0.02	-1.20	1.55	1.59	0.04	2.22
Bachelor's Degree or equivalent	150	90	1.48	1.25	1.92	-0.22	-17.86	-0.22	-17.86	1.34	1.50	0.16	10.59
Not in a postsecondary award, certificate, diploma, or degree program	1,570	1,240	12.40	10.76	15.66	-1.64*	-15.25	-1.64*	-15.25	11.47	10.82	-0.65*	-6.03
Class level of undergraduates													
First year	14,620	8,430	59.58	57.29	64.30	-2.29*	-4.00	-2.29*	-4.00	59.67	56.76	-2.92*	-5.14
Second year	5,190	2,140	37.14	39.34	32.61	2.20*	5.59	2.20*	5.59	37.21	39.89	2.68*	6.71
Third year	270	120	2.35	2.38	2.27	0.04	1.52	0.04	1.52	2.25	2.40	0.15	6.45
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	10,300	5,340	49.30	49.77	48.37	0.47	0.94	0.47	0.94	48.73	50.47	1.74*	3.45
65–80	7,600	4,480	33.46	32.92	34.54	-0.54	-1.65	-0.54	-1.65	33.51	32.92	-0.59	-1.78
81–92	2,910	1,600	11.95	11.84	12.17	-0.11	-0.94	-0.11	-0.94	12.27	11.35	-0.91*	-8.06
93 or more	1,570	780	5.29	5.48	4.92	0.19	3.40	0.19	3.40	5.49	5.25	-0.24	-4.52
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	16,350	9,080	72.34	72.36	72.29	0.02	0.03	0.02	0.03	72.20	71.86	-0.34	-0.47
25–42	5,180	2,580	24.25	24.32	24.09	0.08	0.32	0.08	0.32	24.34	24.91	0.57	2.29
43–60	650	400	2.80	2.69	3.02	-0.11	-4.13	-0.11	-4.13	2.82	2.56	-0.27	-10.43
61 or more	200	140	0.62	0.63	0.60	0.01	1.42	0.01	1.42	0.63	0.67	0.04	5.56
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	8,270	4,700	40.22	39.04	42.59	-1.19*	-3.04	-1.19*	-3.04	39.95	40.40	0.44	1.10
14–23	6,790	3,640	30.13	30.28	29.83	0.15	0.50	0.15	0.50	30.18	29.84	-0.34	-1.15
24–32	5,160	2,750	20.68	21.52	18.99	0.85*	3.93	0.85*	3.93	20.82	20.82	#	0.01
33 or more	2,160	1,120	8.96	9.15	8.58	0.19	2.09	0.19	2.09	9.04	8.94	-0.10	-1.13

See notes at end of table.

Table J-47. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment						After nonresponse weight adjustment						
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	10,110	5,860	43.82	43.14	45.17	-0.68	-1.57	-0.68	-1.57	43.29	42.85	-0.44	-1.03
\$4,145–\$5,619	8,230	4,220	38.65	39.00	37.93	0.36	0.92	0.36	0.92	38.89	38.54	-0.35	-0.91
\$5,620–\$7,662	3,180	1,670	14.39	14.53	14.11	0.14	0.97	0.14	0.97	14.55	14.97	0.42	2.81
\$7,663 or more	860	450	3.15	3.33	2.79	0.18	5.43	0.18	5.43	3.28	3.65	0.37	10.12

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	260	100	4.54	4.43	4.85	-0.11	-2.40	-0.11	-2.40	4.57	4.41	-0.16	-3.60	
Mideast	1,120	350	18.25	18.48	17.58	0.23	1.23	0.23	1.23	18.24	18.84	0.60	3.18	
Great Lakes	750	250	13.38	13.50	13.06	0.11	0.82	0.11	0.82	13.27	12.92	-0.35	-2.71	
Plains	260	60	3.96	4.31	2.92	0.35*	8.18	0.35*	8.18	3.84	4.05	0.21*	5.15	
Southeast	1,830	620	30.01	30.01	30.02	#	-0.01	#	-0.01	30.41	29.85	-0.56	-1.87	
Southwest	350	190	6.06	5.56	7.54	-0.50	-9.00	-0.50	-9.00	5.95	5.79	-0.16	-2.72	
Rocky Mountains	390	110	7.03	7.30	6.22	0.27	3.76	0.27	3.76	7.19	7.49	0.30	3.99	
Far West	810	330	16.76	16.41	17.82	-0.36	-2.17	-0.36	-2.17	16.53	16.65	0.12	0.71	
Student type														
Undergraduate student	4,960	1,800	92.81	92.22	94.56	-0.59*	-0.64	-0.59*	-0.64	92.57	92.25	-0.32	-0.35	
Graduate student	800	210	7.17	7.75	5.44	0.59*	7.55	0.59*	7.55	7.42	7.74	0.32	4.14	
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
CPS record available														
Yes	4,070	1,130	66.35	69.80	56.15	3.45*	4.94	3.45*	4.94	66.18	65.87	-0.31	-0.47	
No	1,700	870	33.65	30.20	43.85	-3.45*	-11.42	-3.45*	-11.42	33.82	34.13	0.31	0.91	
Federal aid status														
Received	3,670	890	59.10	63.92	44.85	4.82*	7.53	4.82*	7.53	59.15	60.13	0.98	1.62	
Did not receive	1,920	560	31.42	33.22	26.10	1.80*	5.41	1.80*	5.41	31.62	36.04	4.42*	12.27	
Unknown	170	560	9.48	2.87	29.04	-6.61*	-230.57	-6.61*	-230.57	9.23	3.83	-5.40*	-140.89	
Pell Grant status														
Received	2,260	680	39.33	40.89	34.73	1.56*	3.80	1.56*	3.80	39.60	38.89	-0.71	-1.83	
Did not receive	3,510	1,330	60.67	59.11	65.27	-1.56*	-2.63	-1.56*	-2.63	60.40	61.11	0.71	1.16	
Total Pell Grant amount received⁷														
\$0 or unknown	3,510	1,330	60.67	59.11	65.27	-1.56*	-2.63	-1.56*	-2.63	60.40	61.11	0.71	1.16	
\$1–\$2,774	600	250	11.72	11.31	12.94	-0.41	-3.64	-0.41	-3.64	11.82	10.73	-1.09*	-10.12	
\$2,775–\$5,549	900	270	15.67	16.30	13.81	0.63*	3.86	0.63*	3.86	15.74	15.46	-0.28	-1.82	
\$5,550 or more	760	160	11.94	13.28	7.98	1.34*	10.08	1.34*	10.08	12.04	12.70	0.66*	5.17	

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	2,740	680	44.15	47.46	34.38	3.30*	6.96	3.30*	6.96	43.64	44.49	0.84*	1.90
Did not receive	3,030	1,330	55.85	52.54	65.62	-3.30*	-6.29	-3.30*	-6.29	56.36	55.51	-0.84*	-1.52
Total Stafford Loan amount received ³													
\$0 or unknown	3,030	1,330	55.85	52.54	65.62	-3.30*	-6.29	-3.30*	-6.29	56.36	55.51	-0.84*	-1.52
\$1–\$4,699	630	210	10.30	10.49	9.74	0.19	1.81	0.19	1.81	10.13	9.81	-0.31	-3.19
\$4,700–\$6,500	980	220	14.31	15.61	10.46	1.30*	8.34	1.30*	8.34	14.28	14.79	0.50	3.41
\$6,501–\$9,500	620	140	11.01	12.07	7.89	1.05*	8.74	1.05*	8.74	10.98	11.39	0.41*	3.59
\$9,501 or more	510	120	8.53	9.28	6.28	0.76*	8.16	0.76*	8.16	8.25	8.49	0.24	2.87
Institution total enrollment ⁷													
0–2,628	210	60	3.54	3.68	3.11	0.14	3.92	0.14	3.92	3.43	3.48	0.05	1.31
2,629–10,233	2,220	680	35.71	37.14	31.49	1.43*	3.84	1.43*	3.84	35.64	37.19	1.54*	4.15
10,234–26,884	2,250	830	40.50	39.88	42.33	-0.62	-1.55	-0.62	-1.55	40.50	39.37	-1.13	-2.86
26,885 or more	1,090	440	20.25	19.30	23.06	-0.95*	-4.93	-0.95*	-4.93	20.43	19.96	-0.46	-2.32
Sampled FTB Status													
FTB	1,830	700	13.31	13.30	13.35	-0.01	-0.09	-0.01	-0.09	13.70	13.42	-0.28	-2.09
Not FTB	3,940	1,310	86.69	86.70	86.65	0.01	0.01	0.01	0.01	86.30	86.58	0.28	0.32
Age as of Dec 31, 2011													
15–23	3,620	1,190	58.70	59.74	55.63	1.04*	1.74	1.04*	1.74	58.60	59.66	1.06*	1.78
24–29	1,030	360	18.99	18.80	19.56	-0.19	-1.01	-0.19	-1.01	18.93	18.51	-0.43	-2.31
30 or more	1,120	450	22.31	21.46	24.82	-0.85*	-3.95	-0.85*	-3.95	22.47	21.83	-0.64	-2.92
Institution aid status													
Received	1,000	180	13.85	15.70	8.36	1.86*	11.82	1.86*	11.82	14.04	15.13	1.09*	7.18
Did not receive	4,580	1,570	81.99	81.48	83.49	-0.51	-0.62	-0.51	-0.62	81.78	81.04	-0.74	-0.92
Unknown	180	260	4.16	2.82	8.15	-1.35*	-47.80	-1.35*	-47.80	4.17	3.83	-0.34	-8.96
State aid status													
Received	1,190	270	18.74	20.68	12.99	1.94*	9.39	1.94*	9.39	18.93	19.82	0.89*	4.47
Did not receive	4,420	1,670	78.42	76.64	83.69	-1.78*	-2.32	-1.78*	-2.32	78.26	76.55	-1.71*	-2.23
Unknown	160	70	2.84	2.68	3.32	-0.16	-6.01	-0.16	-6.01	2.81	3.63	0.82	22.69

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	130	50	2.64	2.57	2.86	-0.07	-2.64	-0.07	-2.64	2.65	2.58	-0.06	-2.43
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Education	440	90	9.19	10.17	6.09	0.98*	9.60	0.98*	9.60	9.33	9.97	0.64*	6.42
Engineering	140	50	1.98	1.77	2.64	-0.21	-11.68	-0.21	-11.68	1.97	1.97	#	-0.16
Engineering Technologies/Technicians	140	90	2.85	2.49	3.99	-0.36	-14.43	-0.36	-14.43	2.87	2.61	-0.26	-9.85
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	960	390	20.16	19.07	23.63	-1.09*	-5.73	-1.09*	-5.73	19.97	18.71	-1.26*	-6.72
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	240	60	3.72	3.79	3.49	0.07	1.89	0.07	1.89	3.66	3.64	-0.02	-0.44	
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	210	50	3.82	3.99	3.29	0.17	4.22	0.17	4.22	3.82	3.91	0.08	2.09	
Security and Protective Services	160	50	3.44	3.52	3.20	0.08	2.14	0.08	2.14	3.45	3.47	0.02	0.54	
Public Administration and Social Service Professions	140	40	2.06	2.16	1.77	0.09	4.32	0.09	4.32	2.10	2.25	0.15	6.70	
Social Sciences	150	40	2.97	3.10	2.57	0.13	4.07	0.13	4.07	2.97	3.10	0.13	4.07	
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	200	70	4.25	4.11	4.69	-0.14	-3.36	-0.14	-3.36	4.32	4.16	-0.16	-3.85	
Health Professions and Related Clinical Sciences	580	160	11.64	11.91	10.77	0.27	2.31	0.27	2.31	11.54	11.81	0.27	2.26	
Business, Management, Marketing, and Related Support Services	580	200	13.57	13.27	14.54	-0.30	-2.29	-0.30	-2.29	13.56	13.58	0.02	0.18	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	180	120	3.32	2.98	4.31	-0.34*	-11.31	-0.34*	-11.31	3.32	3.11	-0.21	-6.62
Associate's Degree	1,430	630	32.03	30.52	36.50	-1.51*	-4.96	-1.51*	-4.96	32.51	30.76	-1.76*	-5.71
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	3,000	840	59.06	61.62	51.50	2.56*	4.16	2.56*	4.16	58.91	61.39	2.48*	4.03
Not in a postsecondary award, certificate, diploma, or degree program	280	120	5.36	4.68	7.37	-0.68*	-14.51	-0.68*	-14.51	5.03	4.53	-0.50*	-10.97
Class level of undergraduates													
First year	2,310	1,010	35.12	32.02	44.42	-3.10*	-9.68	-3.10*	-9.68	35.38	31.95	-3.43*	-10.73
Second year	990	290	25.42	26.02	23.59	0.61	2.33	0.61	2.33	25.39	26.09	0.70	2.68
Third year	610	160	15.63	16.57	12.83	0.94*	5.64	0.94*	5.64	15.27	16.29	1.02*	6.29
Fourth year	820	210	20.90	22.32	16.63	1.42*	6.37	1.42*	6.37	21.06	22.73	1.67*	7.35
Fifth year or higher	150	40	2.94	3.07	2.53	0.14	4.43	0.14	4.43	2.90	2.93	0.04	1.25

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	1,740	580	30.21	30.58	29.12	0.37	1.20	0.37	1.20	29.96	30.15	0.20	0.65
65–80	2,330	810	42.09	41.79	42.96	-0.29	-0.70	-0.29	-0.70	42.05	42.55	0.50	1.17
81–92	1,270	420	21.92	21.81	22.23	-0.11	-0.49	-0.11	-0.49	22.12	21.53	-0.60	-2.78
93 or more	390	170	5.78	5.82	5.69	0.03	0.54	0.03	0.54	5.86	5.77	-0.09	-1.64
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	790	330	18.06	16.94	21.40	-1.12*	-6.61	-1.12*	-6.61	17.89	16.91	-0.98*	-5.78
25–42	2,610	1,020	46.18	45.29	48.82	-0.89	-1.95	-0.89	-1.95	46.62	45.55	-1.06	-2.34
43–60	1,640	460	26.84	28.18	22.84	1.34*	4.76	1.34*	4.76	26.65	27.67	1.02*	3.67
61 or more	640	150	8.93	9.59	6.94	0.67*	6.94	0.67*	6.94	8.84	9.87	1.03*	10.40
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	340	200	6.81	6.21	8.59	-0.61	-9.75	-0.61	-9.75	7.04	6.37	-0.67	-10.51
14–23	1,560	570	25.38	24.94	26.69	-0.44	-1.78	-0.44	-1.78	25.47	24.76	-0.71	-2.89
24–32	1,630	580	30.28	30.31	30.20	0.03	0.09	0.03	0.09	30.21	30.46	0.24	0.79
33 or more	2,190	640	37.53	38.55	34.52	1.02	2.65	1.02	2.65	37.27	38.42	1.14	2.97

See notes at end of table.

Table J-48. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	1,130	460	19.36	18.44	22.06	-0.92*	-4.98	-0.92*	-4.98	19.48	18.44	-1.04*	-5.64
\$4,145–\$5,619	1,290	560	25.86	25.35	27.35	-0.51	-2.00	-0.51	-2.00	26.15	25.82	-0.33	-1.28
\$5,620–\$7,662	1,910	520	32.08	33.47	28.02	1.38*	4.13	1.38*	4.13	31.84	32.78	0.94	2.87
\$7,663 or more	1,390	460	22.69	22.74	22.56	0.04	0.19	0.04	0.19	22.53	22.96	0.43	1.88

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	550	150	3.34	3.26	3.64	-0.08	-2.39	-0.08	-2.39	3.38	3.29	-0.09	-2.85	
Mideast	1,940	520	10.75	10.45	11.89	-0.30	-2.84	-0.30	-2.84	10.93	10.84	-0.10	-0.88	
Great Lakes	2,960	670	16.52	16.78	15.55	0.25	1.50	0.25	1.50	16.59	16.55	-0.04	-0.23	
Plains	1,260	300	8.22	8.37	7.64	0.15	1.80	0.15	1.80	8.27	8.26	-0.01	-0.06	
Southeast	4,970	1,190	28.63	28.62	28.68	-0.01	-0.04	-0.01	-0.04	28.68	28.52	-0.16	-0.57	
Southwest	2,690	750	15.17	14.91	16.15	-0.26	-1.71	-0.26	-1.71	14.73	14.56	-0.17	-1.17	
Rocky Mountains	890	170	4.38	4.60	3.56	0.21	4.66	0.21	4.66	4.48	4.78	0.30	6.19	
Far West	1,630	390	12.99	13.01	12.89	0.03	0.20	0.03	0.20	12.92	13.19	0.27	2.03	
Student type														
Undergraduate student	11,760	3,230	77.09	75.90	81.66	-1.19*	-1.56	-1.19*	-1.56	76.01	75.61	-0.40	-0.53	
Graduate student	4,310	750	20.37	21.40	16.41	1.03*	4.80	1.03*	4.80	21.31	21.66	0.34	1.58	
First-professional	820	150	2.54	2.70	1.93	0.16*	5.90	0.16*	5.90	2.68	2.73	0.06	2.03	
CPS record available														
Yes	11,020	2,240	64.32	67.19	53.30	2.86*	4.26	2.86*	4.26	63.86	63.85	-0.01	-0.02	
No	5,860	1,890	35.68	32.81	46.70	-2.86*	-8.72	-2.86*	-8.72	36.14	36.15	0.01	0.03	
Federal aid status														
Received	9,920	1,870	57.75	61.06	45.02	3.30*	5.41	3.30*	5.41	57.56	57.96	0.40	0.69	
Did not receive	6,380	1,330	34.36	35.35	30.58	0.98*	2.78	0.98*	2.78	34.66	38.08	3.41*	8.96	
Unknown	590	930	7.88	3.60	24.40	-4.29*	-119.25	-4.29*	-119.25	7.77	3.97	-3.81*	-96.02	
Pell Grant status														
Received	4,480	1,010	28.35	29.23	24.99	0.87*	2.99	0.87*	2.99	28.02	27.76	-0.26	-0.92	
Did not receive	12,400	3,120	71.65	70.77	75.01	-0.87*	-1.23	-0.87*	-1.23	71.98	72.24	0.26	0.35	
Total Pell Grant amount received⁷														
\$0 or unknown	12,400	3,120	71.65	70.77	75.01	-0.87*	-1.23	-0.87*	-1.23	71.98	72.24	0.26	0.35	
\$1–\$2,774	1,070	270	6.98	7.05	6.75	0.06	0.88	0.06	0.88	6.84	6.65	-0.19	-2.80	
\$2,775–\$5,549	1,610	380	10.53	10.73	9.77	0.20	1.86	0.20	1.86	10.41	10.18	-0.23	-2.27	
\$5,550 or more	1,810	360	10.84	11.45	8.48	0.61*	5.35	0.61*	5.35	10.76	10.93	0.16	1.48	

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	8,760	1,740	51.21	53.63	41.90	2.42*	4.51	2.42*	4.51	51.06	51.16	0.10	0.20
Did not receive	8,120	2,390	48.79	46.37	58.10	-2.42*	-5.21	-2.42*	-5.21	48.94	48.84	-0.10	-0.20
Total Stafford Loan amount received⁶													
\$0 or unknown	8,120	2,390	48.79	46.37	58.10	-2.42*	-5.21	-2.42*	-5.21	48.94	48.84	-0.10	-0.20
\$1–\$4,699	1,440	380	9.00	8.99	9.04	-0.01	-0.12	-0.01	-0.12	8.69	8.33	-0.36*	-4.34
\$4,700–\$6,500	2,790	580	14.97	15.57	12.64	0.60*	3.88	0.60*	3.88	14.84	14.77	-0.07	-0.49
\$6,501–\$9,500	1,970	360	12.67	13.40	9.85	0.73*	5.47	0.73*	5.47	12.71	12.84	0.13	0.99
\$9,501 or more	2,550	430	14.57	15.67	10.37	1.09*	6.96	1.09*	6.96	14.82	15.23	0.41*	2.67
Institution total enrollment⁷													
0–2,628	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
2,629–10,233	1,230	290	7.31	7.34	7.18	0.03	0.47	0.03	0.47	7.31	7.25	-0.06	-0.82
10,234–26,884	6,010	1,550	35.93	35.89	36.12	-0.05	-0.13	-0.05	-0.13	36.19	35.65	-0.54	-1.53
26,885 or more	9,530	2,280	56.36	56.31	56.52	-0.04	-0.08	-0.04	-0.08	56.08	56.64	0.56	0.99
Sampled FTB Status													
FTB	3,520	890	11.33	11.62	10.22	0.29*	2.49	0.29*	2.49	11.48	11.65	0.17	1.43
Not FTB	13,360	3,240	88.67	88.38	89.78	-0.29*	-0.33	-0.29*	-0.33	88.52	88.35	-0.17	-0.19
Age as of Dec 31, 2011													
15–23	9,980	2,520	60.91	61.08	60.25	0.17	0.28	0.17	0.28	60.31	60.78	0.47	0.78
24–29	3,550	830	21.04	21.03	21.11	-0.02	-0.09	-0.02	-0.09	21.43	21.23	-0.19	-0.90
30 or more	3,360	790	18.05	17.90	18.64	-0.15	-0.86	-0.15	-0.86	18.27	17.98	-0.28	-1.57
Institution aid status													
Received	5,690	680	26.27	28.84	16.38	2.57*	8.90	2.57*	8.90	26.54	28.15	1.61*	5.73
Did not receive	10,420	2,410	65.92	66.96	61.88	1.05*	1.57	1.05*	1.57	65.42	67.15	1.74*	2.59
Unknown	780	1,050	7.81	4.20	21.74	-3.61*	-86.05	-3.61*	-86.05	8.05	4.69	-3.35*	-71.41
State aid status													
Received	3,350	640	18.76	19.98	14.08	1.21*	6.08	1.21*	6.08	18.72	19.11	0.38*	2.00
Did not receive	12,960	3,310	77.64	76.56	81.81	-1.08*	-1.41	-1.08*	-1.41	77.67	77.07	-0.61*	-0.79
Unknown	570	180	3.60	3.46	4.11	-0.13	-3.82	-0.13	-3.82	3.60	3.83	0.22	5.84

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	180	40	1.16	1.16	1.13	0.01	0.53	0.01	0.53	1.17	1.18	0.01	1.12	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	480	130	3.63	3.52	4.07	-0.11	-3.19	-0.11	-3.19	3.58	3.50	-0.08	-2.36	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	410	100	2.78	2.79	2.77	#	0.14	#	0.14	2.85	2.90	0.05	1.73	
Personal and Culinary Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Education	1,490	290	8.62	8.89	7.58	0.27*	2.99	0.27*	2.99	8.68	8.71	0.03	0.40	
Engineering	1,140	260	7.18	7.24	6.93	0.06	0.88	0.06	0.88	7.14	7.27	0.13	1.74	
Engineering Technologies/Technicians	110	30	0.84	0.80	0.99	-0.04	-4.78	-0.04	-4.78	0.83	0.79	-0.04	-4.50	
Foreign Languages, Literatures, and Linguistics	150	40	1.05	1.06	1.03	#	0.41	#	0.41	1.06	1.07	0.01	1.23	
Family and Consumer Sciences/Human Sciences	180	50	1.40	1.40	1.39	#	0.05	#	0.05	1.40	1.40	#	-0.09	
Legal Professions and Studies	270	60	1.10	1.12	1.03	0.02	1.60	0.02	1.60	1.12	1.11	#	-0.30	
English Language and Literature/Letters	360	70	2.42	2.55	1.90	0.13*	5.16	0.13*	5.16	2.42	2.54	0.12	4.89	
Liberal Arts and Sciences, General Studies and Humanities	610	160	4.14	4.02	4.62	-0.12	-3.03	-0.12	-3.03	4.09	4.01	-0.08	-2.04	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	1,050	230	6.39	6.49	6.02	0.10	1.47	0.10	1.47	6.30	6.37	0.07	1.08	
Mathematics and Statistics	190	60	1.16	1.12	1.31	-0.04	-3.43	-0.04	-3.43	1.16	1.12	-0.05	-4.32	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	420	120	3.19	3.09	3.57	-0.10	-3.09	-0.10	-3.09	3.05	3.02	-0.03	-0.92	
Parks, Recreation, Leisure, and Fitness Studies	340	110	2.28	2.24	2.45	-0.04	-1.91	-0.04	-1.91	2.24	2.20	-0.04	-1.77	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Physical Sciences	440	70	2.18	2.28	1.79	0.10*	4.33	0.10*	4.33	2.17	2.27	0.11	4.64	
Science														
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	780	160	4.98	5.08	4.56	0.11	2.09	0.11	2.09	5.00	5.11	0.11	2.07	
Security and Protective Services	260	80	2.08	2.00	2.40	-0.08	-4.08	-0.08	-4.08	2.08	1.99	-0.08	-4.24	
Public Administration and Social Service Professions	300	70	2.31	2.38	2.03	0.07	2.99	0.07	2.99	2.32	2.32	#	-0.15	
Social Sciences	780	200	5.56	5.48	5.89	-0.08	-1.53	-0.08	-1.53	5.61	5.56	-0.05	-0.91	
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mechanic and Repair														
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials														
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	580	160	4.13	4.05	4.44	-0.08	-1.94	-0.08	-1.94	4.21	4.11	-0.11	-2.62	
Health Professions and Related Clinical Sciences	1,970	360	11.64	12.27	9.16	0.63*	5.14	0.63*	5.14	11.58	12.07	0.49*	4.07	
Business, Management, Marketing, and Related Support Services	1,800	570	15.39	14.65	18.27	-0.73*	-5.00	-0.73*	-5.00	15.49	15.02	-0.48*	-3.17	
History (new)	190	70	1.48	1.35	2.01	-0.14*	-10.04	-0.14*	-10.04	1.49	1.35	-0.14*	-10.11	
Residency Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Associate's Degree	140	30	1.01	1.03	0.93	0.02	1.98	0.02	1.98	1.02	1.09	0.06	5.74
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	11,160	2,970	94.02	94.27	93.08	0.25*	0.27	0.25*	0.27	94.13	94.34	0.21	0.22
Not in a postsecondary award, certificate, diploma, or degree program	610	190	4.64	4.40	5.52	-0.24*	-5.47	-0.24*	-5.47	4.51	4.26	-0.25	-5.82
Class level of undergraduates													
First year	3,530	1,060	19.89	19.32	22.00	-0.57*	-2.97	-0.57*	-2.97	20.01	19.13	-0.88*	-4.60
Second year	2,120	510	19.18	19.48	18.11	0.29	1.51	0.29	1.51	18.76	18.90	0.14	0.75
Third year	2,170	580	23.08	23.09	23.02	0.02	0.07	0.02	0.07	22.56	22.53	-0.03	-0.14
Fourth year	3,350	870	35.59	35.89	34.48	0.30	0.84	0.30	0.84	36.37	37.15	0.77*	2.08
Fifth year or higher	210	60	2.26	2.22	2.40	-0.04	-1.66	-0.04	-1.66	2.30	2.30	#	-0.17

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	6,720	1,570	40.11	40.41	38.99	0.29	0.72	0.29	0.72	40.18	40.92	0.74	1.80
65–80	4,580	1,240	29.61	29.03	31.84	-0.58*	-2.00	-0.58*	-2.00	29.58	28.83	-0.75*	-2.62
81–92	3,860	980	22.71	22.76	22.54	0.04	0.20	0.04	0.20	22.77	22.65	-0.12	-0.53
93 or more	1,320	280	7.56	7.81	6.63	0.24*	3.13	0.24*	3.13	7.47	7.60	0.14	1.82
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	270	120	2.21	1.99	3.04	-0.22	-10.92	-0.22	-10.92	2.25	2.02	-0.23	-11.53
25–42	3,290	960	21.38	20.75	23.80	-0.63*	-3.04	-0.63*	-3.04	21.36	20.76	-0.60*	-2.88
43–60	6,250	1,440	37.05	37.70	34.56	0.65*	1.72	0.65*	1.72	37.11	37.59	0.48	1.28
61 or more	6,680	1,560	39.36	39.56	38.60	0.20	0.50	0.20	0.50	39.28	39.63	0.35	0.88
Public institution tuition and fees as percent of core revenues (GASB reporting) ⁷													
13 or less	1,050	210	5.54	5.82	4.49	0.27	4.72	0.27	4.72	5.55	5.73	0.18	3.11
14–23	3,170	760	18.74	18.97	17.87	0.23	1.20	0.23	1.20	18.80	18.96	0.16	0.85
24–32	5,130	1,290	32.20	31.90	33.32	-0.29	-0.92	-0.29	-0.92	32.24	31.95	-0.28	-0.88
33 or more	7,050	1,790	43.52	43.31	44.32	-0.21	-0.48	-0.21	-0.48	43.41	43.35	-0.06	-0.14

See notes at end of table.

Table J-49. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Public institution instructional expenses per FTE enrollment (GASB reporting) ⁷													
\$4,144 or less	110	60	1.17	1.02	1.74	-0.15	-14.42	-0.15	-14.42	1.19	1.07	-0.12	-11.03
\$4,145–\$5,619	630	200	4.33	4.03	5.47	-0.30	-7.44	-0.30	-7.44	4.41	4.16	-0.25	-6.04
\$5,620–\$7,662	5,320	1,350	33.62	33.83	32.82	0.21	0.62	0.21	0.62	33.50	33.77	0.27	0.80
\$7,663 or more	10,330	2,440	60.88	61.12	59.97	0.24	0.39	0.24	0.39	60.90	61.00	0.10	0.17

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Midwest	170	100	15.71	15.79	15.57	0.08	0.52	0.08	0.52	16.17	16.48	0.31	1.90	
Great Lakes	20	50	8.71	3.26	18.06	-5.45	-166.91	-5.45	-166.91	9.12	3.53	-5.60	-158.79	
Plains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Southeast	270	90	37.94	44.54	26.60	6.60*	14.82	6.60*	14.82	35.98	41.13	5.14	12.50	
Southwest	50	40	9.32	8.71	10.38	-0.61	-7.05	-0.61	-7.05	9.41	9.03	-0.38	-4.22	
Rocky Mountains	†	†	†	†	†	†	†	†	†	†	†	†	†	
Far West	130	120	10.29	7.46	15.15	-2.83	-37.90	-2.83	-37.90	10.59	7.60	-2.99	-39.29	
CPS record available														
Yes	620	320	80.08	83.05	74.99	2.96	3.57	2.96	3.57	79.60	80.58	0.98	1.21	
No	120	120	19.92	16.95	25.01	-2.96	-17.49	-2.96	-17.49	20.40	19.42	-0.98	-5.03	
Federal aid status														
Received	590	310	76.61	80.33	70.22	3.72*	4.63	3.72*	4.63	76.01	76.96	0.95	1.23	
Did not receive	110	50	14.68	13.67	16.42	-1.01	-7.40	-1.01	-7.40	15.23	15.62	0.39	2.51	
Unknown	40	80	8.71	6.01	13.36	-2.71	-45.04	-2.71	-45.04	8.76	7.42	-1.34	-18.08	
Pell Grant status														
Received	500	290	66.05	65.37	67.22	-0.68	-1.04	-0.68	-1.04	65.22	63.30	-1.92	-3.03	
Did not receive	240	150	33.95	34.63	32.78	0.68	1.97	0.68	1.97	34.78	36.70	1.92	5.23	
Total Pell Grant amount received⁷														
\$0 or unknown	240	150	33.95	34.63	32.78	0.68	1.97	0.68	1.97	34.78	36.70	1.92	5.23	
\$1–\$2,774	90	60	13.98	13.37	15.03	-0.61	-4.56	-0.61	-4.56	13.51	12.66	-0.85	-6.71	
\$2,775–\$5,549	170	120	26.03	23.70	30.04	-2.33	-9.85	-2.33	-9.85	25.59	22.58	-3.01	-13.33	
\$5,550 or more	230	100	26.04	28.30	22.15	2.26	7.99	2.26	7.99	26.12	28.06	1.94	6.91	
Stafford Loan status														
Received	520	250	63.26	67.74	55.56	4.48	6.62	4.48	6.62	62.04	64.26	2.21	3.45	
Did not receive	210	190	36.74	32.26	44.44	-4.48	-13.90	-4.48	-13.90	37.96	35.74	-2.21	-6.20	

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	210	190	36.74	32.26	44.44	-4.48	-13.90	-4.48	-13.90	37.96	35.74	-2.21	-6.20
\$1–\$4,699	90	70	13.29	12.29	14.99	-0.99	-8.09	-0.99	-8.09	13.01	11.53	-1.49	-12.89
\$4,700–\$6,500	210	90	21.86	24.30	17.66	2.44	10.06	2.44	10.06	21.72	23.49	1.77	7.55
\$6,501–\$9,500	190	90	21.24	23.63	17.14	2.39	10.11	2.39	10.11	21.19	22.73	1.54	6.77
\$9,501 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Institution total enrollment ⁷													
0–2,628	720	420	99.27	99.73	98.48	0.46	0.46	0.46	0.46	99.27	99.69	0.42	0.42
2,629–10,233	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
10,234–26,884	†	†	†	†	†	†	†	†	†	†	†	†	†
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	470	260	21.85	22.45	20.82	0.60	2.67	0.60	2.67	22.45	23.23	0.78	3.35
Not FTB	270	180	78.15	77.55	79.18	-0.60	-0.77	-0.60	-0.77	77.55	76.77	-0.78	-1.01
Age as of Dec 31, 2011													
15–23	430	240	43.60	45.27	40.73	1.67	3.69	1.67	3.69	43.56	45.29	1.73	3.82
24–29	150	80	24.55	26.14	21.83	1.58	6.06	1.58	6.06	24.57	26.25	1.68	6.40
30 or more	160	130	31.85	28.59	37.44	-3.25	-11.38	-3.25*	-11.38	31.87	28.46	-3.41	-11.98
Institution aid status													
Received	200	80	19.20	20.62	16.77	1.42	6.87	1.42	6.87	19.70	20.99	1.30	6.17
Did not receive	510	340	74.85	73.67	76.87	-1.18	-1.60	-1.18	-1.60	74.33	72.08	-2.25	-3.12
Unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
State aid status													
Received	150	40	12.16	15.09	7.12	2.93*	19.43	2.93*	19.43	11.92	14.65	2.73*	18.65
Did not receive	560	380	81.89	79.20	86.52	-2.69*	-3.40	-2.69*	-3.40	82.11	78.43	-3.69*	-4.70
Unknown	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Education	†	†	†	†	†	†	†	†	†	†	†	†	†
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
English Language and Literature/Letters	10	40	7.43	2.18	16.04	-5.26	-241.47	-5.26	-241.47	7.75	2.34	-5.41	-231.20
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science													
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair													
Technologies/Technicians	60	40	9.27	10.25	7.66	0.98	9.60	0.98	9.60	9.43	10.39	0.96	9.23
Precision Production	60	50	8.55	7.19	10.79	-1.36	-18.98	-1.36	-18.98	8.98	7.69	-1.29	-16.72
Transportation and Materials													
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Health Professions and Related													
Clinical Sciences	210	110	43.94	50.14	33.79	6.20	12.37	6.20	12.37	42.27	48.18	5.91	12.27
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	310	270	47.97	41.35	59.33	-6.61*	-15.99	-6.61*	-15.99	48.21	40.64	-7.57*	-18.62
Associate's Degree	330	140	37.12	40.02	32.13	2.90	7.26	2.90	7.26	37.27	40.91	3.64	8.89
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	90	30	14.43	18.11	8.10	3.68*	20.33	3.68*	20.33	14.01	17.73	3.72*	20.96
Bachelor's Degree or equivalent	†	†	†	†	†	†	†	†	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Class level of undergraduates													
First year	610	390	72.14	68.10	79.12	-4.04*	-5.94	-4.04*	-5.94	72.54	68.17	-4.37*	-6.41
Second year	120	50	24.31	28.34	17.34	4.03*	14.24	4.03*	14.24	23.85	28.21	4.36*	15.47
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fifth year or higher	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	100	50	16.22	19.01	11.43	2.79	14.67	2.79	14.67	16.34	19.18	2.83	14.78
65–80	210	130	26.99	28.74	23.98	1.75	6.09	1.75	6.09	25.95	27.24	1.29	4.75
81–92	330	200	39.06	34.74	46.48	-4.32	-12.45	-4.32	-12.45	39.56	34.85	-4.71	-13.51
93 or more	100	60	17.73	17.52	18.10	-0.21	-1.23	-0.21	-1.23	18.15	18.73	0.58	3.11
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	130	40	14.56	16.03	11.90	1.47	9.16	1.47	9.16	14.12	16.56	2.45	14.78
25–42	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
43–60	190	110	33.23	33.82	32.16	0.59	1.74	0.59	1.74	34.00	34.19	0.20	0.58
61 or more	210	160	37.87	32.13	48.26	-5.73	-17.85	-5.73	-17.85	39.40	33.79	-5.61	-16.61
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	260	180	30.60	24.54	41.02	-6.06	-24.71	-6.06	-24.71	30.92	25.42	-5.50	-21.62
64–79	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
80–98	270	130	30.99	34.95	24.19	3.96	11.32	3.96	11.32	30.01	33.54	3.53	10.51
99 or more	160	120	25.49	24.70	26.86	-0.79	-3.22	-0.79	-3.22	25.95	25.01	-0.94	-3.76

See notes at end of table.

Table J-50. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	320	200	46.51	42.23	53.85	-4.27	-10.12	-4.27	-10.12	47.28	42.23	-5.05	-11.96
\$3,122–\$5,426	180	110	15.39	15.47	15.27	0.07	0.48	0.07	0.48	15.92	16.26	0.34	2.08
\$5,427–\$8,864	180	90	25.29	27.49	21.52	2.20	7.99	2.20	7.99	23.84	26.49	2.65	10.01
\$8,865 or more	60	40	12.81	14.81	9.37	2.00	13.52	2.00	13.52	12.97	15.03	2.06	13.70

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	630	150	10.49	10.14	12.15	-0.36	-3.53	-0.36	-3.53	10.72	10.43	-0.29	-2.81	
Mideast	1,360	380	20.30	19.60	23.56	-0.71	-3.60	-0.71	-3.60	20.33	19.70	-0.63	-3.19	
Great Lakes	1,360	510	23.36	23.33	23.50	-0.03	-0.13	-0.03	-0.13	23.26	23.31	0.05	0.21	
Plains	500	60	10.07	10.74	6.97	0.67*	6.25	0.67*	6.25	9.87	10.32	0.45*	4.40	
Southeast	1,110	270	19.82	20.10	18.57	0.27	1.35	0.27	1.35	20.14	20.21	0.07	0.36	
Southwest	240	50	4.48	4.42	4.74	-0.06	-1.32	-0.06	-1.32	4.36	4.37	0.01	0.26	
Rocky Mountains	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Far West	600	130	9.05	9.15	8.58	0.10	1.09	0.10	1.09	8.91	9.17	0.26	2.85	
Student type														
Undergraduate student	4,520	1,270	84.44	84.38	84.71	-0.06	-0.07	-0.06	-0.07	84.02	84.15	0.13	0.15	
Graduate student	1,420	310	15.53	15.58	15.29	0.05	0.34	0.05	0.34	15.95	15.81	-0.14	-0.86	
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
CPS record available														
Yes	4,600	1,040	75.41	78.73	60.05	3.32*	4.22	3.32*	4.22	75.17	76.86	1.69*	2.20	
No	1,340	540	24.59	21.27	39.95	-3.32*	-15.62	-3.32*	-15.62	24.83	23.14	-1.69*	-7.30	
Federal aid status														
Received	3,890	670	68.95	72.42	52.89	3.47*	4.79	3.47*	4.79	68.69	69.95	1.26*	1.80	
Did not receive	1,400	390	23.54	22.83	26.83	-0.71	-3.12	-0.71	-3.12	23.86	24.36	0.50	2.07	
Unknown	640	510	7.51	4.75	20.28	-2.76*	-58.06	-2.76*	-58.06	7.45	5.69	-1.76*	-30.95	
Pell Grant status														
Received	1,950	560	33.46	34.34	29.40	0.88*	2.56	0.88*	2.56	33.36	33.83	0.47	1.40	
Did not receive	3,990	1,020	66.54	65.66	70.60	-0.88*	-1.34	-0.88*	-1.34	66.64	66.17	-0.47	-0.71	
Total Pell Grant amount received⁷														
\$0 or unknown	3,990	1,020	66.54	65.66	70.60	-0.88*	-1.34	-0.88*	-1.34	66.64	66.17	-0.47	-0.71	
\$1–\$2,774	520	230	9.14	9.14	9.12	#	0.04	#	0.04	9.16	9.16	#	-0.05	
\$2,775–\$5,549	720	200	12.45	12.61	11.73	0.16	1.24	0.16	1.24	12.35	12.33	-0.02	-0.13	
\$5,550 or more	710	130	11.87	12.59	8.55	0.72*	5.71	0.72*	5.71	11.84	12.34	0.49*	3.99	

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	3,940	820	65.56	68.37	52.57	2.81*	4.11	2.81*	4.11	65.32	66.72	1.40*	2.10
Did not receive	2,000	760	34.44	31.63	47.43	-2.81*	-8.88	-2.81*	-8.88	34.68	33.28	-1.40*	-4.20
Total Stafford Loan amount received⁶													
\$0 or unknown	2,000	760	34.44	31.63	47.43	-2.81*	-8.88	-2.81*	-8.88	34.68	33.28	-1.40*	-4.20
\$1–\$4,699	550	210	8.44	8.18	9.64	-0.26	-3.18	-0.26	-3.18	8.12	7.77	-0.35	-4.51
\$4,700–\$6,500	1,520	300	22.05	22.89	18.18	0.84*	3.66	0.84*	3.66	22.17	22.49	0.32	1.40
\$6,501–\$9,500	930	180	19.05	20.30	13.24	1.25*	6.18	1.25*	6.18	18.94	19.73	0.79*	4.02
\$9,501 or more	950	140	16.02	17.00	11.51	0.98*	5.74	0.98*	5.74	16.09	16.74	0.64*	3.83
Institution total enrollment⁷													
0–2,628	2,910	630	49.84	51.15	43.80	1.31*	2.55	1.31*	2.55	50.33	51.50	1.17*	2.27
2,629–10,233	2,630	820	41.27	41.00	42.52	-0.27	-0.66	-0.27	-0.66	40.89	40.62	-0.27	-0.67
10,234–26,884	230	60	5.77	5.46	7.21	-0.31	-5.71	-0.31	-5.71	5.74	5.43	-0.31	-5.77
26,885 or more	160	70	3.13	2.40	6.48	-0.72	-30.19	-0.72	-30.19	3.04	2.46	-0.58	-23.70
Sampled FTB Status													
FTB	2,300	730	16.05	16.26	15.11	0.20	1.25	0.20	1.25	16.57	16.73	0.15	0.90
Not FTB	3,640	850	83.95	83.74	84.89	-0.20	-0.24	-0.20	-0.24	83.43	83.27	-0.15	-0.18
Age as of Dec 31, 2011													
15–23	3,850	930	64.49	66.33	56.01	1.84*	2.77	1.84*	2.77	64.27	65.77	1.50*	2.28
24–29	810	250	13.31	12.97	14.86	-0.34	-2.58	-0.34	-2.58	13.26	12.92	-0.34	-2.63
30 or more	1,280	400	22.20	20.70	29.14	-1.50*	-7.25	-1.50*	-7.25	22.47	21.31	-1.16*	-5.45
Institution aid status													
Received	3,120	460	53.27	56.60	37.88	3.33*	5.88	3.33*	5.88	53.40	55.49	2.09*	3.77
Did not receive	2,150	420	38.70	38.45	39.87	-0.25	-0.66	-0.25	-0.66	38.53	38.64	0.11	0.28
Unknown	670	700	8.03	4.95	22.25	-3.08*	-62.11	-3.08*	-62.11	8.07	5.87	-2.20*	-37.50
State aid status													
Received	1,080	190	20.49	21.88	14.08	1.39*	6.34	1.39*	6.34	20.50	21.29	0.79*	3.72
Did not receive	4,220	990	74.39	73.50	78.54	-0.90*	-1.22	-0.90*	-1.22	74.37	73.20	-1.17*	-1.59
Unknown	640	400	5.12	4.63	7.38	-0.49	-10.59	-0.49	-10.59	5.13	5.50	0.37	6.79

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	230	80	1.70	1.71	1.68	0.01	0.32	0.01	0.32	1.72	1.78	0.07	3.88	
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Education	500	90	12.88	13.47	10.12	0.59*	4.39	0.59*	4.39	13.06	13.60	0.54*	3.99	
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering Technologies/Technicians	50	30	0.52	0.40	1.09	-0.12	-30.65	-0.12	-30.65	0.46	0.33	-0.13	-38.95	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Liberal Arts and Sciences, General Studies and Humanities	330	100	5.40	4.85	7.98	-0.55	-11.40	-0.55	-11.40	5.42	4.93	-0.49	-10.00	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	200	30	4.37	4.51	3.71	0.14	3.16	0.14	3.16	4.21	4.35	0.14	3.24	
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	170	50	3.91	3.73	4.73	-0.18	-4.72	-0.18	-4.72	4.06	3.91	-0.15	-3.82	
Physical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	210	40	5.63	5.59	5.79	-0.04	-0.64	-0.04	-0.64	5.56	5.48	-0.09	-1.62	
Security and Protective Services	120	60	2.92	2.64	4.24	-0.28	-10.77	-0.28	-10.77	2.95	2.61	-0.34	-13.01	
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Construction Trades	†	†	†	†	†	†	†	†	†	†	†	†	†	
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	40	50	0.60	0.39	1.60	-0.21	-55.26	-0.21	-55.26	0.64	0.41	-0.23	-56.03	
Precision Production	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Transportation and Materials	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	370	110	7.67	7.58	8.12	-0.10	-1.27	-0.10	-1.27	7.97	7.71	-0.26	-3.39	
Health Professions and Related Clinical Sciences	640	190	11.98	12.33	10.34	0.35	2.85	0.35	2.85	11.47	11.84	0.38	3.17	
Business, Management, Marketing, and Related Support Services	570	170	17.64	16.93	20.91	-0.70*	-4.15	-0.70*	-4.15	17.72	17.09	-0.62*	-3.65	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	240	220	1.16	0.93	2.27	-0.24	-25.46	-0.24	-25.46	1.20	0.94	-0.26	-27.58
Associate's Degree	380	160	8.07	7.08	12.73	-0.99*	-14.03	-0.99*	-14.03	8.17	7.27	-0.89*	-12.31
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	3,880	820	85.93	87.49	78.65	1.55*	1.78	1.55*	1.78	86.02	87.55	1.53*	1.75
Not in a postsecondary award, certificate, diploma, or degree program	190	70	3.71	3.32	5.51	-0.38	-11.59	-0.38	-11.59	3.51	3.11	-0.40	-13.00
Class level of undergraduates													
First year	2,260	780	26.97	25.50	34.09	-1.47*	-5.76	-1.47*	-5.76	27.47	25.89	-1.58*	-6.10
Second year	810	150	22.33	22.52	21.37	0.20	0.88	0.20	0.88	22.34	22.63	0.29	1.28
Third year	590	100	21.38	21.87	18.99	0.49*	2.26	0.49*	2.26	21.06	21.42	0.35	1.65
Fourth year	730	140	26.54	27.30	22.89	0.75*	2.76	0.75*	2.76	26.36	27.25	0.89*	3.26
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	590	130	10.61	10.68	10.27	0.07	0.68	0.07	0.68	10.71	11.11	0.40	3.58
65–80	410	90	8.56	8.41	9.26	-0.15	-1.75	-0.15	-1.75	8.63	8.36	-0.27	-3.22
81–92	1,160	480	18.01	17.01	22.77	-1.00*	-5.89	-1.00*	-5.89	18.35	17.45	-0.91*	-5.19
93 or more	3,640	840	62.81	63.89	57.71	1.08*	1.68	1.08*	1.68	62.31	63.08	0.78	1.23
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	590	390	6.37	5.74	9.37	-0.63*	-10.98	-0.63*	-10.98	6.50	6.40	-0.09	-1.42
25–42	1,000	280	18.66	17.56	23.92	-1.10*	-6.29	-1.10*	-6.29	18.53	17.19	-1.34*	-7.78
43–60	2,010	450	37.84	38.03	36.98	0.18	0.48	0.18	0.48	37.75	37.58	-0.17	-0.44
61 or more	2,220	420	37.13	38.68	29.73	1.55*	4.01	1.55*	4.01	37.23	38.82	1.59*	4.11
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	2,240	400	39.53	41.32	31.02	1.79*	4.34	1.79*	4.34	39.58	41.54	1.96*	4.71
64–79	2,010	470	35.51	35.78	34.27	0.26	0.73	0.26	0.73	35.19	35.10	-0.09	-0.24
80–98	1,340	480	24.04	22.10	33.22	-1.93*	-8.74	-1.93*	-8.74	24.29	22.57	-1.72*	-7.61
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-51. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	260	120	5.79	4.52	11.83	-1.27*	-28.12	-1.27*	-28.12	5.73	4.53	-1.20*	-26.55
\$3,122–\$5,426	1,090	320	19.68	18.96	23.10	-0.72	-3.79	-0.72	-3.79	19.61	18.99	-0.62	-3.25
\$5,427–\$8,864	2,300	460	40.87	41.66	37.13	0.79*	1.89	0.79*	1.89	40.78	41.25	0.47	1.13
\$8,865 or more	2,020	470	33.66	34.86	27.94	1.20*	3.45	1.20*	3.45	33.88	35.23	1.35*	3.84

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	1,290	330	12.22	11.68	14.48	-0.54	-4.64	-0.54	-4.64	12.25	12.14	-0.10	-0.85	
Mideast	3,230	800	32.37	31.70	35.17	-0.67	-2.12	-0.67	-2.12	32.66	32.44	-0.22	-0.68	
Great Lakes	1,270	320	14.01	13.63	15.56	-0.37	-2.73	-0.37	-2.73	13.96	13.38	-0.58	-4.33	
Plains	640	110	7.65	8.03	6.06	0.38	4.75	0.38	4.75	7.46	7.60	0.14	1.81	
Southeast	1,310	220	16.11	16.62	14.00	0.51	3.04	0.51	3.04	16.13	16.11	-0.03	-0.17	
Southwest	320	60	3.84	3.87	3.73	0.03	0.72	0.03	0.72	3.80	3.82	0.02	0.57	
Rocky Mountains	190	40	3.20	3.37	2.48	0.17	5.12	0.17	5.12	3.32	3.51	0.19	5.31	
Far West	630	110	10.60	11.10	8.53	0.50	4.48	0.50	4.48	10.43	11.01	0.59	5.33	
Student type														
Undergraduate student	4,010	1,080	56.55	54.93	63.31	-1.62*	-2.95	-1.62*	-2.95	55.50	54.88	-0.62	-1.13	
Graduate student	4,020	750	35.31	36.43	30.66	1.12*	3.06	1.12*	3.06	36.00	36.31	0.30	0.84	
First-professional	830	140	8.14	8.64	6.04	0.50*	5.83	0.50*	5.83	8.50	8.81	0.32*	3.61	
CPS record available														
Yes	5,300	910	62.39	65.99	47.38	3.59*	5.45	3.59*	5.45	61.85	63.80	1.95*	3.06	
No	3,570	1,060	37.61	34.01	52.62	-3.59*	-10.57	-3.59*	-10.57	38.15	36.20	-1.95*	-5.40	
Federal aid status														
Received	4,670	700	56.50	60.19	41.12	3.69*	6.12	3.69*	6.12	56.06	57.49	1.44*	2.50	
Did not receive	3,470	810	32.08	31.28	35.45	-0.81	-2.58	-0.81	-2.58	32.71	32.25	-0.47	-1.45	
Unknown	730	470	11.41	8.53	23.43	-2.88*	-33.74	-2.88*	-33.74	11.23	10.26	-0.97	-9.42	
Pell Grant status														
Received	1,250	250	16.70	17.09	15.08	0.39	2.27	0.39	2.27	16.48	16.65	0.17	1.02	
Did not receive	7,610	1,720	83.30	82.91	84.92	-0.39	-0.47	-0.39	-0.47	83.52	83.35	-0.17	-0.20	
Total Pell Grant amount received⁷														
\$0 or unknown	7,610	1,720	83.30	82.91	84.92	-0.39	-0.47	-0.39	-0.47	83.52	83.35	-0.17	-0.20	
\$1–\$2,774	330	90	4.73	4.78	4.50	0.05	1.14	0.05	1.14	4.62	4.66	0.05	0.98	
\$2,775–\$5,549	470	100	6.79	6.61	7.55	-0.18	-2.77	-0.18	-2.77	6.65	6.38	-0.26	-4.13	
\$5,550 or more	450	60	5.18	5.70	3.02	0.52*	9.08	0.52*	9.08	5.21	5.60	0.39*	6.92	

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment									After nonresponse weight adjustment			
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	4,520	710	55.14	58.74	40.11	3.60*	6.13	3.60*	6.13	54.71	56.82	2.11*	3.71
Did not receive	4,350	1,260	44.86	41.26	59.89	-3.60*	-8.72	-3.60*	-8.72	45.29	43.18	-2.11*	-4.88
Total Stafford Loan amount received ⁶													
\$0 or unknown	4,350	1,260	44.86	41.26	59.89	-3.60*	-8.72	-3.60*	-8.72	45.29	43.18	-2.11*	-4.88
\$1–\$4,699	460	110	5.78	5.73	6.00	-0.05	-0.90	-0.05	-0.90	5.51	5.30	-0.21	-3.91
\$4,700–\$6,500	1,530	220	13.65	15.01	7.96	1.36*	9.08	1.36*	9.08	13.52	14.59	1.07*	7.34
\$6,501–\$9,500	680	100	11.57	12.33	8.41	0.76*	6.14	0.76*	6.14	11.34	11.78	0.44	3.71
\$9,501 or more	1,860	280	24.14	25.67	17.75	1.53*	5.96	1.53*	5.96	24.35	25.15	0.81*	3.21
Institution total enrollment ⁷													
0–2,628	630	110	8.49	9.03	6.24	0.54*	5.96	0.54*	5.96	8.65	8.97	0.32	3.52
2,629–10,233	4,050	930	44.57	44.60	44.45	0.03	0.06	0.03	0.06	44.17	43.86	-0.31	-0.71
10,234–26,884	2,710	590	29.89	29.37	32.02	-0.51	-1.74	-0.51	-1.74	29.87	29.54	-0.33	-1.12
26,885 or more	1,480	350	17.06	17.00	17.29	-0.06	-0.33	-0.06	-0.33	17.30	17.63	0.33	1.86
Sampled FTB Status													
FTB	2,830	710	10.22	10.57	8.76	0.35*	3.31	0.35*	3.31	10.33	10.83	0.50*	4.60
Not FTB	6,040	1,270	89.78	89.43	91.24	-0.35*	-0.39	-0.35*	-0.39	89.67	89.17	-0.50*	-0.56
Age as of Dec 31, 2011													
15–23	4,190	930	49.09	49.54	47.18	0.46	0.92	0.46	0.92	48.41	48.95	0.54	1.11
24–29	2,360	470	24.67	25.10	22.91	0.42	1.69	0.42	1.69	24.95	25.37	0.42	1.67
30 or more	2,320	580	26.24	25.36	29.91	-0.88*	-3.47	-0.88*	-3.47	26.65	25.68	-0.97*	-3.77
Institution aid status													
Received	4,480	460	40.95	44.35	26.74	3.40*	7.67	3.40*	7.67	40.72	42.65	1.94*	4.55
Did not receive	3,460	440	43.14	46.18	30.42	3.05*	6.59	3.05*	6.59	43.24	46.05	2.81*	6.11
Unknown	930	1,080	15.91	9.46	42.84	-6.45*	-68.15	-6.45*	-68.15	16.05	11.30	-4.75*	-42.07
State aid status													
Received	870	140	9.98	10.59	7.47	0.60*	5.68	0.60*	5.68	9.77	10.00	0.23	2.29
Did not receive	7,280	1,580	81.29	80.94	82.75	-0.35	-0.43	-0.35	-0.43	81.60	79.83	-1.77*	-2.22
Unknown	720	260	8.72	8.47	9.78	-0.25	-2.98	-0.25	-2.98	8.63	10.17	1.54*	15.14

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	180	40	3.19	3.30	2.72	0.11	3.25	0.11	3.25	3.22	3.23	#	0.05
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	260	70	2.34	2.34	2.37	-0.01	-0.23	-0.01	-0.23	2.37	2.61	0.24	9.23
Personal and Culinary Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Education	790	160	10.23	10.44	9.31	0.21	2.02	0.21	2.02	10.04	9.90	-0.14	-1.37
Engineering	630	130	4.89	4.65	5.95	-0.24	-5.24	-0.24	-5.24	4.88	4.58	-0.30	-6.53
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Legal Professions and Studies	340	80	4.30	4.22	4.65	-0.08	-1.91	-0.08	-1.91	4.36	4.20	-0.15	-3.68
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	300	70	4.06	3.79	5.28	-0.28	-7.36	-0.28	-7.36	4.06	3.83	-0.23	-6.01
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	650	100	5.45	5.84	3.72	0.39*	6.76	0.39*	6.76	5.29	5.64	0.34*	6.06	
Mathematics and Statistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Theology and Religious Vocations	200	30	1.79	1.92	1.22	0.13	6.78	0.13	6.78	1.81	1.87	0.07	3.56	
Physical Sciences	260	50	1.61	1.63	1.54	0.02	1.03	0.02	1.03	1.64	1.66	0.02	0.93	
Science														
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†	
Psychology	400	80	4.91	4.85	5.15	-0.06	-1.15	-0.06	-1.15	4.93	4.83	-0.10	-2.05	
Security and Protective Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Public Administration and Social Service Professions	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Social Sciences	330	70	5.17	5.29	4.64	0.12	2.30	0.12	2.30	5.15	5.28	0.13	2.47	
Construction Trades	†	†	†	†	†	†	†	†	†	†	†	†	†	
Mechanic and Repair														
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†	
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†	
Transportation and Materials														
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	260	70	4.11	3.99	4.66	-0.12	-3.11	-0.12	-3.11	4.13	4.02	-0.11	-2.66	
Health Professions and Related Clinical Sciences	1,160	210	16.78	17.32	14.43	0.54*	3.12	0.54*	3.12	16.81	17.27	0.46	2.66	
Business, Management, Marketing, and Related Support Services	810	260	17.71	16.63	22.43	-1.08*	-6.49	-1.08*	-6.49	17.81	17.23	-0.59	-3.40	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Associate's Degree	160	80	2.58	2.55	2.72	-0.04	-1.44	-0.04	-1.44	2.60	2.66	0.06	2.12
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	3,470	790	87.01	88.28	82.11	1.28	1.45	1.28	1.45	87.18	88.42	1.24	1.40
Not in a postsecondary award, certificate, diploma, or degree program	180	90	6.75	5.36	12.11	-1.40*	-26.07	-1.40*	-26.07	6.58	5.23	-1.35*	-25.87
Class level of undergraduates													
First year	2,400	620	24.35	24.45	23.91	0.11	0.43	0.11	0.43	24.47	24.61	0.14	0.57
Second year	610	100	21.79	22.52	18.81	0.74	3.27	0.74	3.27	21.86	22.43	0.57	2.53
Third year	330	80	22.72	22.49	23.61	-0.22	-0.98	-0.22	-0.98	22.34	21.88	-0.47	-2.13
Fourth year	400	110	28.45	27.87	30.79	-0.58	-2.07	-0.58	-2.07	28.57	28.27	-0.31	-1.08
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	2,240	450	23.29	23.80	21.14	0.52	2.18	0.52	2.18	23.78	24.44	0.66	2.71
65–80	1,320	290	14.97	15.37	13.33	0.40	2.59	0.40	2.59	15.21	15.72	0.51	3.24
81–92	1,300	350	15.69	15.56	16.24	-0.13	-0.85	-0.13	-0.85	15.61	15.44	-0.17	-1.08
93 or more	3,470	790	46.05	45.27	49.29	-0.78	-1.73	-0.78	-1.73	45.40	44.40	-1.01	-2.27
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	580	210	7.82	7.66	8.52	-0.17	-2.19	-0.17	-2.19	7.87	7.68	-0.19	-2.51
43–60	2,120	530	28.20	27.26	32.09	-0.94*	-3.44	-0.94*	-3.44	27.86	26.71	-1.15*	-4.31
61 or more	5,530	1,110	62.04	62.97	58.18	0.93	1.48	0.93	1.48	62.21	63.41	1.20*	1.90
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	4,820	1,010	47.21	47.44	46.27	0.23	0.48	0.23	0.48	47.87	48.20	0.33	0.69
64–79	2,180	430	27.88	27.92	27.73	0.04	0.13	0.04	0.13	27.28	27.06	-0.22	-0.80
80–98	1,740	440	24.90	24.64	26.01	-0.26	-1.07	-0.26	-1.07	24.84	24.73	-0.11	-0.46
99 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-52. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
\$3,122–\$5,426	750	170	9.91	10.10	9.08	0.20	1.95	0.20	1.95	9.75	10.34	0.59	5.72
\$5,427–\$8,864	1,980	450	24.31	23.49	27.75	-0.82	-3.49	-0.82	-3.49	23.86	22.55	-1.31*	-5.81
\$8,865 or more	5,900	1,230	63.41	63.94	61.16	0.53	0.84	0.53	0.84	63.96	64.65	0.69	1.07

‡ Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	210	180	10.85	9.27	12.85	-1.58	-17.10	-1.58	-17.10	11.00	8.06	-2.95	-36.58
Mideast	430	340	11.01	11.31	10.63	0.30	2.68	0.30	2.68	11.05	9.38	-1.67	-17.78
Great Lakes	410	280	5.48	6.32	4.42	0.84	13.29	0.84	13.29	5.43	5.14	-0.29	-5.58
Plains	220	160	5.10	5.44	4.67	0.34	6.25	0.34	6.25	5.11	4.64	-0.46	-10.01
Southeast	440	450	15.57	13.94	17.62	-1.63	-11.70	-1.63	-11.70	15.69	11.72	-3.97*	-33.91
Southwest	430	330	35.32	37.65	32.40	2.32	6.17	2.32	6.17	34.71	47.48	12.77*	26.90
Rocky Mountains	210	120	5.26	5.51	4.94	0.25	4.55	0.25	4.55	5.38	4.67	-0.71	-15.25
Far West	280	270	11.41	10.56	12.47	-0.84	-7.97	-0.84	-7.97	11.64	8.92	-2.72	-30.49
CPS record available													
Yes	2,390	1,880	84.85	88.01	80.88	3.15*	3.58	3.15*	3.58	84.72	86.28	1.56	1.81
No	240	250	15.15	11.99	19.12	-3.15*	-26.29	-3.15*	-26.29	15.28	13.72	-1.56	-11.35
Federal aid status													
Received	2,290	1,760	59.96	60.59	59.18	0.62	1.03	0.62	1.03	60.66	49.81	10.85*	-21.78
Did not receive	140	140	4.83	4.87	4.78	0.04	0.85	0.04	0.85	5.02	5.19	0.17	3.37
Unknown	190	230	35.21	34.54	36.04	-0.67	-1.93	-0.67	-1.93	34.33	45.00	10.67*	23.72
Pell Grant status													
Received	2,110	1,680	71.84	73.81	69.37	1.97	2.67	1.97	2.67	72.13	69.49	-2.64*	-3.80
Did not receive	510	440	28.16	26.19	30.63	-1.97	-7.52	-1.97	-7.52	27.87	30.51	2.64*	8.66
Total Pell Grant amount received⁷													
\$0 or unknown	510	440	28.16	26.19	30.63	-1.97	-7.52	-1.97	-7.52	27.87	30.51	2.64*	8.66
\$1–\$2,774	490	490	16.49	15.53	17.70	-0.96	-6.19	-0.96	-6.19	16.82	14.36	-2.46*	-17.13
\$2,775–\$5,549	840	710	32.83	33.00	32.61	0.17	0.52	0.17	0.52	32.28	30.40	-1.88	-6.19
\$5,550 or more	780	480	22.52	25.28	19.05	2.76*	10.90	2.76*	10.90	23.03	24.73	1.70*	6.88
Stafford Loan status													
Received	2,280	1,680	75.45	79.73	70.07	4.28*	5.37	4.28*	5.37	75.83	73.85	-1.99	-2.69
Did not receive	340	450	24.55	20.27	29.93	-4.28*	-21.11	-4.28*	-21.11	24.17	26.15	1.99	7.60

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	340	450	24.55	20.27	29.93	-4.28*	-21.11	-4.28*	-21.11	24.17	26.15	1.99	7.60
\$1–\$4,699	480	550	19.25	17.52	21.44	-1.74	-9.93	-1.74	-9.93	19.42	15.12	-4.30*	-28.45
\$4,700–\$6,500	560	430	19.52	18.29	21.07	-1.23	-6.72	-1.23	-6.72	19.68	17.35	-2.32*	-13.40
\$6,501–\$9,500	1,140	640	31.47	38.13	23.08	6.66*	17.47	6.66*	17.47	31.42	35.37	3.94*	11.15
\$9,501 or more	100	70	5.21	5.79	4.47	0.58	10.08	0.58	10.08	5.31	6.00	0.69*	11.58
Institution total enrollment ⁷													
0–2,628	2,570	2,070	98.05	98.31	97.72	0.26	0.26	0.26	0.26	97.96	98.56	0.60	0.61
2,629–10,233	50	60	1.95	1.69	2.28	-0.26	-15.35	-0.26	-15.35	2.04	1.44	-0.60	-41.95
10,234–26,884	†	†	†	†	†	†	†	†	†	†	†	†	†
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	1,550	1,270	21.05	20.89	21.25	-0.16	-0.77	-0.16	-0.77	21.50	20.16	-1.34*	-6.65
Not FTB	1,070	850	78.95	79.11	78.75	0.16	0.20	0.16	0.20	78.50	79.84	1.34*	1.68
Age as of Dec 31, 2011													
15–23	1,450	1,180	46.68	44.73	49.13	-1.95	-4.36	-1.95	-4.36	46.10	41.89	-4.21	-10.06
24–29	530	450	25.29	26.09	24.29	0.80	3.06	0.80	3.06	25.46	25.96	0.50	1.93
30 or more	650	500	28.03	29.18	26.58	1.15	3.94	1.15	3.94	28.44	32.15	3.71*	11.55
Institution aid status													
Received	60	60	1.82	1.64	2.04	-0.17	-10.64	-0.17	-10.64	1.86	1.36	-0.50	-36.85
Did not receive	2,380	1,960	66.41	63.90	69.58	-2.51	-3.93	-2.51*	-3.93	67.13	53.71	13.42*	-24.98
Unknown	180	110	31.77	34.46	28.39	2.69*	7.80	2.69*	7.80	31.01	44.93	13.92*	30.98
State aid status													
Received	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Did not receive	2,360	1,990	66.66	63.34	70.84	-3.32*	-5.24	-3.32*	-5.24	67.38	53.21	14.16*	-26.62
Unknown	180	110	31.77	34.46	28.39	2.69*	7.80	2.69*	7.80	31.01	44.93	13.92*	30.98

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Major (2-digit CIP)													
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Personal and Culinary Services	880	750	37.17	36.18	38.42	-0.99	-2.73	-0.99	-2.73	37.60	30.21	-7.39*	-24.46
Education	†	†	†	†	†	†	†	†	†	†	†	†	†
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†	†	†	†	†	†	†	†	†
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†
Security and Protective Services	†	†	†	†	†	†	†	†	†	†	†	†	†
Public Administration and Social Service Professions	†	†	†	†	†	†	†	†	†	†	†	†	†
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	140	110	2.18	2.23	2.13	0.04	1.99	0.04	1.99	2.26	1.92	-0.35	-17.98
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†
Transportation and Materials Moving	†	†	†	†	†	†	†	†	†	†	†	†	†
Visual and Performing Arts	†	†	†	†	†	†	†	†	†	†	†	†	†
Health Professions and Related Clinical Sciences	1,370	1,060	58.34	59.50	56.88	1.16	1.95	1.16	1.95	57.78	66.16	8.38*	12.67
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	2,540	2,060	88.82	85.10	93.50	-3.72	-4.37	-3.72	-4.37	88.84	79.45	-9.39*	-11.82
Associate's Degree	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	40	40	2.35	2.24	2.49	-0.11	-4.98	-0.11	-4.98	2.40	1.91	-0.49	-25.62
Bachelor's Degree or equivalent	†	†	†	†	†	†	†	†	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Class level of undergraduates													
First year	2,470	2,030	93.53	91.86	95.63	-1.67*	-1.82	-1.67*	-1.82	93.38	92.19	-1.19*	-1.29
Second year	130	70	6.14	7.75	4.12	1.61*	20.79	1.61	20.79	6.27	7.43	1.16*	15.55
Third year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	250	170	5.22	5.63	4.71	0.42	7.39	0.42	7.39	5.31	4.72	-0.59	-12.48
65–80	1,110	860	60.24	61.67	58.49	1.43	2.32	1.43	2.32	59.77	68.12	8.34*	12.25
81–92	1,040	940	28.34	26.57	30.50	-1.76	-6.64	-1.76	-6.64	28.72	22.18	-6.54*	-29.50
93 or more	140	120	6.20	6.12	6.30	-0.08	-1.32	-0.08	-1.32	6.20	4.99	-1.21	-24.28
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	†	†	†	†	†	†	†	†	†	†	†	†	†
25–42	†	†	†	†	†	†	†	†	†	†	†	†	†
43–60	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	100	150	5.60	4.03	7.51	-1.58	-39.12	-1.58	-39.12	5.70	3.33	-2.37	-71.25
64–79	440	310	44.82	48.77	40.02	3.95	8.11	3.95*	8.11	43.97	57.88	13.91*	24.03
80–98	700	570	31.42	29.16	34.16	-2.26	-7.76	-2.26	-7.76	31.90	24.10	-7.80*	-32.36
99 or more	1,060	890	18.16	18.05	18.30	-0.12	-0.64	-0.12	-0.64	18.44	14.70	-3.74*	-25.44

See notes at end of table.

Table J-53. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	800	700	33.36	30.04	37.39	-3.32	-11.06	-3.32*	-11.06	34.09	24.81	-9.28*	-37.43
\$3,122–\$5,426	1,020	760	61.98	65.52	57.69	3.54	5.41	3.54	5.41	61.29	71.72	10.43*	14.54
\$5,427–\$8,864	430	410	4.20	4.03	4.41	-0.17	-4.34	-0.17	-4.34	4.17	3.14	-1.03	-32.63
\$8,865 or more	50	50	0.45	0.41	0.51	-0.05	-11.12	-0.05	-11.12	0.45	0.33	-0.12	-34.86

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Institution region⁶													
New England	130	80	2.36	2.80	1.78	0.44	15.74	0.44	15.74	2.38	2.58	0.20	7.84
Mideast	940	790	19.53	17.89	21.69	-1.64	-9.17	-1.64	-9.17	19.66	18.68	-0.98	-5.26
Great Lakes	530	440	14.17	13.78	14.69	-0.39	-2.85	-0.39	-2.85	14.24	13.00	-1.24	-9.55
Plains	90	60	1.89	2.01	1.74	0.11	5.68	0.11	5.68	1.90	1.92	0.01	0.72
Southeast	700	590	24.42	25.14	23.46	0.72	2.88	0.72	2.88	23.89	25.18	1.28	5.09
Southwest	600	450	11.21	10.68	11.90	-0.53	-4.95	-0.53	-4.95	11.44	10.44	-1.00	-9.60
Rocky Mountains	300	280	4.87	4.48	5.38	-0.39	-8.70	-0.39	-8.70	4.81	5.64	0.83	14.77
Far West	1,570	1,020	21.55	23.23	19.35	1.67*	7.20	1.67*	7.20	21.66	22.56	0.90	3.97
CPS record available													
Yes	4,540	3,290	88.14	90.60	84.90	2.45*	2.71	2.45*	2.71	88.28	87.67	-0.61	-0.70
No	320	410	11.86	9.40	15.10	-2.45*	-26.09	-2.45*	-26.09	11.72	12.33	0.61	4.96
Federal aid status													
Received	3,920	2,770	77.33	80.72	72.86	3.39*	4.20	3.39*	4.20	77.46	72.65	-4.81*	-6.62
Did not receive	230	190	6.04	6.10	5.95	0.07	1.11	0.07	1.11	6.15	7.23	1.08	14.98
Unknown	710	740	16.63	13.18	21.19	-3.45*	-26.22	-3.45*	-26.22	16.40	20.12	3.72	18.51
Pell Grant status													
Received	3,770	2,800	72.41	73.93	70.40	1.52	2.05	1.52	2.05	72.31	70.95	-1.37	-1.93
Did not receive	1,080	890	27.59	26.07	29.60	-1.52	-5.83	-1.52	-5.83	27.69	29.05	1.37	4.70
Total Pell Grant amount received⁷													
\$0 or unknown	1,080	890	27.59	26.07	29.60	-1.52	-5.83	-1.52	-5.83	27.69	29.05	1.37	4.70
\$1–\$2,774	850	930	21.40	18.38	25.38	-3.02*	-16.43	-3.02*	-16.43	21.66	18.10	-3.56*	-19.67
\$2,775–\$5,549	1,470	1,060	26.69	27.62	25.44	0.94	3.40	0.94	3.40	26.17	25.82	-0.35	-1.36
\$5,550 or more	1,450	810	24.33	27.93	19.58	3.60*	12.88	3.60*	12.88	24.49	27.03	2.54*	9.41
Stafford Loan status													
Received	4,200	2,880	80.35	84.05	75.48	3.69*	4.40	3.69*	4.40	80.36	81.31	0.95	1.17
Did not receive	660	820	19.65	15.95	24.52	-3.69*	-23.17	-3.69*	-23.17	19.64	18.69	-0.95	-5.11

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Total Stafford Loan amount received ³													
\$0 or unknown	660	820	19.65	15.95	24.52	-3.69*	-23.17	-3.69*	-23.17	19.64	18.69	-0.95	-5.11
\$1–\$4,699	810	820	22.48	20.73	24.79	-1.75*	-8.44	-1.75*	-8.44	22.62	20.22	-2.40*	-11.87
\$4,700–\$6,500	940	750	16.85	16.34	17.51	-0.50	-3.08	-0.50	-3.08	16.73	15.87	-0.86	-5.43
\$6,501–\$9,500	1,990	1,080	29.76	33.46	24.86	3.71*	11.08	3.71*	11.08	29.59	31.57	1.98*	6.27
\$9,501 or more	460	230	11.27	13.51	8.31	2.24*	16.59	2.24*	16.59	11.42	13.65	2.24*	16.38
Institution total enrollment ⁷													
0–2,628	3,620	2,700	76.27	76.08	76.52	-0.19	-0.25	-0.19	-0.25	75.71	76.92	1.21	1.57
2,629–10,233	1,170	950	22.67	22.98	22.26	0.31	1.34	0.31	1.34	23.20	22.21	-0.98	-4.43
10,234–26,884	60	50	1.06	0.94	1.22	-0.12	-12.83	-0.12	-12.83	1.09	0.87	-0.23	-26.13
26,885 or more	†	†	†	†	†	†	†	†	†	†	†	†	†
Sampled FTB Status													
FTB	3,420	2,600	20.86	21.72	19.73	0.86	3.95	0.86*	3.95	21.25	21.92	0.67	3.07
Not FTB	1,440	1,100	79.14	78.28	80.27	-0.86	-1.10	-0.86*	-1.10	78.75	78.08	-0.67	-0.86
Age as of Dec 31, 2011													
15–23	2,900	2,210	47.14	46.43	48.09	-0.71	-1.54	-0.71	-1.54	46.92	46.31	-0.62	-1.34
24–29	860	740	23.66	22.97	24.58	-0.69	-3.02	-0.69	-3.02	23.59	23.79	0.20	0.85
30 or more	1,100	750	29.19	30.60	27.34	1.41	4.60	1.41	4.60	29.49	29.91	0.42	1.39
Institution aid status													
Received	240	150	5.62	6.18	4.88	0.56	9.08	0.56	9.08	5.71	5.61	-0.10	-1.84
Did not receive	3,920	3,030	81.97	80.86	83.45	-1.11	-1.38	-1.11	-1.38	81.93	74.58	-7.35*	-9.85
Unknown	700	520	12.41	12.96	11.68	0.55	4.27	0.55	4.27	12.36	19.81	7.45*	37.60
State aid status													
Received	210	100	5.36	6.75	3.52	1.39*	20.60	1.39*	20.60	5.50	6.23	0.73	11.76
Did not receive	3,950	3,080	82.24	80.29	84.80	-1.94*	-2.42	-1.94*	-2.42	82.14	73.96	-8.18*	-11.06
Unknown	700	520	12.41	12.96	11.68	0.55	4.27	0.55	4.27	12.36	19.81	7.45*	37.60

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	†	†	†	†	†	†	†	†	†	†	†	†	†	
Architecture and Related Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communications Technologies/Technicians and Support Services	†	†	†	†	†	†	†	†	†	†	†	†	†	
Computer and Information Sciences and Support Services	140	80	2.73	3.11	2.24	0.38*	12.24	0.38*	12.24	2.73	3.52	0.78	22.25	
Personal and Culinary Services	460	410	12.41	12.24	12.63	-0.17	-1.39	-0.17	-1.39	11.53	11.90	0.37	3.10	
Education	30	60	1.83	0.82	3.13	-1.01	-122.06	-1.01	-122.06	1.74	0.91	-0.83	-91.19	
Engineering	†	†	†	†	†	†	†	†	†	†	†	†	†	
Engineering Technologies/Technicians	130	130	1.92	1.98	1.84	0.06	3.01	0.06	3.01	1.91	2.26	0.35	15.56	
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Family and Consumer Sciences/Human Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Legal Professions and Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
English Language and Literature/Letters	†	†	†	†	†	†	†	†	†	†	†	†	†	
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†	†	†	†	†	†	†	†	†	
Library Science	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Military Technologies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Multi/Interdisciplinary Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†	
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Science	†	†	†	†	†	†	†	†	†	†	†	†	†	
Technologies/Technicians	†	†	†	†	†	†	†	†	†	†	†	†	†	
Psychology	†	†	†	†	†	†	†	†	†	†	†	†	†	
Security and Protective Services	120	90	3.24	3.29	3.19	0.04	1.32	0.04	1.32	3.12	3.33	0.21	6.29	
Public Administration and Social Service Professions	†	†	†	†	†	†	†	†	†	†	†	†	†	
Social Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Construction Trades	90	70	1.55	1.41	1.73	-0.14*	-9.78	-0.14*	-9.78	1.56	1.29	-0.28*	-21.42	
Mechanic and Repair	†	†	†	†	†	†	†	†	†	†	†	†	†	
Technologies/Technicians	680	490	16.88	17.17	16.52	0.28	1.66	0.28	1.66	17.49	16.88	-0.61	-3.61	
Precision Production	90	90	1.98	1.68	2.37	-0.30	-18.00	-0.30	-18.00	2.06	1.64	-0.42	-25.85	
Transportation and Materials	†	†	†	†	†	†	†	†	†	†	†	†	†	
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	100	60	3.18	3.66	2.57	0.48*	13.09	0.48*	13.09	3.26	3.71	0.45	12.14	
Health Professions and Related Clinical Sciences	2,600	1,920	49.05	48.82	49.34	-0.23	-0.47	-0.23	-0.47	49.18	48.65	-0.53	-1.09	
Business, Management, Marketing, and Related Support Services	170	110	4.48	4.78	4.08	0.31	6.44	0.31	6.44	4.63	4.79	0.15	3.16	
History (new)	†	†	†	†	†	†	†	†	†	†	†	†	†	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Degree Program (undergraduates only)													
Postsecondary award, certificate or diploma of less than 2 academic years	3,540	2,920	60.91	56.10	67.23	-4.80*	-8.56	-4.80*	-8.56	61.21	54.69	-6.52*	-11.92
Associate's Degree	1,060	610	34.31	39.07	28.05	4.76*	12.17	4.76*	12.17	34.04	39.52	5.48*	13.87
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	220	160	4.69	4.71	4.67	0.01	0.31	0.01	0.31	4.66	5.65	1.00	17.64
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Not in a postsecondary award, certificate, diploma, or degree program	†	†	†	†	†	†	†	†	†	†	†	†	†
Class level of undergraduates													
First year	3,710	2,960	78.87	77.46	80.71	-1.40	-1.81	-1.40	-1.81	78.67	76.92	-1.74	-2.27
Second year	470	250	17.73	19.26	15.71	1.54	7.98	1.54	7.98	17.89	19.53	1.64	8.41
Third year	90	70	3.17	3.12	3.22	-0.04	-1.34	-0.04	-1.34	3.20	3.32	0.12	3.52
Fourth year	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	1,120	790	17.91	18.93	16.57	1.02	5.36	1.02	5.36	18.22	22.11	3.88*	17.56
65–80	1,650	1,330	35.31	33.04	38.31	-2.27*	-6.88	-2.27*	-6.88	34.70	33.41	-1.29	-3.88
81–92	1,500	1,120	29.25	30.81	27.20	1.56	5.05	1.56	5.05	29.42	28.67	-0.75	-2.61
93 or more	590	470	17.53	17.23	17.92	-0.30	-1.74	-0.30	-1.74	17.65	15.81	-1.84*	-11.63
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
25–42	430	350	8.76	8.70	8.85	-0.06	-0.74	-0.06	-0.74	8.50	8.90	0.40	4.46
43–60	1,480	1,060	33.78	35.89	30.98	2.11*	5.88	2.11*	5.88	33.39	34.33	0.94	2.73
61 or more	2,850	2,230	56.25	53.80	59.51	-2.45*	-4.56	-2.45*	-4.56	56.89	54.59	-2.29	-4.20
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	580	390	18.29	18.91	17.49	0.62	3.27	0.62	3.27	18.36	18.33	-0.03	-0.15
64–79	840	600	18.96	19.53	18.23	0.57	2.91	0.57	2.91	19.35	21.10	1.75	8.29
80–98	870	620	16.98	17.34	16.51	0.36	2.08	0.36	2.08	17.22	16.97	-0.26	-1.51
99 or more	2,260	1,910	45.77	44.23	47.78	-1.55	-3.50	-1.55	-3.50	45.07	43.60	-1.47	-3.36

See notes at end of table.

Table J-54. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	2,330	1,870	54.28	52.23	56.94	-2.05*	-3.93	-2.05*	-3.93	53.81	51.30	-2.51	-4.90
\$3,122–\$5,426	1,330	940	30.08	31.61	28.10	1.53	4.84	1.53	4.84	30.43	32.39	1.96	6.05
\$5,427–\$8,864	600	490	6.79	6.87	6.68	0.08	1.16	0.08	1.16	6.74	6.93	0.19	2.79
\$8,865 or more	290	230	8.85	9.30	8.28	0.45	4.79	0.45	4.79	9.02	9.38	0.36	3.82

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Institution region⁶														
New England	560	340	1.70	1.69	1.73	-0.01	-0.65	-0.01	-0.65	1.72	1.78	0.06	3.51	
Mideast	1,220	790	4.35	4.28	4.51	-0.08	-1.78	-0.08	-1.78	4.38	4.21	-0.17	-4.08	
Great Lakes	1,540	1,170	8.30	7.27	10.37	-1.03*	-14.14	-1.03*	-14.14	8.18	7.70	-0.48	-6.25	
Plains	1,770	960	24.42	24.75	23.77	0.32	1.31	0.32	1.31	24.43	23.73	-0.70	-2.95	
Southeast	3,940	2,710	17.95	17.59	18.70	-0.37	-2.10	-0.37	-2.10	18.01	18.14	0.13	0.71	
Southwest	3,640	1,960	27.94	29.54	24.71	1.60	5.43	1.60	5.43	28.00	28.92	0.91	3.16	
Rocky Mountains	690	440	4.74	4.58	5.05	-0.16	-3.42	-0.16	-3.42	4.68	4.27	-0.41	-9.59	
Far West	3,140	1,800	10.60	10.31	11.18	-0.29	-2.80	-0.29	-2.80	10.58	11.24	0.66	5.86	
Student type														
Undergraduate student	14,780	9,710	83.92	82.39	87.01	-1.53*	-1.86	-1.53*	-1.86	83.80	83.23	-0.57	-0.69	
Graduate student	1,670	460	15.95	17.45	12.92	1.50*	8.61	1.50*	8.61	16.06	16.61	0.55	3.33	
First-professional	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
CPS record available														
Yes	14,880	8,900	80.70	83.60	74.87	2.89*	3.46	2.89*	3.46	80.37	82.09	1.71*	2.09	
No	1,630	1,280	19.30	16.40	25.13	-2.89*	-17.65	-2.89*	-17.65	19.63	17.91	-1.71*	-9.57	
Federal aid status														
Received	11,360	5,910	74.12	79.36	63.56	5.24*	6.60	5.24*	6.60	73.95	74.87	0.92	1.22	
Did not receive	1,220	740	13.96	12.81	16.27	-1.15	-8.96	-1.15	-8.96	14.27	13.72	-0.55	-4.01	
Unknown	3,930	3,520	11.92	7.83	20.17	-4.09*	-52.29	-4.09*	-52.29	11.77	11.41	-0.36	-3.19	
Pell Grant status														
Received	10,800	6,510	51.78	54.02	47.29	2.23*	4.13	2.23*	4.13	51.20	53.34	2.14*	4.01	
Did not receive	5,710	3,670	48.22	45.98	52.71	-2.23*	-4.85	-2.23*	-4.85	48.80	46.66	-2.14*	-4.59	
Total Pell Grant amount received⁷														
\$0 or unknown	5,710	3,670	48.22	45.98	52.71	-2.23*	-4.85	-2.23*	-4.85	48.80	46.66	-2.14*	-4.59	
\$1–\$2,774	2,970	2,650	16.26	15.07	18.66	-1.19*	-7.89	-1.19*	-7.89	16.20	15.38	-0.82*	-5.34	
\$2,775–\$5,549	4,200	2,430	20.63	21.75	18.37	1.12	5.15	1.12	5.15	19.98	20.86	0.88	4.20	
\$5,550 or more	3,630	1,420	14.89	17.19	10.26	2.30*	13.39	2.30*	13.39	15.02	17.10	2.09*	12.20	

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Stafford Loan status													
Received	13,360	7,180	71.21	75.54	62.48	4.33*	5.74	4.33*	5.74	70.99	74.40	3.41*	4.58
Did not receive	3,150	2,990	28.79	24.46	37.52	-4.33*	-17.72	-4.33*	-17.72	29.01	25.60	-3.41*	-13.32
Total Stafford Loan amount received³													
\$0 or unknown	3,150	2,990	28.79	24.46	37.52	-4.33*	-17.72	-4.33*	-17.72	29.01	25.60	-3.41*	-13.32
\$1–\$4,699	2,510	2,470	15.59	13.69	19.41	-1.90*	-13.86	-1.90*	-13.86	15.54	13.64	-1.90*	-13.89
\$4,700–\$6,500	2,620	1,510	10.63	10.94	10.00	0.31	2.85	0.31	2.85	10.56	10.83	0.28	2.57
\$6,501–\$9,500	5,130	2,190	17.85	19.31	14.90	1.47*	7.59	1.47*	7.59	17.69	18.95	1.26*	6.64
\$9,501 or more	3,100	1,010	27.15	31.60	18.17	4.46*	14.10	4.46*	14.10	27.20	30.97	3.77*	12.17
Institution total enrollment⁷													
0–2,628	7,570	4,910	19.62	19.08	20.69	-0.53	-2.80	-0.53	-2.80	19.63	21.46	1.84*	8.56
2,629–10,233	4,030	2,650	14.97	14.92	15.07	-0.05	-0.34	-0.05	-0.34	14.92	14.41	-0.51	-3.51
10,234–26,884	1,110	760	7.26	6.92	7.96	-0.35	-4.99	-0.35	-4.99	7.27	7.12	-0.15	-2.04
26,885 or more	3,800	1,860	58.15	59.08	56.28	0.93	1.57	0.93	1.57	58.19	57.01	-1.18	-2.08
Sampled FTB Status													
FTB	9,630	6,690	6.76	6.22	7.87	-0.55*	-8.81	-0.55*	-8.81	6.89	6.44	-0.45*	-6.98
Not FTB	6,880	3,490	93.24	93.78	92.13	0.55*	0.58	0.55*	0.58	93.11	93.56	0.45*	0.48
Age as of Dec 31, 2011													
15–23	6,990	4,730	18.23	17.09	20.51	-1.13*	-6.63	-1.13*	-6.63	18.03	17.78	-0.25	-1.42
24–29	3,500	2,450	27.16	26.66	28.18	-0.50	-1.89	-0.50	-1.89	27.23	26.47	-0.76	-2.88
30 or more	6,020	3,000	54.61	56.25	51.31	1.64*	2.91	1.64*	2.91	54.74	55.75	1.01	1.82
Institution aid status													
Received	500	160	3.72	4.61	1.91	0.90	19.47	0.90	19.47	3.75	4.46	0.71	15.93
Did not receive	12,100	6,560	83.59	87.88	74.96	4.29*	4.88	4.29*	4.88	83.55	84.62	1.07	1.27
Unknown	3,910	3,470	12.69	7.51	23.13	-5.18*	-69.06	-5.18*	-69.06	12.70	10.92	-1.78	-16.34
State aid status													
Received	1,020	470	3.16	3.21	3.05	0.05	1.63	0.05	1.63	3.19	3.09	-0.10	-3.33
Did not receive	11,600	6,700	88.55	89.47	86.69	0.92*	1.03	0.92*	1.03	88.60	86.18	-2.42*	-2.81
Unknown	3,880	3,010	8.30	7.32	10.26	-0.97*	-13.29	-0.97*	-13.29	8.20	10.73	2.53*	23.54

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Major (2-digit CIP)														
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Natural Resources and Conservation	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Communications Technologies/Technicians and Support Services	180	120	0.70	0.69	0.71	#	-0.60	#	-0.60	0.72	0.76	0.04	5.39	
Computer and Information Sciences and Support Services	2,660	1,720	9.95	9.03	11.81	-0.91*	-10.13	-0.91*	-10.13	9.93	9.65	-0.28	-2.90	
Personal and Culinary Services	740	510	1.68	1.34	2.37	-0.34*	-25.48	-0.34*	-25.48	1.60	1.25	-0.35*	-27.95	
Education	380	120	7.44	8.65	4.96	1.22*	14.06	1.22*	14.06	7.41	8.16	0.74*	9.12	
Engineering	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Engineering Technologies/Technicians	1,440	1,320	2.75	2.20	3.88	-0.55*	-25.23	-0.55*	-25.23	2.75	3.07	0.32	10.32	
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Family and Consumer Sciences/Human Sciences	30	30	0.42	0.26	0.75	-0.16	-61.05	-0.16	-61.05	0.45	0.27	-0.18	-67.71	
Legal Professions and Studies	260	180	1.36	1.49	1.10	0.13	8.56	0.13	8.56	1.33	1.46	0.14	9.39	
English Language and Literature/Letters	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Library Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Biological and Biomedical Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Mathematics and Statistics	†	†	†	†	†	†	†	†	†	†	†	†	†	
Military Technologies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Multi/Interdisciplinary Studies	280	140	3.25	3.18	3.39	-0.07	-2.24	-0.07	-2.24	3.23	3.06	-0.18	-5.74	
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Philosophy and Religious Studies	†	†	†	†	†	†	†	†	†	†	†	†	†	
Theology and Religious Vocations	†	†	†	†	†	†	†	†	†	†	†	†	†	
Physical Sciences	†	†	†	†	†	†	†	†	†	†	†	†	†	
Science	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Psychology	840	250	4.00	4.23	3.54	0.23	5.33	0.23	5.33	3.99	4.04	0.05	1.19	
Security and Protective Services	1,590	1,040	10.55	9.99	11.68	-0.56*	-5.57	-0.56*	-5.57	10.47	10.56	0.09	0.81	
Public Administration and Social Service Professions	270	120	2.53	2.77	2.05	0.24*	8.56	0.24*	8.56	2.59	2.73	0.13	4.92	
Social Sciences	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Construction Trades	20	30	0.04	0.02	0.09	-0.03	-155.64	-0.03	-155.64	0.04	0.01	-0.03	186.33	
Mechanic and Repair	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Technologies/Technicians	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Precision Production	†	†	†	†	†	†	†	†	†	†	†	†	†	
Transportation and Materials	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Moving	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Visual and Performing Arts	1,420	840	5.34	5.24	5.55	-0.10	-1.98	-0.10	-1.98	5.42	5.23	-0.20	-3.79	
Health Professions and Related Clinical Sciences	2,770	1,460	16.06	17.01	14.13	0.95*	5.57	0.95*	5.57	16.23	16.79	0.56	3.35	
Business, Management, Marketing, and Related Support Services	3,110	1,820	29.69	30.20	28.66	0.51	1.68	0.51	1.68	29.58	29.31	-0.27	-0.93	
History (new)	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	†	†	†	†	†	†	†	†	

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment					
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents		
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²	
Degree Program (undergraduates only)														
Postsecondary award, certificate or diploma of less than 2 academic years	1,420	1,080	2.41	2.42	2.40	0.01	0.23	0.01	0.23	2.36	2.35	-0.01	-0.39	
Associate's Degree	7,910	5,400	40.41	39.51	42.12	-0.90*	-2.27	-0.90*	-2.27	40.30	40.41	0.12	0.28	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	5,440	3,140	56.57	57.91	54.01	1.34	2.32	1.34	2.32	56.82	57.08	0.26	0.46	
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
Class level of undergraduates														
First year	8,190	5,680	48.24	44.97	54.77	-3.27*	-7.28	-3.27*	-7.28	47.30	44.26	-3.04*	-6.87	
Second year	1,390	710	20.85	22.12	18.31	1.27*	5.75	1.27*	5.75	21.06	22.76	1.70*	7.46	
Third year	920	470	17.75	18.50	16.24	0.76	4.09	0.76	4.09	18.20	18.75	0.55*	2.93	
Fourth year	400	140	9.40	10.41	7.39	1.01*	9.67	1.01*	9.67	9.67	10.27	0.60*	5.85	
Fifth year or higher	150	60	3.76	4.00	3.29	0.24	5.93	0.24	5.93	3.76	3.95	0.19	4.85	

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ⁷													
64 or less	2,360	1,140	12.49	12.89	11.67	0.41	3.16	0.41	3.16	12.59	13.33	0.75	5.59
65–80	4,720	3,240	20.64	19.97	21.99	-0.67	-3.36	-0.67	-3.36	20.83	21.70	0.87	4.03
81–92	6,990	4,280	55.40	55.96	54.26	0.56	1.01	0.56	1.01	55.13	54.03	-1.10	-2.04
93 or more	2,420	1,510	11.47	11.17	12.08	-0.30	-2.69	-0.30	-2.69	11.45	10.94	-0.52	-4.72
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ⁷													
24 or less	5,530	3,320	60.59	61.87	57.97	1.29	2.08	1.29	2.08	60.38	60.58	0.20	0.33
25–42	6,230	4,290	32.68	31.49	35.09	-1.19	-3.76	-1.19	-3.76	32.84	32.65	-0.19	-0.58
43–60	1,340	800	4.78	4.59	5.16	-0.19	-4.11	-0.19	-4.11	4.85	4.71	-0.14	-2.98
61 or more	670	430	1.95	2.04	1.78	0.09	4.21	0.09	4.21	1.93	2.06	0.13	6.34
Private institution tuition and fees as percent of core revenues (FASB reporting) ⁷													
63 or less	220	150	0.84	0.78	0.95	-0.06	-7.18	-0.06	-7.18	0.83	0.74	-0.10	-12.91
64–79	2,230	1,200	18.44	17.57	20.19	-0.87	-4.96	-0.87	-4.96	18.21	16.63	-1.58*	-9.51
80–98	5,130	2,450	40.38	43.13	34.85	2.75*	6.37	2.75*	6.37	40.60	42.02	1.42*	3.38
99 or more	8,740	6,290	40.34	38.52	44.00	-1.82*	-4.72	-1.82*	-4.72	40.36	40.61	0.25	0.63

See notes at end of table.

Table J-55. Student nonresponse bias analysis for interview respondents before and after weight adjustment, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	Before nonresponse weight adjustment								After nonresponse weight adjustment				
	Un-weighted interview respondents	Un-weighted interview non-respondents	Mean, base weighted			Respondents vs. full sample		Respondents vs. nonrespondents		Mean		Full sample vs. respondents	
			Full sample	Respondent	Non-respondent	Estimated bias ¹	Relative bias ²	Estimated bias ³	Relative bias ²	Full sample, base weighted	Respondents, non-response adjusted ⁴	Estimated bias ⁵	Relative bias ²
Private institution instructional expenses per FTE enrollment (FASB reporting) ⁷													
\$3,121 or less	8,330	4,980	76.48	76.60	76.24	0.12	0.15	0.12	0.15	76.58	76.49	-0.09	-0.12
\$3,122–\$5,426	5,530	3,360	17.06	17.12	16.94	0.06	0.36	0.06	0.36	16.89	17.25	0.36	2.12
\$5,427–\$8,864	1,880	1,370	5.42	5.19	5.89	-0.23	-4.50	-0.23	-4.50	5.53	5.22	-0.31	-5.86
\$8,865 or more	590	380	1.03	1.09	0.93	0.05	4.86	0.05	4.86	1.00	1.04	0.03	3.17

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using base weight) and the mean of all sample cases (using the base weight).

² Relative bias is defined as the ratio of estimated bias to the weighted mean of the respondent cases.

³ Bias in the sample mean is estimated as the product of the base-weighted nonresponse rate and the difference between the mean of respondent cases (using base weight) and the mean of nonrespondent cases (using the base weight).

⁴ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

⁵ Bias in the sample mean is estimated as the difference between the mean of respondent cases (using the specified weight) and the mean of all sample cases (using the specified weight).

⁶ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

⁷ Enrollment and Stafford Loan categories were defined by quartiles. Categories of institution percent receiving grants, graduation rate, percentages of core revenues, and expenses per enrollment were defined using quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-56. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution type					
Public					
Less-than-2-year	0.19	0.21	0.32	-0.13*	-0.11*
2-year	31.53	32.40	35.05	-3.52*	-2.65*
4-year non-doctorate-granting	10.27	10.21	10.03	0.24	0.18
4-year doctorate-granting	27.10	25.68	25.01	2.09*	0.67*
Private nonprofit					
Less-than-4-year	0.22	0.27	0.26	-0.04*	0.01
4-year non-doctorate-granting	6.94	6.47	6.49	0.45*	-0.02
4-year doctorate-granting	11.74	11.04	11.18	0.56*	-0.14
Private for-profit					
Less-than-2-year	2.03	2.35	1.34	0.69	1.01*
2-year	1.83	2.29	2.13	-0.30*	0.16
4-year	8.14	9.08	8.18	-0.04	0.90
Institution region²					
New England	5.10	5.09	5.04	0.06	0.05
Mideast	14.54	14.45	14.48	0.06	-0.03
Great Lakes	14.79	14.87	14.84	-0.05	0.03
Plains	8.50	8.71	7.82	0.68	0.89
Southeast	22.41	22.56	22.83	-0.42	-0.27
Southwest	13.93	14.22	14.24	-0.31	-0.02
Rocky Mountains	4.05	4.00	4.22	-0.17	-0.22
Far West	16.69	16.12	16.53	0.16	-0.41
Student type					
Undergraduate student	84.83	85.66	85.32	-0.49	0.34
Graduate student	13.38	12.70	13.14	0.24	-0.44
First-professional	1.79	1.64	1.54	0.25*	0.10*
CPS record available					
Yes	66.76	67.33	62.75	4.01*	4.58*
No	33.24	32.67	37.25	-4.01*	-4.58*
Federal aid status					
Received	57.76	58.21	53.16	4.60*	5.05*
Did not receive	33.18	28.72	38.62	-5.44*	-9.90*
Unknown	9.06	13.07	8.22	0.84	4.85*
Pell Grant status					
Received	37.07	38.28	34.25	2.82*	4.03*
Did not receive	62.93	61.72	65.75	-2.82*	-4.03*
Total Pell Grant amount received³					
\$0 or unknown	62.93	61.72	65.75	-2.82*	-4.03*
\$1-\$2,774	10.78	11.86	11.31	-0.53*	0.55*
\$2,775-\$5,549	14.74	15.30	13.46	1.28*	1.84*
\$5,550 or more	11.55	11.12	9.48	2.07*	1.64*
Stafford Loan status					
Received	46.93	46.39	40.96	5.97*	5.43*
Did not receive	53.07	53.61	59.04	-5.97*	-5.43*

See notes at end of table.

Table J-56. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Total Stafford Loan amount received³					
\$0 or unknown	53.07	53.61	59.04	-5.97*	-5.43*
\$1–\$4,699	9.87	10.68	9.91	-0.04	0.77*
\$4,700–\$6,500	12.18	11.94	10.80	1.38*	1.14*
\$6,501–\$9,500	12.17	11.83	9.94	2.23*	1.89*
\$9,501 or more	12.71	11.94	10.31	2.40*	1.63*
Institution total enrollment³					
0–2,628	11.38	11.70	10.83	0.55	0.87
2,629–10,233	22.43	22.47	22.78	-0.35	-0.31
10,234–26,884	31.57	31.45	32.18	-0.61	-0.73
26,885 or more	34.62	34.37	34.21	0.41	0.16
Sampled FTB Status					
FTB	12.82	13.04	13.33	-0.51*	-0.29*
Not FTB	87.18	86.96	86.67	0.51*	0.29*
Age as of Dec 31, 2011					
15–23	52.15	51.46	50.46	1.69*	1.00*
24–29	21.12	21.26	21.45	-0.33*	-0.19
30 or more	26.73	27.28	28.09	-1.36*	-0.81*
Institution aid status					
Received	22.22	20.68	20.10	2.12*	0.58*
Did not receive	68.57	69.59	71.61	-3.04*	-2.02*
Unknown	9.21	9.73	8.29	0.92	1.44*
State aid status					
Received	14.39	13.83	13.19	1.20*	0.64*
Did not receive	76.83	79.14	78.90	-2.07*	0.24
Unknown	8.78	7.03	7.91	0.87	-0.88
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	0.58	0.60	0.55	0.03	0.05
Natural Resources and Conservation	0.54	0.50	0.48	0.06*	0.02
Architecture and Related Services	0.38	0.37	0.35	0.03*	0.02
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	1.93	1.88	1.82	0.11*	0.06
Communications Technologies/Technicians and Support Services	0.39	0.32	0.34	0.05	-0.02
Computer and Information Sciences and Support Services	3.61	3.64	3.84	-0.23*	-0.20
Personal and Culinary Services	1.74	2.16	1.87	-0.13*	0.29*
Education	7.21	6.83	6.95	0.26*	-0.12
Engineering	3.18	3.03	2.97	0.21*	0.06
Engineering Technologies/Technicians	1.73	1.79	1.95	-0.22*	-0.16*
Foreign Languages, Literatures, and Linguistics	0.59	0.53	0.59	#	-0.06
Family and Consumer Sciences/Human Sciences	1.15	1.10	1.22	-0.07	-0.12*
Legal Professions and Studies	1.25	1.21	1.16	0.09*	0.05
English Language and Literature/Letters	1.55	1.44	1.45	0.10*	-0.01
Liberal Arts and Sciences, General Studies and Humanities	13.98	14.59	15.35	-1.37*	-0.76*
Library Science	‡	‡	‡	‡	‡

See notes at end of table.

Table J-56. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Biological and Biomedical Sciences	3.47	3.22	3.20	0.27*	0.02
Mathematics and Statistics	0.61	0.59	0.56	0.05*	0.03
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	2.06	2.08	2.09	-0.03	-0.01
Parks, Recreation, Leisure, and Fitness Studies	1.30	1.22	1.18	0.12*	0.04
Philosophy and Religious Studies	0.25	0.22	0.25	#	-0.03
Theology and Religious Vocations	0.48	0.45	0.46	0.02*	-0.01
Physical Sciences	1.23	1.12	1.19	0.04	-0.07
Science Technologies/Technicians	0.15	0.13	0.17	-0.02	-0.04
Psychology	3.41	3.25	3.13	0.28*	0.12*
Security and Protective Services	3.46	3.71	3.66	-0.20*	0.05
Public Administration and Social Service Professions	1.76	1.70	1.67	0.09*	0.03
Social Sciences	3.20	3.02	2.97	0.23*	0.05
Construction Trades	0.27	0.37	0.29	-0.02	0.08*
Mechanic and Repair Technologies/Technicians	1.16	1.43	1.28	-0.12*	0.15*
Precision Production	0.30	0.41	0.39	-0.09*	0.02
Transportation and Materials Moving	0.16	0.16	0.22	-0.06*	-0.06
Visual and Performing Arts	3.97	3.99	3.76	0.21*	0.23*
Health Professions and Related Clinical Sciences	16.64	16.38	16.23	0.41	0.15
Business, Management, Marketing, and Related Support Services	15.08	15.32	15.27	-0.19	0.05
History (new)	0.89	0.88	0.85	0.04	0.03
Residency Programs	‡	‡	‡	‡	‡
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	8.40	9.76	9.09	-0.69	0.67
Associate's Degree	35.74	36.41	37.81	-2.07*	-1.40*
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1.08	1.07	1.19	-0.11*	-0.12
Bachelor's Degree or equivalent	48.68	46.18	44.77	3.91*	1.41*
Not in a postsecondary award, certificate, diploma, or degree program	6.10	6.59	7.14	-1.04*	-0.55*
Class level of undergraduates					
First year	40.11	43.28	43.50	-3.39*	-0.22
Second year	27.79	26.55	27.03	0.76*	-0.48
Third year	13.17	12.56	12.05	1.12*	0.51*
Fourth year	17.14	15.89	15.60	1.54*	0.29
Fifth year or higher	1.79	1.71	1.82	-0.03	-0.11
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	35.56	34.40	36.49	-0.93*	-2.09*
65–80	28.92	29.27	28.35	0.57	0.92
81–92	20.48	21.54	20.56	-0.08	0.98
93 or more	15.05	14.79	14.61	0.44*	0.18

See notes at end of table.

Table J-56. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in all institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	31.29	32.76	34.00	-2.71*	-1.24*
25–42	23.60	23.97	23.97	-0.37	#
43–60	21.25	20.62	20.15	1.10*	0.47
61 or more	23.87	22.65	21.88	1.99*	0.77
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	21.82	22.20	23.02	-1.20*	-0.82*
14–23	24.83	25.22	25.37	-0.54*	-0.15*
24–32	26.57	26.46	25.91	0.66	0.55
33 or more	26.78	26.11	25.70	1.08	0.41
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	29.49	27.32	29.18	0.31*	-1.86
64–79	27.47	26.67	24.72	2.75	1.95
80–98	28.45	29.34	30.17	-1.72	-0.83
99 or more	14.59	16.68	15.93	-1.34	0.75*
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	22.95	24.04	24.75	-1.80*	-0.71*
\$4,145–\$5,619	23.29	24.16	24.49	-1.20*	-0.33*
\$5,620–\$7,662	24.92	24.18	24.43	0.49	-0.25*
\$7,663 or more	28.84	27.63	26.33	2.51*	1.30
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	27.13	31.00	29.17	-2.04	1.83
\$3,122–\$5,426	19.07	18.83	18.06	1.01	0.77
\$5,427–\$8,864	20.06	19.39	20.02	0.04*	-0.63
\$8,865 or more	33.74	30.78	32.74	1.00*	-1.96

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board. GASB = Governmental Accounting Standards Board.

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

Table J-57. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	23.52	15.06	16.08	7.44	-1.02
Great Lakes	‡	‡	‡	‡	‡
Plains	‡	‡	‡	‡	‡
Southeast	15.19	17.13	29.70	-14.51*	-12.57*
Southwest	‡	‡	‡	‡	‡
Rocky Mountains	25.82	32.55	21.49	4.33	11.06
Far West	3.57	3.78	6.05	-2.48	-2.27
CPS record available					
Yes	73.43	75.48	71.35	2.08	4.13
No	26.57	24.52	28.65	-2.08	-4.13
Federal aid status					
Received	68.32	68.23	63.52	4.80	4.71
Did not receive	‡	‡	‡	‡	‡
Unknown	10.90	14.74	7.63	3.27	7.11*
Pell Grant status					
Received	63.65	63.69	58.23	5.42*	5.46
Did not receive	36.35	36.31	41.77	-5.42*	-5.46
Total Pell Grant amount received³					
\$0 or unknown	36.35	36.31	41.77	-5.42*	-5.46
\$1–\$2,774	‡	‡	‡	‡	‡
\$2,775–\$5,549	31.87	26.25	29.61	2.26	-3.36
\$5,550 or more	‡	‡	‡	‡	‡
Stafford Loan status					
Received	49.57	48.32	19.82	29.75*	28.50*
Did not receive	50.43	51.68	80.18	-29.75*	-28.50*
Total Stafford Loan amount received³					
\$0 or unknown	50.43	51.68	80.18	-29.75*	-28.50*
\$1–\$4,699	‡	‡	‡	‡	‡
\$4,700–\$6,500	‡	‡	‡	‡	‡
\$6,501–\$9,500	‡	‡	‡	‡	‡
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	98.02	98.30	96.09	1.93	2.21
2,629–10,233	†	†	†	†	†
10,234–26,884	1.98	1.70	3.91	-1.93	-2.21
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	17.86	22.49	25.86	-8.00*	-3.37
Not FTB	82.14	77.51	74.14	8.00*	3.37
Age as of Dec 31, 2011					
15–23	32.71	34.36	42.43	-9.72*	-8.07*
24–29	28.21	22.77	23.28	4.93*	-0.51
30 or more	39.08	42.86	34.29	4.79	8.57*

See notes at end of table.

Table J-57. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	‡	‡	‡	‡	‡
Did not receive	87.32	92.06	90.00	-2.68	2.06
Unknown	10.90	5.84	7.63	3.27	-1.79
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	69.70	76.36	72.10	-2.40	4.26
Unknown	10.90	5.84	7.63	3.27	-1.79
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	‡	‡	‡	‡	‡
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	†	†	†	†	†
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	10.16	12.48	10.49	-0.33	1.99
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡
Health Professions and Related Clinical Sciences	41.56	31.98	37.76	3.80	-5.78

See notes at end of table.

Table J-57. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	75.65	70.52	81.20	-5.55	-10.68
Associate's Degree	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	†	†	†	†	†
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	75.14	72.83	75.66	-0.52	-2.83
Second year	‡	‡	‡	‡	‡
Third year	†	†	†	†	†
Fourth year	†	†	†	†	†
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	45.74	45.25	57.59	-11.85	-12.34
65–80	4.62	6.24	6.54	-1.92	-0.30
81–92	‡	‡	‡	‡	‡
93 or more	‡	‡	‡	‡	‡
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	5.04	7.97	8.44	-3.40	-0.47
14–23	‡	‡	‡	‡	‡
24–32	‡	‡	‡	‡	‡
33 or more	66.09	58.47	52.64	13.45*	5.83
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	‡	‡	‡	‡	‡
\$4,145–\$5,619	26.42	23.96	21.02	5.40	2.94
\$5,620–\$7,662	‡	‡	‡	‡	‡
\$7,663 or more	50.63	51.47	55.79	-5.16	-4.32

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-58. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Institution region²						
New England	3.82	3.68	3.86	-0.04	-0.18	
Mideast	11.20	11.34	11.21	-0.01	0.13	
Great Lakes	15.15	15.29	15.17	-0.02	0.12	
Plains	6.81	7.15	6.59	0.22	0.56*	
Southeast	19.11	19.50	18.98	0.13	0.52	
Southwest	16.19	16.88	16.90	-0.71*	-0.02	
Rocky Mountains	2.55	2.66	2.78	-0.23	-0.12	
Far West	25.18	23.51	24.51	0.67	-1.00	
CPS record available						
Yes	61.87	64.20	55.47	6.40*	8.73*	
No	38.13	35.80	44.53	-6.40*	-8.73*	
Federal aid status						
Received	49.27	50.90	40.96	8.31*	9.94*	
Did not receive	38.86	30.26	48.35	-9.49*	-18.09*	
Unknown	11.87	18.84	10.68	1.19*	8.16*	
Pell Grant status						
Received	44.20	45.55	35.99	8.21*	9.56*	
Did not receive	55.80	54.45	64.01	-8.21*	-9.56*	
Total Pell Grant amount received³						
\$0 or unknown	55.80	54.45	64.01	-8.21*	-9.56*	
\$1–\$2,774	15.10	16.51	14.74	0.36	1.77*	
\$2,775–\$5,549	18.67	19.10	14.54	4.13*	4.56*	
\$5,550 or more	10.42	9.94	6.70	3.72*	3.24*	
Stafford Loan status						
Received	25.10	25.35	17.35	7.75*	8.00*	
Did not receive	74.90	74.65	82.65	-7.75*	-8.00*	
Total Stafford Loan amount received³						
\$0 or unknown	74.90	74.65	82.65	-7.75*	-8.00*	
\$1–\$4,699	11.31	11.73	9.26	2.05*	2.47*	
\$4,700–\$6,500	5.69	5.75	3.77	1.92*	1.98*	
\$6,501–\$9,500	5.91	5.75	3.27	2.64*	2.48*	
\$9,501 or more	2.18	2.13	1.04	1.14*	1.09*	
Institution total enrollment³						
0–2,628	2.21	2.28	2.19	0.02	0.09	
2,629–10,233	22.42	23.15	22.84	-0.42	0.31	
10,234–26,884	42.57	42.18	42.17	0.40	0.01	
26,885 or more	32.79	32.40	32.80	-0.01	-0.40	
Sampled FTB Status						
FTB	14.05	14.66	14.55	-0.50*	0.11	
Not FTB	85.95	85.34	85.45	0.50*	-0.11	
Age as of Dec 31, 2011						
15–23	50.51	50.93	49.32	1.19*	1.61*	
24–29	20.17	20.03	20.72	-0.55*	-0.69*	
30 or more	29.32	29.04	29.96	-0.64*	-0.92*	

See notes at end of table.

Table J-58. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	11.53	12.07	10.55	0.98*	1.52*
Did not receive	77.03	79.45	79.19	-2.16*	0.26
Unknown	11.45	8.48	10.26	1.19*	-1.78*
State aid status					
Received	12.86	12.83	10.66	2.20*	2.17*
Did not receive	75.69	78.69	79.07	-3.38*	-0.38
Unknown	11.45	8.48	10.26	1.19*	-1.78*
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	0.44	0.57	0.49	-0.05	0.08
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	0.52	0.54	0.62	-0.10	-0.08
Communications Technologies/Technicians and Support Services	0.83	0.56	0.63	0.20	-0.07
Computer and Information Sciences and Support Services	3.80	3.74	4.05	-0.25	-0.31
Personal and Culinary Services	1.91	1.85	1.83	0.08	0.02
Education	2.89	2.73	2.63	0.26*	0.10
Engineering	0.88	0.91	0.88	#	0.03
Engineering Technologies/Technicians	2.88	2.87	3.26	-0.38*	-0.39
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	1.74	1.62	1.84	-0.10	-0.22
Legal Professions and Studies	0.74	0.72	0.67	0.07	0.05
English Language and Literature/Letters	0.63	0.64	0.62	0.01	0.02
Liberal Arts and Sciences, General Studies and Humanities	35.22	35.79	35.43	-0.21	0.36
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	1.12	1.05	1.05	0.07	#
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	1.88	1.93	1.91	-0.03	0.02
Parks, Recreation, Leisure, and Fitness Studies	0.51	0.49	0.45	0.06	0.04
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	0.34	0.28	0.37	-0.03	-0.09
Psychology	0.80	0.69	0.78	0.02	-0.09
Security and Protective Services	3.91	4.26	4.02	-0.11	0.24
Public Administration and Social Service Professions	0.82	0.82	0.74	0.08*	0.08
Social Sciences	0.98	0.89	0.95	0.03	-0.06
Construction Trades	0.69	0.94	0.70	-0.01	0.24*
Mechanic and Repair Technologies/Technicians	2.34	2.68	2.36	-0.02	0.32*
Precision Production	0.81	1.02	0.94	-0.13*	0.08
Transportation and Materials Moving	0.20	0.23	0.24	-0.04	-0.01

See notes at end of table.

Table J-58. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Visual and Performing Arts	2.87	2.77	2.66	0.21*	0.11
Health Professions and Related Clinical Sciences	17.19	16.50	16.80	0.39	-0.30
Business, Management, Marketing, and Related Support Services	11.52	11.51	11.55	-0.03	-0.04
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	11.77	12.18	12.60	-0.83*	-0.42
Associate's Degree	74.33	73.46	72.52	1.81*	0.94*
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1.59	1.55	1.63	-0.04	-0.08
Bachelor's Degree or equivalent	1.50	1.34	0.99	0.51	0.35
Not in a postsecondary award, certificate, diploma, or degree program	10.82	11.47	12.27	-1.45*	-0.80
Class level of undergraduates					
First year	56.76	59.67	59.62	-2.86*	0.05
Second year	39.89	37.21	36.99	2.90*	0.22
Third year	2.40	2.25	2.42	-0.02	-0.17
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	50.47	48.73	51.50	-1.03*	-2.77*
65–80	32.92	33.51	32.14	0.78	1.37
81–92	11.35	12.27	11.24	0.11	1.03*
93 or more	5.25	5.49	5.12	0.13	0.37*
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	71.86	72.20	72.47	-0.61	-0.27
25–42	24.91	24.34	24.15	0.76	0.19
43–60	2.56	2.82	2.64	-0.08	0.18
61 or more	0.67	0.63	0.74	-0.07	-0.11
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	40.40	39.95	39.78	0.62	0.17
14–23	29.84	30.18	29.90	-0.06	0.28
24–32	20.82	20.82	21.04	-0.22	-0.22
33 or more	8.94	9.04	9.28	-0.34	-0.24

See notes at end of table.

Table J-58. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	42.85	43.29	42.55	0.30	0.74
\$4,145–\$5,619	38.54	38.89	38.32	0.22	0.57
\$5,620–\$7,662	14.97	14.55	15.61	-0.64*	-1.06*
\$7,663 or more	3.65	3.28	3.52	0.13	-0.24

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-59. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Institution region²						
New England	4.41	4.57	4.12	0.29	0.45	
Mideast	18.84	18.24	18.83	0.01	-0.59	
Great Lakes	12.92	13.27	13.00	-0.08	0.27	
Plains	4.05	3.84	3.85	0.20	-0.01	
Southeast	29.85	30.41	31.10	-1.25	-0.69	
Southwest	5.79	5.95	5.85	-0.06	0.10	
Rocky Mountains	7.49	7.19	7.94	-0.45	-0.75*	
Far West	16.65	16.53	15.30	1.35	1.23	
Student type						
Undergraduate student	92.25	92.57	91.58	0.67*	0.99*	
Graduate student	7.74	7.42	8.41	-0.67*	-0.99*	
First-professional	‡	‡	‡	‡	‡	
CPS record available						
Yes	65.87	66.18	62.97	2.90*	3.21*	
No	34.13	33.82	37.03	-2.90*	-3.21*	
Federal aid status						
Received	60.13	59.15	55.88	4.25*	3.27*	
Did not receive	36.04	31.62	41.00	-4.96*	-9.38*	
Unknown	3.83	9.23	3.13	0.70	6.10*	
Pell Grant status						
Received	38.89	39.60	36.55	2.34*	3.05*	
Did not receive	61.11	60.40	63.45	-2.34*	-3.05*	
Total Pell Grant amount received³						
\$0 or unknown	61.11	60.40	63.45	-2.34*	-3.05*	
\$1–\$2,774	10.73	11.82	10.92	-0.19	0.90*	
\$2,775–\$5,549	15.46	15.74	14.53	0.93*	1.21*	
\$5,550 or more	12.70	12.04	11.09	1.61*	0.95*	
Stafford Loan status						
Received	44.49	43.64	38.89	5.60*	4.75*	
Did not receive	55.51	56.36	61.11	-5.60*	-4.75*	
Total Stafford Loan amount received³						
\$0 or unknown	55.51	56.36	61.11	-5.60*	-4.75*	
\$1–\$4,699	9.81	10.13	10.24	-0.43*	-0.11	
\$4,700–\$6,500	14.79	14.28	13.29	1.50*	0.99*	
\$6,501–\$9,500	11.39	10.98	9.13	2.26*	1.85*	
\$9,501 or more	8.49	8.25	6.23	2.26*	2.02*	
Institution total enrollment³						
0–2,628	3.48	3.43	3.41	0.07	0.02	
2,629–10,233	37.19	35.64	36.55	0.64	-0.91	
10,234–26,884	39.37	40.50	40.30	-0.93	0.20	
26,885 or more	19.96	20.43	19.75	0.21	0.68	
Sampled FTB Status						
FTB	13.42	13.70	13.67	-0.25	0.03	
Not FTB	86.58	86.30	86.33	0.25	-0.03	

See notes at end of table.

Table J-59. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	59.66	58.60	57.19	2.47*	1.41*
24–29	18.51	18.93	19.29	-0.78*	-0.36
30 or more	21.83	22.47	23.52	-1.69*	-1.05
Institution aid status					
Received	15.13	14.04	13.62	1.51*	0.42
Did not receive	81.04	81.78	83.26	-2.22*	-1.48*
Unknown	3.83	4.17	3.12	0.71	1.05*
State aid status					
Received	19.82	18.93	18.35	1.47*	0.58
Did not receive	76.55	78.26	78.69	-2.14*	-0.43
Unknown	3.63	2.81	2.96	0.67	-0.15
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	2.58	2.65	2.64	-0.06	0.01
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	9.97	9.33	9.74	0.23	-0.41
Engineering	1.97	1.97	1.59	0.38	0.38
Engineering Technologies/Technicians	2.61	2.87	2.65	-0.04	0.22
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	18.71	19.97	20.36	-1.65*	-0.39
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	3.64	3.66	3.40	0.24	0.26
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	‡	‡	‡	‡	‡
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	3.91	3.82	3.70	0.21	0.12
Security and Protective Services	3.47	3.45	3.63	-0.16	-0.18
Public Administration and Social Service Professions	2.25	2.10	2.08	0.17	0.02
Social Sciences	3.10	2.97	3.23	-0.13	-0.26

See notes at end of table.

Table J-59. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	4.16	4.32	3.88	0.28*	0.44
Health Professions and Related Clinical Sciences	11.81	11.54	12.48	-0.67	-0.94
Business, Management, Marketing, and Related Support Services	13.58	13.56	13.36	0.22	0.20
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	3.11	3.32	3.27	-0.16	0.05
Associate's Degree	30.76	32.51	31.86	-1.10	0.65
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	61.39	58.91	59.69	1.70*	-0.78
Not in a postsecondary award, certificate, diploma, or degree program	4.53	5.03	4.99	-0.46	0.04
Class level of undergraduates					
First year	31.95	35.38	34.63	-2.68*	0.75
Second year	26.09	25.39	24.55	1.54*	0.84
Third year	16.29	15.27	15.95	0.34	-0.68
Fourth year	22.73	21.06	21.66	1.07*	-0.60
Fifth year or higher	2.93	2.90	3.22	-0.29	-0.32
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	30.15	29.96	29.75	0.40	0.21
65–80	42.55	42.05	42.39	0.16	-0.34
81–92	21.53	22.12	22.23	-0.70	-0.11
93 or more	5.77	5.86	5.63	0.14	0.23
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	16.91	17.89	17.12	-0.21	0.77
25–42	45.55	46.62	47.25	-1.70	-0.63
43–60	27.67	26.65	26.68	0.99	-0.03
61 or more	9.87	8.84	8.95	0.92*	-0.11
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	6.37	7.04	6.81	-0.44	0.23
14–23	24.76	25.47	27.06	-2.30*	-1.59*
24–32	30.46	30.21	29.11	1.35	1.10
33 or more	38.42	37.27	37.02	1.40	0.25

See notes at end of table.

Table J-59. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	18.44	19.48	20.07	-1.63*	-0.59
\$4,145–\$5,619	25.82	26.15	25.19	0.63	0.96
\$5,620–\$7,662	32.78	31.84	31.84	0.94	#
\$7,663 or more	22.96	22.53	22.90	0.06	-0.37

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-60. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	3.29	3.38	3.42	-0.13	-0.04
Mideast	10.84	10.93	11.16	-0.32	-0.23
Great Lakes	16.55	16.59	16.53	0.02	0.06
Plains	8.26	8.27	7.96	0.30	0.31
Southeast	28.52	28.68	29.28	-0.76*	-0.60
Southwest	14.56	14.73	14.82	-0.26	-0.09
Rocky Mountains	4.78	4.48	4.90	-0.12	-0.42*
Far West	13.19	12.92	11.93	1.26*	0.99*
Student type					
Undergraduate student	75.61	76.01	75.22	0.39	0.79*
Graduate student	21.66	21.31	22.37	-0.71*	-1.06*
First-professional	2.73	2.68	2.41	0.32*	0.27*
CPS record available					
Yes	63.85	63.86	62.02	1.83*	1.84*
No	36.15	36.14	37.98	-1.83*	-1.84*
Federal aid status					
Received	57.96	57.56	56.11	1.85*	1.45*
Did not receive	38.08	34.66	40.19	-2.11*	-5.53*
Unknown	3.97	7.77	3.70	0.27	4.07*
Pell Grant status					
Received	27.76	28.02	27.47	0.29	0.55*
Did not receive	72.24	71.98	72.53	-0.29	-0.55*
Total Pell Grant amount received³					
\$0 or unknown	72.24	71.98	72.53	-0.29	-0.55*
\$1–\$2,774	6.65	6.84	7.06	-0.41*	-0.22
\$2,775–\$5,549	10.18	10.41	10.10	0.08	0.31*
\$5,550 or more	10.93	10.76	10.31	0.62*	0.45*
Stafford Loan status					
Received	51.16	51.06	49.52	1.64*	1.54*
Did not receive	48.84	48.94	50.48	-1.64*	-1.54*
Total Stafford Loan amount received³					
\$0 or unknown	48.84	48.94	50.48	-1.64*	-1.54*
\$1–\$4,699	8.33	8.69	9.57	-1.24*	-0.88*
\$4,700–\$6,500	14.77	14.84	14.84	-0.07	#
\$6,501–\$9,500	12.84	12.71	12.08	0.76*	0.63*
\$9,501 or more	15.23	14.82	13.03	2.20*	1.79*
Institution total enrollment³					
0–2,628	‡	‡	‡	‡	‡
2,629–10,233	7.25	7.31	7.35	-0.10	-0.04
10,234–26,884	35.65	36.19	36.21	-0.56	-0.02
26,885 or more	56.64	56.08	56.00	0.64	0.08
Sampled FTB Status					
FTB	11.65	11.48	12.03	-0.38*	-0.55*
Not FTB	88.35	88.52	87.97	0.38*	0.55*

See notes at end of table.

Table J-60. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Age as of Dec 31, 2011						
15–23	60.78	60.31	59.58	1.20*	0.73*	
24–29	21.23	21.43	21.28	-0.05	0.15	
30 or more	17.98	18.27	19.14	-1.16*	-0.87*	
Institution aid status						
Received	28.15	26.54	26.97	1.18*	-0.43	
Did not receive	67.15	65.42	68.61	-1.46*	-3.19*	
Unknown	4.69	8.05	4.42	0.27	3.63*	
State aid status						
Received	19.11	18.72	18.83	0.28*	-0.11	
Did not receive	77.07	77.67	77.58	-0.51*	0.09	
Unknown	3.83	3.60	3.59	0.24	0.01	
Major (2-digit CIP)						
Agriculture, Agriculture Operations, and Related Sciences	1.18	1.17	1.11	0.07	0.06	
Natural Resources and Conservation	‡	‡	‡	‡	‡	
Architecture and Related Services	‡	‡	‡	‡	‡	
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡	
Communication, Journalism, and Related Programs	3.50	3.58	3.54	-0.04	0.04	
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡	
Computer and Information Sciences and Support Services	2.90	2.85	2.97	-0.07	-0.12	
Personal and Culinary Services	†	†	†	†	†	
Education	8.71	8.68	8.75	-0.04	-0.07	
Engineering	7.27	7.14	7.21	0.06	-0.07	
Engineering Technologies/Technicians	0.79	0.83	0.82	-0.03	0.01	
Foreign Languages, Literatures, and Linguistics	1.07	1.06	1.17	-0.10*	-0.11	
Family and Consumer Sciences/Human Sciences	1.40	1.40	1.35	0.05	0.05	
Legal Professions and Studies	1.11	1.12	1.01	0.10*	0.11*	
English Language and Literature/Letters	2.54	2.42	2.51	0.03	-0.09	
Liberal Arts and Sciences, General Studies and Humanities	4.01	4.09	4.24	-0.23*	-0.15	
Library Science	‡	‡	‡	‡	‡	
Biological and Biomedical Sciences	6.37	6.30	6.24	0.13	0.06	
Mathematics and Statistics	1.12	1.16	1.08	0.04	0.08	
Military Technologies	†	†	†	†	†	
Multi/Interdisciplinary Studies	3.02	3.05	3.02	#	0.03	
Parks, Recreation, Leisure, and Fitness Studies	2.20	2.24	2.15	0.05	0.09	
Philosophy and Religious Studies	‡	‡	‡	‡	‡	
Theology and Religious Vocations	‡	‡	‡	‡	‡	
Physical Sciences	2.27	2.17	2.28	-0.01	-0.11	
Science Technologies/Technicians	‡	‡	‡	‡	‡	
Psychology	5.11	5.00	5.01	0.10*	-0.01	
Security and Protective Services	1.99	2.08	2.01	-0.02	0.07	
Public Administration and Social Service Professions	2.32	2.32	2.28	0.04	0.04	
Social Sciences	5.56	5.61	5.51	0.05	0.10	

See notes at end of table.

Table J-60. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	4.11	4.21	4.05	0.06	0.16
Health Professions and Related Clinical Sciences	12.07	11.58	12.02	0.05	-0.44*
Business, Management, Marketing, and Related Support Services	15.02	15.49	15.27	-0.25	0.22
History (new)	1.35	1.49	1.45	-0.10	0.04
Residency Programs	‡	‡	‡	‡	‡
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡
Associate's Degree	1.09	1.02	1.27	-0.18*	-0.25*
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	94.34	94.13	93.80	0.54*	0.33
Not in a postsecondary award, certificate, diploma, or degree program	4.26	4.51	4.60	-0.34*	-0.09
Class level of undergraduates					
First year	19.13	20.01	20.64	-1.51*	-0.63
Second year	18.90	18.76	18.76	0.14*	#
Third year	22.53	22.56	21.86	0.67*	0.70*
Fourth year	37.15	36.37	36.49	0.66*	-0.12
Fifth year or higher	2.30	2.30	2.25	0.05	0.05
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	40.92	40.18	39.90	1.02*	0.28
65–80	28.83	29.58	29.37	-0.54	0.21
81–92	22.65	22.77	23.13	-0.48*	-0.36
93 or more	7.60	7.47	7.60	#	-0.13
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	2.02	2.25	2.23	-0.21	0.02
25–42	20.76	21.36	21.39	-0.63*	-0.03
43–60	37.59	37.11	37.97	-0.38	-0.86
61 or more	39.63	39.28	38.41	1.22*	0.87
Public institution tuition and fees as percent of core revenues (GASB reporting) ³					
13 or less	5.73	5.55	5.72	0.01	-0.17
14–23	18.96	18.80	18.17	0.79	0.63
24–32	31.95	32.24	31.70	0.25	0.54
33 or more	43.35	43.41	44.41	-1.06*	-1.00

See notes at end of table.

Table J-60. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in public 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Public institution instructional expenses per FTE enrollment (GASB reporting) ³					
\$4,144 or less	1.07	1.19	1.25	-0.18	-0.06
\$4,145–\$5,619	4.16	4.41	4.40	-0.24	0.01
\$5,620–\$7,662	33.77	33.50	34.15	-0.38	-0.65
\$7,663 or more	61.00	60.90	60.21	0.79*	0.69

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. GASB = Governmental Accounting Standards Board.

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

Table J-61. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	‡	‡	‡	‡	‡
Mideast	16.48	16.17	17.47	-0.99	-1.30
Great Lakes	3.53	9.12	4.87	-1.34	4.25
Plains	‡	‡	‡	‡	‡
Southeast	41.13	35.98	38.17	2.96	-2.19
Southwest	9.03	9.41	10.63	-1.60	-1.22
Rocky Mountains	†	†	†	†	†
Far West	7.60	10.59	6.81	0.79	3.78
CPS record available					
Yes	80.58	79.60	73.73	6.85*	5.87
No	19.42	20.40	26.27	-6.85*	-5.87
Federal aid status					
Received	76.96	76.01	67.22	9.74*	8.79*
Did not receive	15.62	15.23	23.17	-7.55*	-7.94*
Unknown	7.42	8.76	9.61	-2.19	-0.85
Pell Grant status					
Received	63.30	65.22	53.76	9.54*	11.46*
Did not receive	36.70	34.78	46.24	-9.54*	-11.46*
Total Pell Grant amount received³					
\$0 or unknown	36.70	34.78	46.24	-9.54*	-11.46*
\$1–\$2,774	12.66	13.51	13.95	-1.29	-0.44
\$2,775–\$5,549	22.58	25.59	20.83	1.75	4.76*
\$5,550 or more	28.06	26.12	18.98	9.08*	7.14*
Stafford Loan status					
Received	64.26	62.04	50.65	13.61*	11.39*
Did not receive	35.74	37.96	49.35	-13.61*	-11.39*
Total Stafford Loan amount received³					
\$0 or unknown	35.74	37.96	49.35	-13.61*	-11.39*
\$1–\$4,699	11.53	13.01	11.14	0.39	1.87
\$4,700–\$6,500	23.49	21.72	18.88	4.61*	2.84*
\$6,501–\$9,500	22.73	21.19	16.00	6.73*	5.19*
\$9,501 or more	‡	‡	‡	‡	‡
Institution total enrollment³					
0–2,628	99.69	99.27	99.62	0.07	-0.35
2,629–10,233	‡	‡	‡	‡	‡
10,234–26,884	†	†	†	†	†
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	23.23	22.45	21.88	1.35	0.57
Not FTB	76.77	77.55	78.12	-1.35	-0.57
Age as of Dec 31, 2011					
15–23	45.29	43.56	45.03	0.26	-1.47
24–29	26.25	24.57	26.35	-0.10	-1.78
30 or more	28.46	31.87	28.62	-0.16	3.25

See notes at end of table.

Table J-61. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	20.99	19.70	20.73	0.26	-1.03
Did not receive	72.08	74.33	69.95	2.13	4.38
Unknown	‡	‡	‡	‡	‡
State aid status					
Received	14.65	11.92	11.60	3.05*	0.32
Did not receive	78.43	82.11	79.08	-0.65	3.03
Unknown	‡	‡	‡	‡	‡
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	†	†	†	†	†
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	2.34	7.75	3.19	-0.85	4.56
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	10.39	9.43	7.52	2.87*	1.91
Precision Production	7.69	8.98	6.10	1.59	2.88
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	‡	‡	‡	‡	‡

See notes at end of table.

Table J-61. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Health Professions and Related Clinical Sciences	48.18	42.27	50.74	-2.56	-8.47
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	40.64	48.21	40.02	0.62	8.19*
Associate's Degree	40.91	37.27	40.67	0.24	-3.40
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	17.73	14.01	17.79	-0.06	-3.78*
Bachelor's Degree or equivalent	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	68.17	72.54	67.86	0.31	4.68
Second year	28.21	23.85	28.45	-0.24	-4.60
Third year	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	†	†	†	†	†
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	19.18	16.34	15.46	3.72*	0.88
65–80	27.24	25.95	29.95	-2.71	-4.00
81–92	34.85	39.56	33.88	0.97	5.68
93 or more	18.73	18.15	20.72	-1.99	-2.57
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	16.56	14.12	16.51	0.05	-2.39
25–42	‡	‡	‡	‡	‡
43–60	34.19	34.00	33.58	0.61	0.42
61 or more	33.79	39.40	34.52	-0.73	4.88
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	25.42	30.92	26.04	-0.62	4.88
64–79	‡	‡	‡	‡	‡
80–98	33.54	30.01	34.76	-1.22	-4.75
99 or more	25.01	25.95	26.14	-1.13	-0.19

See notes at end of table.

Table J-61. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit less-than-4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	42.23	47.28	42.06	0.17	5.22
\$3,122–\$5,426	16.26	15.92	17.98	-1.72	-2.06
\$5,427–\$8,864	26.49	23.84	27.17	-0.68	-3.33
\$8,865 or more	15.03	12.97	12.78	2.25	0.19

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-62. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	10.43	10.72	10.29	0.14	0.43
Mideast	19.70	20.33	19.44	0.26	0.89
Great Lakes	23.31	23.26	22.84	0.47	0.42
Plains	10.32	9.87	10.37	-0.05	-0.50
Southeast	20.21	20.14	20.35	-0.14	-0.21
Southwest	4.37	4.36	5.12	-0.75	-0.76
Rocky Mountains	‡	‡	‡	‡	‡
Far West	9.17	8.91	9.00	0.17	-0.09
Student type					
Undergraduate student	84.15	84.02	84.08	0.07	-0.06
Graduate student	15.81	15.95	15.88	-0.07	0.07
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	76.86	75.17	72.69	4.17*	2.48*
No	23.14	24.83	27.31	-4.17*	-2.48*
Federal aid status					
Received	69.95	68.69	64.87	5.08*	3.82*
Did not receive	24.36	23.86	28.25	-3.89*	-4.39*
Unknown	5.69	7.45	6.89	-1.20*	0.56
Pell Grant status					
Received	33.83	33.36	33.55	0.28	-0.19
Did not receive	66.17	66.64	66.45	-0.28	0.19
Total Pell Grant amount received³					
\$0 or unknown	66.17	66.64	66.45	-0.28	0.19
\$1–\$2,774	9.16	9.16	9.41	-0.25	-0.25
\$2,775–\$5,549	12.33	12.35	12.63	-0.30	-0.28
\$5,550 or more	12.34	11.84	11.50	0.84*	0.34
Stafford Loan status					
Received	66.72	65.32	60.50	6.22*	4.82*
Did not receive	33.28	34.68	39.50	-6.22*	-4.82*
Total Stafford Loan amount received³					
\$0 or unknown	33.28	34.68	39.50	-6.22*	-4.82*
\$1–\$4,699	7.77	8.12	9.43	-1.66*	-1.31*
\$4,700–\$6,500	22.49	22.17	20.52	1.97*	1.65*
\$6,501–\$9,500	19.73	18.94	16.57	3.16*	2.37*
\$9,501 or more	16.74	16.09	13.99	2.75*	2.10*
Institution total enrollment³					
0–2,628	51.50	50.33	51.20	0.30	-0.87
2,629–10,233	40.62	40.89	39.68	0.94	1.21
10,234–26,884	5.43	5.74	5.84	-0.41	-0.10
26,885 or more	2.46	3.04	3.28	-0.82	-0.24
Sampled FTB Status					
FTB	16.73	16.57	16.64	0.09	-0.07
Not FTB	83.27	83.43	83.36	-0.09	0.07

See notes at end of table.

Table J-62. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	65.77	64.27	60.99	4.78*	3.28*
24–29	12.92	13.26	13.97	-1.05*	-0.71
30 or more	21.31	22.47	25.04	-3.73*	-2.57*
Institution aid status					
Received	55.49	53.40	49.91	5.58*	3.49*
Did not receive	38.64	38.53	43.12	-4.48*	-4.59*
Unknown	5.87	8.07	6.96	-1.09	1.11
State aid status					
Received	21.29	20.50	20.05	1.24*	0.45
Did not receive	73.20	74.37	73.36	-0.16	1.01
Unknown	5.50	5.13	6.59	-1.09	-1.46*
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	1.78	1.72	2.09	-0.31	-0.37
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	13.60	13.06	14.26	-0.66	-1.20*
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	0.33	0.46	0.34	-0.01	0.12
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	4.93	5.42	5.88	-0.95	-0.46
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	4.35	4.21	4.27	0.08	-0.06
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	3.91	4.06	3.69	0.22	0.37
Physical Sciences	‡	‡	‡	‡	‡
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	5.48	5.56	4.97	0.51*	0.59*
Security and Protective Services	2.61	2.95	2.64	-0.03	0.31
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	‡	‡	‡	‡	‡

See notes at end of table.

Table J-62. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	†	†	†	†	†
Mechanic and Repair Technologies/Technicians	0.41	0.64	0.38	0.03	0.26
Precision Production	‡	‡	‡	‡	‡
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	7.71	7.97	6.79	0.92*	1.18*
Health Professions and Related Clinical Sciences	11.84	11.47	12.45	-0.61	-0.98
Business, Management, Marketing, and Related Support Services	17.09	17.72	17.77	-0.68	-0.05
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	0.94	1.20	1.20	-0.26	#
Associate's Degree	7.27	8.17	8.52	-1.25*	-0.35
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	87.55	86.02	85.67	1.88*	0.35
Not in a postsecondary award, certificate, diploma, or degree program	3.11	3.51	3.43	-0.32	0.08
Class level of undergraduates					
First year	25.89	27.47	28.35	-2.46*	-0.88
Second year	22.63	22.34	21.45	1.18*	0.89
Third year	21.42	21.06	20.45	0.97*	0.61
Fourth year	27.25	26.36	26.57	0.68	-0.21
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	11.11	10.71	11.03	0.08	-0.32
65–80	8.36	8.63	7.92	0.44	0.71*
81–92	17.45	18.35	17.59	-0.14	0.76
93 or more	63.08	62.31	63.46	-0.38	-1.15
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	6.40	6.50	7.58	-1.18	-1.08
25–42	17.19	18.53	18.38	-1.19	0.15
43–60	37.58	37.75	37.54	0.04	0.21
61 or more	38.82	37.23	36.49	2.33*	0.74
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	41.54	39.58	40.19	1.35*	-0.61
64–79	35.10	35.19	36.88	-1.78*	-1.69*
80–98	22.57	24.29	21.90	0.67	2.39*
99 or more	‡	‡	‡	‡	‡

See notes at end of table.

Table J-62. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year non-doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	4.53	5.73	5.45	-0.92	0.28
\$3,122–\$5,426	18.99	19.61	20.59	-1.60*	-0.98
\$5,427–\$8,864	41.25	40.78	40.66	0.59	0.12
\$8,865 or more	35.23	33.88	33.30	1.93*	0.58

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-63. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	12.14	12.25	12.10	0.04	0.15
Mideast	32.44	32.66	31.88	0.56	0.78
Great Lakes	13.38	13.96	14.00	-0.62	-0.04
Plains	7.60	7.46	7.67	-0.07	-0.21
Southeast	16.11	16.13	16.20	-0.09	-0.07
Southwest	3.82	3.80	3.74	0.08	0.06
Rocky Mountains	3.51	3.32	4.00	-0.49	-0.68
Far West	11.01	10.43	10.41	0.60	0.02
Student type					
Undergraduate student	54.88	55.50	54.61	0.27	0.89
Graduate student	36.31	36.00	37.20	-0.89	-1.20
First-professional	8.81	8.50	8.19	0.62*	0.31
CPS record available					
Yes	63.80	61.85	61.46	2.34*	0.39
No	36.20	38.15	38.54	-2.34*	-0.39
Federal aid status					
Received	57.49	56.06	55.51	1.98*	0.55
Did not receive	32.25	32.71	33.83	-1.58*	-1.12
Unknown	10.26	11.23	10.66	-0.40	0.57
Pell Grant status					
Received	16.65	16.48	18.08	-1.43*	-1.60*
Did not receive	83.35	83.52	81.92	1.43*	1.60*
Total Pell Grant amount received³					
\$0 or unknown	83.35	83.52	81.92	1.43*	1.60*
\$1–\$2,774	4.66	4.62	5.39	-0.73*	-0.77*
\$2,775–\$5,549	6.38	6.65	6.86	-0.48*	-0.21
\$5,550 or more	5.60	5.21	5.83	-0.23*	-0.62*
Stafford Loan status					
Received	56.82	54.71	54.88	1.94*	-0.17
Did not receive	43.18	45.29	45.12	-1.94*	0.17
Total Stafford Loan amount received³					
\$0 or unknown	43.18	45.29	45.12	-1.94*	0.17
\$1–\$4,699	5.30	5.51	6.36	-1.06*	-0.85*
\$4,700–\$6,500	14.59	13.52	14.65	-0.06	-1.13*
\$6,501–\$9,500	11.78	11.34	10.72	1.06*	0.62*
\$9,501 or more	25.15	24.35	23.15	2.00*	1.20*
Institution total enrollment³					
0–2,628	8.97	8.65	8.45	0.52	0.20
2,629–10,233	43.86	44.17	44.33	-0.47	-0.16
10,234–26,884	29.54	29.87	29.35	0.19	0.52
26,885 or more	17.63	17.30	17.87	-0.24	-0.57
Sampled FTB Status					
FTB	10.83	10.33	10.70	0.13	-0.37
Not FTB	89.17	89.67	89.30	-0.13	0.37

See notes at end of table.

Table J-63. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	48.95	48.41	46.78	2.17*	1.63*
24–29	25.37	24.95	25.61	-0.24	-0.66
30 or more	25.68	26.65	27.61	-1.93*	-0.96
Institution aid status					
Received	42.65	40.72	40.48	2.17*	0.24
Did not receive	46.05	43.24	47.97	-1.92*	-4.73*
Unknown	11.30	16.05	11.56	-0.26	4.49*
State aid status					
Received	10.00	9.77	9.89	0.11	-0.12
Did not receive	79.83	81.60	79.58	0.25	2.02*
Unknown	10.17	8.63	10.52	-0.35	-1.89*
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	‡	‡	‡	‡	‡
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	‡	‡	‡	‡	‡
Communication, Journalism, and Related Programs	3.23	3.22	2.96	0.27*	0.26
Communications Technologies/Technicians and Support Services	‡	‡	‡	‡	‡
Computer and Information Sciences and Support Services	2.61	2.37	2.55	0.06	-0.18
Personal and Culinary Services	‡	‡	‡	‡	‡
Education	9.90	10.04	9.99	-0.09	0.05
Engineering	4.58	4.88	4.54	0.04	0.34
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	‡	‡	‡	‡	‡
Legal Professions and Studies	4.20	4.36	4.03	0.17*	0.33*
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	3.83	4.06	3.92	-0.09	0.14
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	5.64	5.29	5.29	0.35*	#
Mathematics and Statistics	‡	‡	‡	‡	‡
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	‡	‡	‡	‡	‡
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	‡	‡	‡	‡	‡
Theology and Religious Vocations	1.87	1.81	2.00	-0.13	-0.19
Physical Sciences	1.66	1.64	1.56	0.10	0.08
Science Technologies/Technicians	†	†	†	†	†
Psychology	4.83	4.93	4.57	0.26	0.36
Security and Protective Services	‡	‡	‡	‡	‡
Public Administration and Social Service Professions	‡	‡	‡	‡	‡
Social Sciences	5.28	5.15	4.94	0.34*	0.21

See notes at end of table.

Table J-63. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After nonresponse weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Construction Trades	†	†	†	†	†	
Mechanic and Repair Technologies/Technicians	†	†	†	†	†	
Precision Production	†	†	†	†	†	
Transportation and Materials Moving	‡	‡	‡	‡	‡	
Visual and Performing Arts	4.02	4.13	3.88	0.14	0.25	
Health Professions and Related Clinical Sciences	17.27	16.81	17.28	-0.01	-0.47	
Business, Management, Marketing, and Related Support Services	17.23	17.81	18.43	-1.20*	-0.62	
History (new)	‡	‡	‡	‡	‡	
Residency Programs	†	†	†	†	†	
Degree Program (undergraduates only)						
Postsecondary award, certificate or diploma of less than 2 academic years	‡	‡	‡	‡	‡	
Associate's Degree	2.66	2.60	3.39	-0.73	-0.79	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡	
Bachelor's Degree or equivalent	88.42	87.18	86.95	1.47	0.23	
Not in a postsecondary award, certificate, diploma, or degree program	5.23	6.58	5.76	-0.53	0.82	
Class level of undergraduates						
First year	24.61	24.47	26.99	-2.38*	-2.52*	
Second year	22.43	21.86	21.74	0.69	0.12	
Third year	21.88	22.34	20.55	1.33*	1.79*	
Fourth year	28.27	28.57	27.58	0.69	0.99	
Fifth year or higher	‡	‡	‡	‡	‡	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³						
64 or less	24.44	23.78	24.13	0.31	-0.35	
65–80	15.72	15.21	15.16	0.56	0.05	
81–92	15.44	15.61	16.09	-0.65	-0.48	
93 or more	44.40	45.40	44.62	-0.22	0.78	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³						
24 or less	‡	‡	‡	‡	‡	
25–42	7.68	7.87	8.34	-0.66	-0.47	
43–60	26.71	27.86	27.22	-0.51	0.64	
61 or more	63.41	62.21	61.96	1.45*	0.25	
Private institution tuition and fees as percent of core revenues (FASB reporting) ³						
63 or less	48.20	47.87	47.65	0.55	0.22	
64–79	27.06	27.28	26.99	0.07	0.29	
80–98	24.73	24.84	25.35	-0.62	-0.51	
99 or more	‡	‡	‡	‡	‡	

See notes at end of table.

Table J-63. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private nonprofit 4-year doctorate-granting institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	‡	‡	‡	‡	‡
\$3,122–\$5,426	10.34	9.75	11.07	-0.73*	-1.32*
\$5,427–\$8,864	22.55	23.86	22.79	-0.24	1.07*
\$8,865 or more	64.65	63.96	63.76	0.89*	0.20

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-64. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	8.06	11.00	10.17	-2.11	0.83
Mideast	9.38	11.05	15.03	-5.65	-3.98
Great Lakes	5.14	5.43	7.12	-1.98	-1.69
Plains	4.64	5.11	7.08	-2.44	-1.97
Southeast	11.72	15.69	19.39	-7.67*	-3.70
Southwest	47.48	34.71	20.66	26.82*	14.05
Rocky Mountains	4.67	5.38	7.26	-2.59	-1.88
Far West	8.92	11.64	13.27	-4.35	-1.63
CPS record available					
Yes	86.28	84.72	83.98	2.30*	0.74
No	13.72	15.28	16.02	-2.30*	-0.74
Federal aid status					
Received	49.81	60.66	73.38	-23.57*	-12.72
Did not receive	5.19	5.02	9.95	-4.76*	-4.93*
Unknown	45.00	34.33	16.66	28.34*	17.67*
Pell Grant status					
Received	69.49	72.13	75.21	-5.72*	-3.08
Did not receive	30.51	27.87	24.79	5.72*	3.08
Total Pell Grant amount received³					
\$0 or unknown	30.51	27.87	24.79	5.72*	3.08
\$1–\$2,774	14.36	16.82	18.07	-3.71	-1.25
\$2,775–\$5,549	30.40	32.28	32.41	-2.01	-0.13
\$5,550 or more	24.73	23.03	24.73	#	-1.70
Stafford Loan status					
Received	73.85	75.83	75.81	-1.96	0.02
Did not receive	26.15	24.17	24.19	1.96	-0.02
Total Stafford Loan amount received³					
\$0 or unknown	26.15	24.17	24.19	1.96	-0.02
\$1–\$4,699	15.12	19.42	19.75	-4.63*	-0.33
\$4,700–\$6,500	17.35	19.68	20.20	-2.85	-0.52
\$6,501–\$9,500	35.37	31.42	32.39	2.98*	-0.97
\$9,501 or more	6.00	5.31	3.46	2.54*	1.85
Institution total enrollment³					
0–2,628	98.56	97.96	98.10	0.46	-0.14
2,629–10,233	1.44	2.04	1.90	-0.46	0.14
10,234–26,884	†	†	†	†	†
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	20.16	21.50	27.95	-7.79	-6.45
Not FTB	79.84	78.50	72.05	7.79	6.45
Age as of Dec 31, 2011					
15–23	41.89	46.10	46.08	-4.19	0.02
24–29	25.96	25.46	24.37	1.59	1.09
30 or more	32.15	28.44	29.55	2.60	-1.11

See notes at end of table.

Table J-64. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	1.36	1.86	2.41	-1.05	-0.55
Did not receive	53.71	67.13	81.09	-27.38*	-13.96
Unknown	44.93	31.01	16.50	28.43*	14.51
State aid status					
Received	‡	‡	‡	‡	‡
Did not receive	53.21	67.38	80.55	-27.34*	-13.17
Unknown	44.93	31.01	16.50	28.43*	14.51
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	‡	‡	‡	‡	‡
Personal and Culinary Services	30.21	37.60	47.91	-17.70*	-10.31
Education	†	†	†	†	†
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	‡	‡	‡	‡	‡
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	†	†	†	†	†
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	†	†	†	†	†
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	‡	‡	‡	‡	‡
Mechanic and Repair Technologies/Technicians	1.92	2.26	3.27	-1.35	-1.01
Precision Production	†	†	†	†	†
Transportation and Materials Moving	†	†	†	†	†
Visual and Performing Arts	†	†	†	†	†

See notes at end of table.

Table J-64. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Health Professions and Related Clinical Sciences	66.16	57.78	46.01	20.15*	11.77
Business, Management, Marketing, and Related Support Services	‡	‡	‡	‡	‡
History (new)	†	†	†	†	†
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	79.45	88.84	91.44	-11.99	-2.60
Associate's Degree	‡	‡	‡	‡	‡
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	1.91	2.40	3.20	-1.29	-0.80
Bachelor's Degree or equivalent	†	†	†	†	†
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	92.19	93.38	92.54	-0.35	0.84
Second year	7.43	6.27	6.76	0.67	-0.49
Third year	‡	‡	‡	‡	‡
Fourth year	‡	‡	‡	‡	‡
Fifth year or higher	‡	‡	‡	‡	‡
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	4.72	5.31	6.86	-2.14	-1.55
65–80	68.12	59.77	50.05	18.07*	9.72
81–92	22.18	28.72	34.78	-12.60*	-6.06
93 or more	4.99	6.20	8.31	-3.32	-2.11
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	†	†	†	†	†
25–42	†	†	†	†	†
43–60	‡	‡	‡	‡	‡
61 or more	‡	‡	‡	‡	‡
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	3.33	5.70	6.35	-3.02	-0.65
64–79	57.88	43.97	30.89	26.99*	13.08
80–98	24.10	31.90	37.51	-13.41	-5.61
99 or more	14.70	18.44	25.24	-10.54*	-6.80

See notes at end of table.

Table J-64. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit less-than-2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	24.81	34.09	40.34	-15.53*	-6.25
\$3,122–\$5,426	71.72	61.29	54.45	17.27*	6.84
\$5,427–\$8,864	3.14	4.17	4.75	-1.61	-0.58
\$8,865 or more	0.33	0.45	0.46	-0.13	-0.01

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-65. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	2.58	2.38	2.35	0.23	0.03
Mideast	18.68	19.66	18.05	0.63	1.61
Great Lakes	13.00	14.24	13.21	-0.21	1.03
Plains	1.92	1.90	2.29	-0.37	-0.39
Southeast	25.18	23.89	23.15	2.03	0.74
Southwest	10.44	11.44	10.57	-0.13	0.87
Rocky Mountains	5.64	4.81	5.47	0.17	-0.66
Far West	22.56	21.66	24.91	-2.35	-3.25
CPS record available					
Yes	87.67	88.28	80.46	7.21*	7.82*
No	12.33	11.72	19.54	-7.21*	-7.82*
Federal aid status					
Received	72.65	77.46	64.43	8.22*	13.03*
Did not receive	7.23	6.15	15.96	-8.73*	-9.81*
Unknown	20.12	16.40	19.61	0.51	-3.21
Pell Grant status					
Received	70.95	72.31	59.31	11.64*	13.00*
Did not receive	29.05	27.69	40.69	-11.64*	-13.00*
Total Pell Grant amount received³					
\$0 or unknown	29.05	27.69	40.69	-11.64*	-13.00*
\$1–\$2,774	18.10	21.66	19.09	-0.99	2.57*
\$2,775–\$5,549	25.82	26.17	22.39	3.43*	3.78*
\$5,550 or more	27.03	24.49	17.83	9.20*	6.66*
Stafford Loan status					
Received	81.31	80.36	63.96	17.35*	16.40*
Did not receive	18.69	19.64	36.04	-17.35*	-16.40*
Total Stafford Loan amount received³					
\$0 or unknown	18.69	19.64	36.04	-17.35*	-16.40*
\$1–\$4,699	20.22	22.62	19.03	1.19	3.59*
\$4,700–\$6,500	15.87	16.73	13.01	2.86*	3.72*
\$6,501–\$9,500	31.57	29.59	23.22	8.35*	6.37*
\$9,501 or more	13.65	11.42	8.71	4.94*	2.71*
Institution total enrollment³					
0–2,628	76.92	75.71	78.49	-1.57	-2.78*
2,629–10,233	22.21	23.20	20.74	1.47	2.46
10,234–26,884	0.87	1.09	0.77	0.10	0.32
26,885 or more	†	†	†	†	†
Sampled FTB Status					
FTB	21.92	21.25	21.07	0.85	0.18
Not FTB	78.08	78.75	78.93	-0.85	-0.18
Age as of Dec 31, 2011					
15–23	46.31	46.92	46.59	-0.28	0.33
24–29	23.79	23.59	22.82	0.97	0.77
30 or more	29.91	29.49	30.59	-0.68	-1.10

See notes at end of table.

Table J-65. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution aid status					
Received	5.61	5.71	5.12	0.49	0.59
Did not receive	74.58	81.93	75.51	-0.93	6.42*
Unknown	19.81	12.36	19.36	0.45	-7.00*
State aid status					
Received	6.23	5.50	5.38	0.85	0.12
Did not receive	73.96	82.14	75.26	-1.30	6.88*
Unknown	19.81	12.36	19.36	0.45	-7.00*
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	†	†	†	†	†
Architecture and Related Services	†	†	†	†	†
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	†	†	†	†	†
Communications Technologies/Technicians and Support Services	†	†	†	†	†
Computer and Information Sciences and Support Services	3.52	2.73	3.08	0.44	-0.35
Personal and Culinary Services	11.90	11.53	12.56	-0.66	-1.03
Education	0.91	1.74	1.83	-0.92	-0.09
Engineering	†	†	†	†	†
Engineering Technologies/Technicians	2.26	1.91	2.11	0.15	-0.20
Foreign Languages, Literatures, and Linguistics	†	†	†	†	†
Family and Consumer Sciences/Human Sciences	†	†	†	†	†
Legal Professions and Studies	‡	‡	‡	‡	‡
English Language and Literature/Letters	†	†	†	†	†
Liberal Arts and Sciences, General Studies and Humanities	†	†	†	†	†
Library Science	†	†	†	†	†
Biological and Biomedical Sciences	†	†	†	†	†
Mathematics and Statistics	†	†	†	†	†
Military Technologies	†	†	†	†	†
Multi/Interdisciplinary Studies	†	†	†	†	†
Parks, Recreation, Leisure, and Fitness Studies	†	†	†	†	†
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	†	†	†	†	†
Psychology	†	†	†	†	†
Security and Protective Services	3.33	3.12	2.67	0.66*	0.45*
Public Administration and Social Service Professions	†	†	†	†	†
Social Sciences	†	†	†	†	†
Construction Trades	1.29	1.56	1.17	0.12	0.39
Mechanic and Repair Technologies/Technicians	16.88	17.49	15.14	1.74	2.35*
Precision Production	1.64	2.06	1.39	0.25	0.67
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	3.71	3.26	2.79	0.92*	0.47

See notes at end of table.

Table J-65. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment				
		Mean		Difference		
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)	
Health Professions and Related Clinical Sciences	48.65	49.18	51.63	-2.98*	-2.45	
Business, Management, Marketing, and Related Support Services	4.79	4.63	4.37	0.42	0.26	
History (new)	†	†	†	†	†	
Residency Programs	†	†	†	†	†	
Degree Program (undergraduates only)						
Postsecondary award, certificate or diploma of less than 2 academic years	54.69	61.21	56.43	-1.74	4.78*	
Associate's Degree	39.52	34.04	37.70	1.82	-3.66*	
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	5.65	4.66	5.73	-0.08	-1.07	
Bachelor's Degree or equivalent	‡	‡	‡	‡	‡	
Not in a postsecondary award, certificate, diploma, or degree program	†	†	†	†	†	
Class level of undergraduates						
First year	76.92	78.67	78.13	-1.21	0.54	
Second year	19.53	17.89	18.52	1.01	-0.63	
Third year	3.32	3.20	3.01	0.31	0.19	
Fourth year	‡	‡	‡	‡	‡	
Fifth year or higher	‡	‡	‡	‡	‡	
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³						
64 or less	22.11	18.22	21.69	0.42	-3.47	
65–80	33.41	34.70	33.78	-0.37	0.92	
81–92	28.67	29.42	29.70	-1.03	-0.28	
93 or more	15.81	17.65	14.84	0.97	2.81*	
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³						
24 or less	‡	‡	‡	‡	‡	
25–42	8.90	8.50	7.73	1.17	0.77	
43–60	34.33	33.39	33.10	1.23	0.29	
61 or more	54.59	56.89	57.05	-2.46	-0.16	
Private institution tuition and fees as percent of core revenues (FASB reporting) ³						
63 or less	18.33	18.36	20.78	-2.45	-2.42	
64–79	21.10	19.35	20.60	0.50	-1.25	
80–98	16.97	17.22	19.32	-2.35	-2.10	
99 or more	43.60	45.07	39.30	4.30*	5.77*	

See notes at end of table.

Table J-65. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 2-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	51.30	53.81	55.17	-3.87*	-1.36
\$3,122–\$5,426	32.39	30.43	28.50	3.89*	1.93
\$5,427–\$8,864	6.93	6.74	7.18	-0.25	-0.44
\$8,865 or more	9.38	9.02	9.15	0.23	-0.13

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.

¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.

² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.

³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-66. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Institution region²					
New England	1.78	1.72	2.02	-0.24	-0.30
Mideast	4.21	4.38	4.40	-0.19	-0.02
Great Lakes	7.70	8.18	7.44	0.26	0.74
Plains	23.73	24.43	17.35	6.38	7.08
Southeast	18.14	18.01	20.17	-2.03	-2.16
Southwest	28.92	28.00	33.39	-4.47*	-5.39*
Rocky Mountains	4.27	4.68	3.93	0.34	0.75
Far West	11.24	10.58	11.30	-0.06	-0.72
Student type					
Undergraduate student	83.23	83.80	81.38	1.85	2.42
Graduate student	16.61	16.06	18.46	-1.85	-2.40
First-professional	‡	‡	‡	‡	‡
CPS record available					
Yes	82.09	80.37	81.04	1.05	-0.67
No	17.91	19.63	18.96	-1.05	0.67
Federal aid status					
Received	74.87	73.95	73.47	1.40*	0.48
Did not receive	13.72	14.27	15.43	-1.71*	-1.16
Unknown	11.41	11.77	11.10	0.31	0.67
Pell Grant status					
Received	53.34	51.20	52.59	0.75	-1.39
Did not receive	46.66	48.80	47.41	-0.75	1.39
Total Pell Grant amount received³					
\$0 or unknown	46.66	48.80	47.41	-0.75	1.39
\$1–\$2,774	15.38	16.20	16.14	-0.76	0.06
\$2,775–\$5,549	20.86	19.98	21.19	-0.33	-1.21
\$5,550 or more	17.10	15.02	15.26	1.84*	-0.24
Stafford Loan status					
Received	74.40	70.99	72.82	1.58*	-1.83
Did not receive	25.60	29.01	27.18	-1.58*	1.83
Total Stafford Loan amount received³					
\$0 or unknown	25.60	29.01	27.18	-1.58*	1.83
\$1–\$4,699	13.64	15.54	14.51	-0.87	1.03
\$4,700–\$6,500	10.83	10.56	10.44	0.39	0.12
\$6,501–\$9,500	18.95	17.69	19.59	-0.64	-1.90*
\$9,501 or more	30.97	27.20	28.28	2.69*	-1.08
Institution total enrollment³					
0–2,628	21.46	19.63	21.98	-0.52	-2.35
2,629–10,233	14.41	14.92	15.47	-1.06	-0.55
10,234–26,884	7.12	7.27	7.44	-0.32	-0.17
26,885 or more	57.01	58.19	55.11	1.90	3.08
Sampled FTB Status					
FTB	6.44	6.89	7.46	-1.02*	-0.57*
Not FTB	93.56	93.11	92.54	1.02*	0.57*

See notes at end of table.

Table J-66. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Age as of Dec 31, 2011					
15–23	17.78	18.03	18.06	-0.28	-0.03
24–29	26.47	27.23	26.89	-0.42	0.34
30 or more	55.75	54.74	55.05	0.70	-0.31
Institution aid status					
Received	4.46	3.75	3.83	0.63	-0.08
Did not receive	84.62	83.55	85.75	-1.13	-2.20
Unknown	10.92	12.70	10.43	0.49	2.27
State aid status					
Received	3.09	3.19	2.95	0.14	0.24
Did not receive	86.18	88.60	86.84	-0.66	1.76
Unknown	10.73	8.20	10.21	0.52	-2.01
Major (2-digit CIP)					
Agriculture, Agriculture Operations, and Related Sciences	†	†	†	†	†
Natural Resources and Conservation	‡	‡	‡	‡	‡
Architecture and Related Services	‡	‡	‡	‡	‡
Area, Ethnic, Cultural, and Gender Studies	†	†	†	†	†
Communication, Journalism, and Related Programs	‡	‡	‡	‡	‡
Communications Technologies/Technicians and Support Services	0.76	0.72	0.72	0.04	#
Computer and Information Sciences and Support Services	9.65	9.93	10.28	-0.63	-0.35
Personal and Culinary Services	1.25	1.60	1.25	#	0.35*
Education	8.16	7.41	7.68	0.48	-0.27
Engineering	‡	‡	‡	‡	‡
Engineering Technologies/Technicians	3.07	2.75	3.03	0.04	-0.28
Foreign Languages, Literatures, and Linguistics	‡	‡	‡	‡	‡
Family and Consumer Sciences/Human Sciences	0.27	0.45	0.36	-0.09	0.09
Legal Professions and Studies	1.46	1.33	1.51	-0.05	-0.18
English Language and Literature/Letters	‡	‡	‡	‡	‡
Liberal Arts and Sciences, General Studies and Humanities	‡	‡	‡	‡	‡
Library Science	‡	‡	‡	‡	‡
Biological and Biomedical Sciences	‡	‡	‡	‡	‡
Mathematics and Statistics	†	†	†	†	†
Military Technologies	‡	‡	‡	‡	‡
Multi/Interdisciplinary Studies	3.06	3.23	3.43	-0.37*	-0.20
Parks, Recreation, Leisure, and Fitness Studies	‡	‡	‡	‡	‡
Philosophy and Religious Studies	†	†	†	†	†
Theology and Religious Vocations	†	†	†	†	†
Physical Sciences	†	†	†	†	†
Science Technologies/Technicians	‡	‡	‡	‡	‡
Psychology	4.04	3.99	3.61	0.43	0.38
Security and Protective Services	10.56	10.47	10.91	-0.35	-0.44
Public Administration and Social Service Professions	2.73	2.59	2.82	-0.09	-0.23
Social Sciences	‡	‡	‡	‡	‡

See notes at end of table.

Table J-66. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Construction Trades	0.01	0.04	0.01	#	0.03
Mechanic and Repair Technologies/Technicians	‡	‡	‡	‡	‡
Precision Production	†	†	†	†	†
Transportation and Materials Moving	‡	‡	‡	‡	‡
Visual and Performing Arts	5.23	5.42	5.33	-0.10	0.09
Health Professions and Related Clinical Sciences	16.79	16.23	16.43	0.36	-0.20
Business, Management, Marketing, and Related Support Services	29.31	29.58	29.37	-0.06	0.21
History (new)	‡	‡	‡	‡	‡
Residency Programs	†	†	†	†	†
Degree Program (undergraduates only)					
Postsecondary award, certificate or diploma of less than 2 academic years	2.35	2.36	2.54	-0.19	-0.18
Associate's Degree	40.41	40.30	42.81	-2.40	-2.51
Postsecondary award, certificate, or diploma of at least 2 but less than 4 academic years	‡	‡	‡	‡	‡
Bachelor's Degree or equivalent	57.08	56.82	54.46	2.62	2.36
Not in a postsecondary award, certificate, diploma, or degree program	‡	‡	‡	‡	‡
Class level of undergraduates					
First year	44.26	47.30	47.35	-3.09	-0.05
Second year	22.76	21.06	20.85	1.91	0.21
Third year	18.75	18.20	17.62	1.13*	0.58
Fourth year	10.27	9.67	9.83	0.44	-0.16
Fifth year or higher	3.95	3.76	4.35	-0.40	-0.59
Percentage of full-time, first time degree/certificate-seeking undergraduate students who received any grant aid ³					
64 or less	13.33	12.59	14.32	-0.99	-1.73
65–80	21.70	20.83	20.45	1.25	0.38
81–92	54.03	55.13	53.79	0.24	1.34
93 or more	10.94	11.45	11.44	-0.50	0.01
Graduation rate of full-time, first-time degree/certificate-seeking undergraduates within 150 percent of normal time to completion ³					
24 or less	60.58	60.38	59.41	1.17	0.97
25–42	32.65	32.84	33.50	-0.85	-0.66
43–60	4.71	4.85	4.66	0.05	0.19
61 or more	2.06	1.93	2.42	-0.36	-0.49
Private institution tuition and fees as percent of core revenues (FASB reporting) ³					
63 or less	0.74	0.83	0.83	-0.09	#
64–79	16.63	18.21	12.78	3.85	5.43
80–98	42.02	40.60	44.62	-2.60	-4.02
99 or more	40.61	40.36	41.77	-1.16	-1.41

See notes at end of table.

Table J-66. Student nonresponse bias analysis for interview respondents after nonresponse and poststratification adjustments, by select variables for students in private for-profit 4-year institutions: 2012—Continued

Variable	After non-response weight adjustment mean, respondents, nonresponse adjusted ¹ (1)	After poststratification adjustment			
		Mean		Difference	
		Full sample, base weighted (2)	Respondents, adjusted for nonresponse and post-stratified (3)	Mean (1) - Mean (3)	Mean (2) - Mean (3)
Private institution instructional expenses per FTE enrollment (FASB reporting) ³					
\$3,121 or less	76.49	76.58	75.66	0.83	0.92
\$3,122–\$5,426	17.25	16.89	18.02	-0.77	-1.13
\$5,427–\$8,864	5.22	5.53	5.40	-0.18	0.13
\$8,865 or more	1.04	1.00	0.92	0.12	0.08

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$.¹ Base weight, adjusted for multiplicity, unknown eligibility and nonresponse.² New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington.³ Enrollment and Stafford Loan categories were defined by quartiles. Pell Grant categories for students receiving less than \$5,550 in Pell Grants were defined by computing the median of all students receiving Pell Grants of less than \$5,550, then all students receiving Pell Grants of \$5,550 are in a single category.

NOTE: Detail may not sum to totals because of rounding. FTB = first time beginner. FTE = full time equivalent. FASB = Financial Accounting Standards Board.

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

Table J-67. Item nonresponse bias before imputation for JOBROLE, by select variables for all students: 2012

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias
Institution type						
Public						
Less-than-2-year	170	270	0.16	0.26	-0.05*	-22.91
2-year	11,260	15,060	32.41	39.02	-3.21*	-9.02
4-year non-doctorate-granting	2,920	2,740	10.75	10.21	0.26	2.51
4-year doctorate-granting	7,640	5,670	27.10	20.87	3.03*	12.58
Private nonprofit						
Less-than-4-year	210	530	0.16	0.33	-0.09*	-35.42
4-year non-doctorate-granting	2,530	2,190	6.60	4.69	0.93*	16.42
4-year doctorate-granting	3,330	2,660	10.82	8.19	1.28*	13.40
Private for-profit						
Less-than-2-year	910	2,430	1.21	3.23	-0.98*	-44.70
2-year	1,570	4,320	1.20	3.18	-0.97*	-44.67
4-year	8,040	11,990	9.60	10.03	-0.21	-2.13
Bureau of Economic Analysis Code (Office of Business Economics) region ¹						
New England	1,960	2,240	4.83	4.91	-0.04	-0.75
Mideast	5,230	6,980	12.99	14.14	-0.56*	-4.11
Great Lakes	6,270	7,620	15.65	14.65	0.48	3.20
Plains	3,430	3,010	10.44	7.73	1.32*	14.48
Southeast	8,830	10,880	22.24	21.70	0.26	1.20
Southwest	5,710	7,200	14.51	15.77	-0.61	-4.05
Rocky Mountains	1,870	2,040	4.54	3.70	0.41*	9.97
Far West	5,300	7,890	14.78	17.41	-1.28*	-7.94
Outlying Areas	†	†	†	†		†
Student type						
Undergraduate student	31,640	43,650	83.30	89.21	-2.87*	-3.33
Graduate student	6,400	3,840	15.52	9.91	2.73*	21.34
First-professional	550	370	1.18	0.89	0.14*	13.65
Age group						
15-23	19,620	26,600	48.33	50.12	-0.87*	-1.77
24-29	7,680	9,380	22.55	21.46	0.53*	2.41
30 or above	11,290	11,870	29.12	28.43	0.34	1.17
Unknown	†	†	†	†		†
CPS record available						
Yes	29,000	33,590	70.91	59.35	5.62*	8.61
No	9,590	14,270	29.09	40.65	-5.62*	-16.19
Federal aid status						
Received	28,370	38,660	69.11	74.25	-2.5*	-3.49
Did not receive	10,220	9,200	30.89	25.75	2.5*	8.80
Pell Grant status						
Received	16,450	23,140	36.90	35.85	0.51	1.40
Did not receive	22,140	24,720	63.10	64.15	-0.51	-0.80
Unknown						
Total Pell Grant amount received ²						
\$0-\$1,616	22,140	24,720	63.10	64.15	-0.51	-0.80
\$1,617-2,840	4,990	8,560	11.87	12.91	-0.51*	-4.08
\$2841 or more	6,490	9,050	14.62	14.51	0.05	0.37
Stafford Loan status						
Received	21,280	23,260	50.44	39.00	5.56*	12.39
Did not receive	17,310	24,600	49.56	61.00	-5.56*	-10.09
Unknown	†	†	†	†		†

See notes at end of table.

Table J-67. Item nonresponse bias before imputation for JOBROLE, by select variables for all students: 2012—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$0–\$3,500	17,310	24,600	49.56	61.00	-5.56*	-10.09
\$3,501–\$5,500	4,510	7,340	10.80	11.03	-0.11	-1.02
\$5,501–\$7,513	5,060	5,960	11.83	9.75	1.01*	9.34
\$7,513 or more	6,250	6,610	12.85	9.62	1.57*	13.91
Institution total enrollment ²						
0–3,803	7,820	13,630	9.18	12.25	-1.49*	-13.99
3,804–10,692	9,730	11,810	23.38	21.26	1.03*	4.61
10,693–24,169	10,070	11,540	31.76	32.10	-0.17	-0.53
24,170 or more	10,980	10,870	35.69	34.39	0.63	1.80

† Not applicable.

* $p < .05$.

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the Outlying Areas for the purposes of NPSAS.

² Categories were formed from continuous variables using quartiles.

NOTE: Detail may not sum to totals because of rounding. CPS = Central Processing System

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

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012

Variable	Variable label	All students	Public			Private nonprofit			Private for-profit			
			Less-than-2-year	2-year	4-year non-doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year	
DEPANY	Dependents: has any dependents											
Before imputation												
Mean estimated relative bias		7.82	37.94	10.82	8.79	8.00	12.57	9.22	8.18	18.11	12.85	10.64
Median estimated relative bias		3.98	16.69	7.01	4.39	4.98	4.49	5.51	4.60	10.33	4.39	7.38
Significant bias		68.63	47.06	67.57	68.57	66.67	47.37	83.78	76.32	78.57	65.63	56.41
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	‡	0.03*	0.02*	0.01	0.05	0.03*	0.01	0.02*	0.03*	#
DEPCARE	Dependents: children in paid childcare											
Before imputation												
Mean estimated relative bias		23.72	123.09	32.79	44.35	55.32	94.77	33.23	48.72	18.64	27.70	22.50
Median estimated relative bias		18.14	31.55	26.76	27.59	26.36	23.80	24.36	23.86	11.58	16.76	14.01
Significant bias		68.63	36.00	76.32	60.00	80.00	31.03	58.97	60.00	38.24	30.56	60.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	#	0.02	0.01	0.13	0.07	0.03	0.01	0.03	0.01
DEPNUM	Dependents: Has any dependents (number)											
Before imputation												
Mean estimated relative bias		8.28	39.78	11.46	9.67	8.64	13.81	10.12	8.69	18.22	13.95	11.64
Median estimated relative bias		4.58	17.00	7.59	5.33	5.74	4.71	6.69	5.42	10.24	4.49	7.93
Significant bias		72.55	47.06	65.79	68.57	69.23	42.11	83.78	76.32	77.42	65.63	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.04	#	0.03	0.07*	0.04	0.02	0.06*	0.01	0.01	0.02
DEPNUMOT	Dependents: has dependent(s) other than children (number)											
Before imputation												
Mean estimated relative bias		8.33	34.12	11.29	10.10	8.75	13.47	10.01	8.65	17.81	13.44	11.50
Median estimated relative bias		4.75	10.37	7.62	8.51	6.07	5.21	6.00	5.51	9.67	4.29	8.54
Significant bias		72.55	5.88	71.05	70.27	70.00	47.62	78.95	73.68	78.13	59.38	56.41
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.13*	0.15	0.11*	0.14*	0.13*	0.04	0.19*	0.10	0.21*	0.24*	0.16*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DEPOTHER												
Dependents: has dependent(s) other than children												
Before imputation												
Mean estimated relative bias		8.26	39.78	11.43	9.67	8.62	13.81	10.07	8.69	18.20	13.95	11.64
Median estimated relative bias		4.57	17.00	7.57	5.31	5.71	4.71	6.71	5.42	10.27	4.49	7.95
Significant bias		70.59	47.06	65.79	68.57	69.23	42.11	83.78	76.32	74.19	65.63	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.04*	0.01	0.03	0.03	0.04	#	0.01	0.04	0.02	#
DEPYNG												
Dependents: children, age of youngest												
Before imputation												
Mean estimated relative bias		22.31	52.41	28.96	39.68	51.46	93.67	30.15	47.96	14.76	25.28	20.98
Median estimated relative bias		16.68	26.64	24.03	24.26	20.98	29.05	20.96	24.04	9.27	18.89	12.38
Significant bias		68.63	37.50	78.95	62.50	75.00	37.93	58.97	65.00	41.18	33.33	70.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.26*	#	#	0.01	0.26*	0.01	#	0.30*	0.08*	0.01
HISPTYPE												
Race-ethnicity: type of Hispanic origin												
Before imputation												
Mean estimated relative bias		6.39	24.59	9.12	5.83	3.76	8.25	4.78	4.07	10.70	8.22	6.94
Median estimated relative bias		5.31	11.05	8.00	3.80	2.78	2.77	2.45	2.43	7.22	2.92	3.74
Significant bias		68.63	50.00	78.95	58.97	60.00	3.57	45.95	45.00	51.43	32.43	60.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.24*	0.33*	0.21*	0.31*	0.20*	0.54*	0.21*	0.15*	0.33*	0.32*	0.26*
HOMELESS												
Homeless or at risk of homelessness												
Before imputation												
Mean estimated relative bias		65.72	53.11	24.07	49.73	77.63	30.57	92.14	93.78	36.44	25.88	202.10
Median estimated relative bias		18.53	25.53	19.55	23.02	22.95	12.96	16.50	29.98	23.20	10.17	24.01
Significant bias		83.33	38.10	77.14	67.57	75.68	31.82	81.08	73.68	66.67	48.39	75.68
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.37	0.34*	0.23	0.27*	#	0.07	0.15	0.28*	0.09	0.03

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
ORPHAN	Orphan, ward of court, emancipated minor, or in legal guardianship											
Before imputation												
Mean estimated relative bias		70.83	127.46	17.23	53.77	79.64	16.04	82.89	102.11	40.02	25.40	12,961.01
Median estimated relative bias		11.42	27.50	12.83	14.38	11.03	6.91	9.14	15.66	20.67	7.59	21.32
Significant bias		77.55	31.82	66.67	76.32	73.68	26.09	83.33	76.32	67.74	50.00	71.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.01	#	0.02	0.01	#	#	0.02*	0.01	0.01
USBORN	Born in the U.S. (student)											
Before imputation												
Mean estimated relative bias		8.13	16.53	6.95	6.41	5.86	19.25	6.98	6.68	10.32	8.15	9.58
Median estimated relative bias		5.70	10.05	5.61	4.70	2.30	8.10	4.32	5.63	7.07	6.21	6.12
Significant bias		80.39	13.79	68.42	47.50	47.50	16.13	47.50	48.78	30.56	27.03	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.03*	0.03*	#	0.02	0.21	0.05*	0.01	0.08	0.02	0.04*
DEPCOL	Number of dependents in college											
Before imputation												
Mean estimated relative bias		20.27	80.29	30.29	28.32	30.05	25.39	20.38	32.29	29.37	26.82	17.72
Median estimated relative bias		12.99	48.16	19.94	11.77	17.38	7.07	13.54	17.06	15.27	9.08	9.79
Significant bias		78.43	52.94	86.84	62.50	68.57	40.00	57.14	69.44	82.14	64.52	64.10
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	0.04	0.05*	0.01	#	0.22	0.10	0.04	0.14	0.33	0.12*
DEPINC	Dependent parent income (cont)											
Before imputation												
Mean estimated relative bias		10.58	10.29	10.59	12.63	15.00	33.14	17.25	19.62	8.92	8.95	6.44
Median estimated relative bias		6.71	6.17	7.74	8.85	9.08	3.89	7.49	7.27	2.95	3.24	1.97
Significant bias		70.45	55.56	68.75	61.54	65.63	45.45	72.73	48.28	76.92	68.75	54.55
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.13*	0.21*	0.22*	0.17*	0.10*	0.26*	0.05*	0.05*	0.13*	0.19*	0.10*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DISTANCE												
Distance from student's home to NPSAS school												
Before imputation												
Mean estimated relative bias		6.70	26.03	9.22	5.89	5.32	12.95	7.21	6.26	9.98	9.34	7.65
Median estimated relative bias		5.66	10.96	8.62	5.08	3.72	7.26	3.02	4.80	6.91	3.92	4.96
Significant bias		72.00	40.91	73.68	69.23	71.79	37.50	61.11	65.71	63.64	50.00	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01*	0.04	0.08*	0.01	0.03*	0.10	0.02	0.05*	0.06	0.04	0.01
DSTUINC												
Dependent student income (cont)												
Before imputation												
Mean estimated relative bias		50.41	93.99	27.89	55.03	43.70	43.01	87.92	64.79	40.02	32.12	10,267.98
Median estimated relative bias		16.35	21.29	21.42	22.48	18.83	10.32	17.49	21.85	26.67	12.58	28.87
Significant bias		87.50	37.50	73.53	77.78	77.78	40.00	82.86	75.68	81.48	75.86	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.13*	0.01	0.18*	0.09*	0.10*	0.07	0.15*	0.04	0.05	0.02	0.04
EFCCPS												
EFC (CPS)												
Before imputation												
Mean estimated relative bias		19.93	38.53	23.80	22.30	26.05	27.16	24.22	32.79	20.48	14.86	20.13
Median estimated relative bias		13.54	8.91	16.92	19.78	19.35	12.46	17.18	19.77	12.08	7.04	14.92
Significant bias		80.00	42.11	75.68	71.79	75.00	45.00	82.05	85.00	65.63	71.88	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.22*	0.32*	0.41*	0.26*	0.12*	0.29*	0.06*	0.01	0.37*	0.32*	0.19*
FEDBEN												
Received federal benefit: Any												
Before imputation												
Mean estimated relative bias		8.37	39.77	11.55	9.73	8.72	14.38	10.18	8.81	18.23	14.26	11.73
Median estimated relative bias		4.44	17.07	7.76	5.47	5.92	5.09	6.29	5.42	10.22	4.63	8.06
Significant bias		72.55	47.06	65.79	68.57	71.79	47.37	83.78	76.32	77.42	68.75	56.41
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	‡	0.07*	0.06*	0.03*	0.05*	0.01*	0.04*	0.04*	0.04*	0.04*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
FEDBENA												
Received federal benefit: Food Stamp Benefit												
Before imputation												
Mean estimated relative bias		8.41	38.74	10.54	9.08	7.52	22.87	8.78	7.76	26.05	14.76	9.43
Median estimated relative bias		5.21	11.65	7.73	6.98	3.46	8.41	4.56	4.77	13.81	4.74	4.15
Significant bias		74.51	40.00	68.42	60.00	62.50	25.00	56.41	60.98	63.64	62.86	42.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.30*	0.31*	0.31*	0.27*	0.31*	0.17*	0.30*	0.33*	0.16*	0.23*	0.32*
FEDBENB												
Received federal benefit: Free/Reduced Price School Lunch												
Before imputation												
Mean estimated relative bias		8.41	38.74	10.54	9.08	7.52	22.87	8.78	7.76	26.05	14.76	9.43
Median estimated relative bias		5.21	11.65	7.73	6.98	3.46	8.41	4.56	4.77	13.81	4.74	4.15
Significant bias		74.51	40.00	68.42	60.00	62.50	25.00	56.41	60.98	63.64	62.86	42.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.26*	0.26*	0.27*	0.21*	0.25*	0.06	0.25*	0.25*	0.10*	0.19*	0.32*
FEDBENC												
Received federal benefit: Supplemental Security Income												
Before imputation												
Mean estimated relative bias		8.41	38.74	10.54	9.08	7.52	22.87	8.78	7.76	26.05	14.76	9.43
Median estimated relative bias		5.21	11.65	7.73	6.98	3.46	8.41	4.56	4.77	13.81	4.74	4.15
Significant bias		74.51	40.00	68.42	60.00	62.50	25.00	56.41	60.98	63.64	62.86	42.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.24*	0.01*	0.24*	0.22*	0.28*	0.01	0.24*	0.37*	0.05	0.15*	0.24*
FEDBEND												
Received federal benefit: TANF Benefits												
Before imputation												
Mean estimated relative bias		8.41	38.74	10.54	9.08	7.52	22.87	8.78	7.76	26.05	14.76	9.43
Median estimated relative bias		5.21	11.65	7.73	6.98	3.46	8.41	4.56	4.77	13.81	4.74	4.15
Significant bias		74.51	40.00	68.42	60.00	62.50	25.00	56.41	60.98	63.64	62.86	42.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.27*	0.01	0.27*	0.28*	0.29*	#	0.34*	0.40*	0.05	0.12*	0.32*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
FEDBENE	Received federal benefit: WIC Benefits											
Before imputation												
Mean estimated relative bias		8.41	38.74	10.54	9.08	7.52	22.87	8.78	7.76	26.05	14.76	9.43
Median estimated relative bias		5.21	11.65	7.73	6.98	3.46	8.41	4.56	4.77	13.81	4.74	4.15
Significant bias		74.51	40.00	68.42	60.00	62.50	25.00	56.41	60.98	63.64	62.86	42.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.28*	0.05*	0.28*	0.25*	0.33*	0.23	0.33*	0.26*	0.15*	0.18*	0.30*
ISTUINC	Independent student income (cont)											
Before imputation												
Mean estimated relative bias		25.18	47.39	30.91	30.17	37.20	28.79	35.70	50.20	26.11	17.92	21.85
Median estimated relative bias		17.79	17.10	29.78	22.20	30.18	8.28	21.19	16.67	15.44	8.18	16.64
Significant bias		78.00	33.33	70.27	64.86	75.00	44.44	64.86	73.68	76.67	67.74	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.19*	0.08	0.22*	0.21*	0.22*	0.24*	0.17*	0.13*	0.08*	0.06*	0.12*
ISTUINCX	Independent student income (cat)											
Before imputation												
Mean estimated relative bias		12.68	49.43	19.17	15.61	14.97	18.49	13.59	15.13	23.55	18.30	13.52
Median estimated relative bias		7.54	25.98	14.85	8.83	8.12	5.84	11.55	10.37	12.27	6.69	9.64
Significant bias		74.51	41.18	81.58	61.76	67.57	47.37	62.16	75.68	79.31	62.50	58.97
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.07*	0.05*	0.04*	0.03*	‡	0.04	0.03	‡	‡	0.03*
LOCALRES	Housing											
Before imputation												
Mean estimated relative bias		8.27	35.46	10.55	7.34	5.97	4.13	6.78	6.63	14.13	12.06	9.12
Median estimated relative bias		6.87	17.22	8.47	6.34	5.19	3.69	2.51	5.28	6.53	4.24	4.99
Significant bias		72.00	52.63	63.16	50.00	65.79	25.00	64.71	73.53	76.92	55.88	58.97
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	0.07	0.07*	0.10*	0.04*	0.01	0.02*	0.03*	0.02*	0.04*	0.04*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
PAGI	Dependent student parents AGI											
Before imputation												
Mean estimated relative bias		51.81	159.49	29.03	55.11	46.64	50.81	87.92	64.86	41.25	38.88	9,641.77
Median estimated relative bias		20.22	21.59	21.24	23.18	19.18	10.17	17.68	22.13	29.20	13.81	30.87
Significant bias		87.50	37.50	73.53	77.78	77.78	40.00	85.71	75.68	81.48	75.86	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.10*	0.19*	0.20*	0.14*	0.08*	0.08*	0.03*	0.02	0.10*	0.16*	0.12*
PARBORN	Parent born in US, PR, or US Territory											
Before imputation												
Mean estimated relative bias		8.12	16.96	6.97	6.47	5.87	18.39	7.02	6.62	10.41	7.95	9.57
Median estimated relative bias		5.65	9.81	5.67	4.67	2.34	8.92	4.17	5.41	7.32	5.83	6.17
Significant bias		80.39	10.71	68.42	47.50	47.50	16.13	47.50	58.54	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.03	0.03*	0.03	0.02	0.19	0.02	0.06*	0.02	0.07	0.08*
PDADED	Father highest education level											
Before imputation												
Mean estimated relative bias		7.45	33.72	10.78	9.69	7.87	14.57	9.29	8.97	15.86	13.04	10.88
Median estimated relative bias		4.15	13.02	7.16	7.53	4.06	8.50	6.03	5.83	9.25	4.98	7.45
Significant bias		64.71	38.10	65.79	65.00	62.50	46.15	69.23	73.17	60.61	71.43	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.11*		0.12*	0.12*	0.09*	0.44*	0.09*	0.07*	0.37*	0.28*	0.17*
PFAMNUM	Family size (dependent)											
Before imputation												
Mean estimated relative bias		48.38	221.77	20.79	62.58	33.09	25.88	58.50	73.90	49.77	33.00	10,487.23
Median estimated relative bias		12.75	22.49	13.59	9.61	8.41	8.58	8.37	12.58	26.02	10.48	26.49
Significant bias		81.63	56.25	74.29	71.88	69.44	21.43	78.79	78.13	86.96	66.67	72.22
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	0.01	#	#	0.01*	0.01	#

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
PFEDTAX												
Dependent student parents federal tax paid												
Before imputation												
Mean estimated relative bias		48.89	84.80	27.52	51.91	41.04	36.75	82.28	62.17	40.86	31.02	8970.05
Median estimated relative bias		18.36	20.74	21.29	20.74	17.42	13.22	14.72	21.61	27.75	11.93	29.56
Significant bias		89.58	31.25	77.14	72.97	75.00	55.56	83.33	75.68	78.57	72.41	67.57
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.12*	0.07	0.35*	0.18*	0.04*	0.07	0.02	0.06	0.20*	0.31*	0.21*
PINCOL												
Number of family members in college (dependent)												
Before imputation												
Mean estimated relative bias		50.02	244.71	26.90	57.06	35.32	38.22	60.96	68.10	54.34	43.61	10,288.14
Median estimated relative bias		14.99	24.93	14.56	18.25	11.59	8.77	11.38	12.51	26.76	11.09	27.60
Significant bias		85.71	50.00	74.29	78.38	75.68	37.50	81.82	69.44	84.00	66.67	69.44
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.02	#	#	0.01*	0.01	#	#	0.01	0.04*	0.01
PMOMED												
Mother highest education level												
Before imputation												
Mean estimated relative bias		7.15	33.29	10.24	9.21	7.57	13.82	9.16	8.49	15.32	12.09	10.81
Median estimated relative bias		3.42	13.75	5.77	7.53	4.63	8.06	6.66	6.05	9.03	5.92	6.88
Significant bias		62.75	42.86	68.42	65.00	57.50	57.69	71.79	68.29	63.64	63.89	62.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.12*	0.15	0.13*	0.11*	0.09*	0.22*	0.09*	0.06*	0.31*	0.30*	0.20*
PTAXFILE												
Dependent student parents federal tax filed												
Before imputation												
Mean estimated relative bias		50.41	93.99	27.85	55.08	43.69	43.01	87.92	64.79	40.06	32.17	10,280.65
Median estimated relative bias		16.32	21.29	21.38	22.41	18.82	10.32	17.49	21.85	26.70	12.48	28.87
Significant bias		87.50	37.50	73.53	77.78	77.78	40.00	82.86	75.68	81.48	75.86	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	0.02	0.09*	0.05	0.04*	0.02	0.12*	0.22*	0.03*	0.02*	0.01*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
SAGI												
	Independent student AGI											
Before imputation												
	Mean estimated relative bias	27.80	50.51	36.02	33.39	42.59	31.22	38.76	60.87	31.62	20.76	24.18
	Median estimated relative bias	20.04	31.37	37.33	25.15	30.96	10.07	25.40	19.65	18.63	9.75	18.87
	Significant bias	80.00	33.33	75.68	72.97	72.50	44.44	67.57	76.32	66.67	61.29	61.54
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.08*	0.04	0.08*	0.08*	0.14*	#	0.10*	0.04	0.09*	0.05*	0.04*
SFEDTAX												
	Independent student federal tax paid											
Before imputation												
	Mean estimated relative bias	24.26	78.48	30.34	29.09	36.11	23.91	33.94	48.82	26.84	17.68	20.02
	Median estimated relative bias	17.88	22.39	32.38	30.78	27.06	11.28	21.99	19.06	15.87	8.80	14.58
	Significant bias	88.00	50.00	72.97	66.67	77.50	42.86	65.79	67.50	67.74	72.73	61.54
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.10*	0.11	0.09*	0.15*	0.17*	0.05	0.15	0.04	0.25*	0.02	0.02
SINCOL												
	Number of family members in college (independent)											
Before imputation												
	Mean estimated relative bias	11.05	46.22	17.93	12.78	11.68	10.78	10.47	11.24	20.53	15.61	11.46
	Median estimated relative bias	7.77	25.75	13.04	5.22	6.44	7.40	7.96	6.48	12.33	6.07	8.12
	Significant bias	76.47	52.94	81.08	45.45	58.33	42.86	65.71	80.00	74.07	62.50	64.10
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.01*	0.01	0.02*	0.02*	0.01*	0.02	0.02*	0.01	0.01*	0.02*	0.01*
SPINCOL												
	Spouse attending college											
Before imputation												
	Mean estimated relative bias	25.96	96.22	37.00	27.52	38.86	25.25	21.80	36.84	44.15	34.49	25.09
	Median estimated relative bias	17.69	51.06	37.20	13.68	16.48	17.75	9.05	17.42	24.94	14.79	13.47
	Significant bias	78.43	52.94	81.58	62.50	69.44	25.00	51.43	75.00	80.00	58.06	58.97
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.09*	‡	0.11*	0.09*	0.03	‡	0.11*	0.06	0.36*	0.18*	0.13*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
SPSINC												
Before imputation	Independent student spouse income (cont)											
Mean estimated relative bias		38.94	105.25	51.90	53.63	65.56	27.90	42.94	88.49	57.94	36.66	38.48
Median estimated relative bias		30.33	46.08	42.03	37.38	32.51	17.57	24.69	28.71	28.92	18.28	27.31
Significant bias		78.00	37.50	75.68	67.65	70.27	33.33	62.16	67.57	76.92	51.61	60.53
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.18*	0.10	0.23*	0.18*	0.16*	0.01	0.11*	0.10*	0.15*	0.15*	0.12*
SPSINCX												
Before imputation	Independent student spouse income (cat)											
Mean estimated relative bias		26.75	102.29	37.77	28.53	39.62	31.01	22.96	39.75	48.62	35.97	26.31
Median estimated relative bias		18.44	44.74	31.66	13.10	16.23	28.26	13.66	17.62	30.59	17.61	14.27
Significant bias		78.43	41.18	81.08	62.50	72.22	28.57	55.88	82.86	80.00	58.06	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	0.13*	0.06*	0.02	0.04*	0.30	0.01	0.06	0.15*	0.11*	0.05*
STAXFILE												
Before imputation	Independent student federal tax filed											
Mean estimated relative bias		25.18	47.39	30.90	30.17	37.20	28.79	35.63	50.20	26.11	17.92	21.85
Median estimated relative bias		17.78	17.10	29.79	22.20	30.18	8.28	21.17	16.67	15.44	8.18	16.64
Significant bias		78.00	33.33	70.27	64.86	75.00	44.44	64.86	73.68	76.67	67.74	61.54
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	0.02	0.05*	#	0.04	0.02	0.01	0.05	0.05*	0.02	0.02*
EMPLWAIV												
Before imputation	Institution tuition waivers for staff											
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	#	0.61	0.20	0.02	#	0.04	0.04	#	0.19	0.02

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
EMPLYAM3	Employer aid (student & parents)											
Before imputation												
Mean estimated relative bias		7.17	18.98	6.31	5.83	5.34	13.78	5.67	6.20	7.88	7.20	7.40
Median estimated relative bias		4.39	11.68	4.75	4.22	2.47	6.18	2.97	4.60	6.33	4.55	4.63
Significant bias		76.47	22.22	63.16	55.00	62.50	3.23	40.00	63.41	20.00	27.03	47.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.11*	0.19	0.07*	0.01	0.09*	0.03	0.04	0.04	0.13	0.21*	0.25*
GRGRDAMT	Other graduate assistantship amount											
Before imputation												
Mean estimated relative bias		11.96	†	†	31.36	18.16	†	34.19	9.93	†	†	413.95
Median estimated relative bias		3.49	†	†	3.93	4.23	†	3.90	4.02	†	†	5.64
Significant bias		48.65	†	†	22.22	46.15	†	40.00	65.38	†	†	34.78
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	#	#	0.23	0.03	#	0.17*	0.07	#	#	0.96
GRRESAMT	Graduate research assistantship amount											
Before imputation												
Mean estimated relative bias		12.23	†	†	24.90	19.87	†	32.78	10.17	†	†	352.85
Median estimated relative bias		4.25	†	†	3.97	4.70	†	3.79	3.86	†	†	5.72
Significant bias		51.35	†	†	22.22	42.31	†	40.00	65.38	†	†	34.78
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05	#	#	0.24	0.03	#	0.63	0.04	#	#	0.95
GRTEAAMT	Graduate teaching assistantship amount											
Before imputation												
Mean estimated relative bias		11.92	†	†	26.40	18.69	†	37.63	9.74	†	†	356.46
Median estimated relative bias		3.76	†	†	4.45	4.35	†	3.58	3.25	†	†	5.73
Significant bias		54.05	†	†	22.22	46.15	†	40.00	57.69	†	†	34.78
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05	#	#	0.09	0.07*	#	0.84*	0.03	#	#	1.00

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
INATHAMT Athletic scholarships												
Before imputation												
Mean estimated relative bias		6.62	18.63	10.32	4.40	4.39	4.59	3.82	6.11	32.92	9.95	8.21
Median estimated relative bias		6.24	9.46	10.95	3.07	3.36	1.94	2.18	5.56	11.56	4.34	5.61
Significant bias		68.75	60.00	77.14	50.00	57.14	31.25	37.93	50.00	70.83	62.07	61.76
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	#	0.27	#	0.03*	0.08	0.02	0.06	#	1.00	#
INLNAMT Institution loans												
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	#	0.39	0.03	0.01	#	0.05	0.09	0.12	0.13	0.06
INSMERIT Institution merit-only grants												
Before imputation												
Mean estimated relative bias		6.62	18.63	10.32	4.40	4.39	4.59	3.82	6.11	32.92	9.95	8.21
Median estimated relative bias		6.24	9.46	10.95	3.07	3.36	1.94	2.18	5.56	11.56	4.34	5.61
Significant bias		68.75	60.00	77.14	50.00	57.14	31.25	37.93	50.00	70.83	62.07	61.76
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.38	0.44*	#	0.02*	0.07	0.01	0.02	0.44	0.25*	0.19*
INSTNEED Institution need-based grants												
Before imputation												
Mean estimated relative bias		12.91	18.63	10.32	8.56	9.32	4.59	9.82	21.36	32.92	9.95	12.76
Median estimated relative bias		6.69	9.46	10.95	4.36	4.38	1.94	3.00	9.43	11.56	4.34	6.47
Significant bias		71.43	60.00	77.14	61.29	67.57	31.25	51.52	79.41	70.83	62.07	69.44
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.26	0.17*	0.01	#	0.07	#	0.03	0.38	0.34	0.11

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
INSTWRK	Institution work-study											
Before imputation												
Mean estimated relative bias		62.27	18.63	308.36	52.84	54.52	525.68	23.71	39.91	32.92	389.19	153.42
Median estimated relative bias		5.81	9.46	11.22	3.80	3.34	2.17	2.62	5.85	11.56	4.54	5.67
Significant bias		70.59	60.00	78.38	57.58	60.00	42.11	50.00	59.46	70.83	58.06	55.26
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	#	0.12	0.02	0.03	#	#	0.04	#	1.00	1.00
INSWAIV	Institution tuition & fee waivers											
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.05	0.10	0.01	0.02	0.06	0.06	0.05	0.12	0.08	0.01
OTHFDGRT	Other federal grants (not Title IV)											
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	0.02	0.07	0.05	0.03*	0.69	0.03	0.04	0.12	0.26	0.74*
PRIVLOAN	Private (alternative) loans											
Before imputation												
Mean estimated relative bias		7.37	19.33	6.13	5.63	4.92	16.49	5.93	5.34	6.76	7.06	7.86
Median estimated relative bias		5.22	11.19	4.89	4.27	2.24	9.40	3.22	4.09	3.46	3.63	3.25
Significant bias		76.47	26.92	71.05	55.00	57.50	6.67	43.59	51.22	20.00	35.14	37.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.67*	0.31*	0.15*	0.05*	0.12	0.06*	0.03	0.08	0.02	0.11*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
STATNEED												
State need-based grants												
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.05	0.01	0.02*	0.01	0.28	0.01	0.02	0.39	0.26*	0.11
STMERIT												
State merit-only grants												
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.05	0.02	0.01	0.01	#	0.02	0.01	1.00	1.00	0.14
STNOND1												
State non-need grants												
Before imputation												
Mean estimated relative bias		11.97	18.63	10.32	12.61	6.83	4.59	9.73	9.01	32.92	9.95	11.35
Median estimated relative bias		6.07	9.46	10.95	3.86	3.17	1.94	2.45	5.48	11.56	4.34	4.81
Significant bias		68.00	60.00	77.14	53.13	61.54	31.25	38.24	52.78	70.83	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.05	0.08	0.01	0.01	0.02	0.04	0.09*	#	0.95	0.27
STWKAMT												
State work-study total												
Before imputation												
Mean estimated relative bias		62.27	18.63	308.36	52.84	54.52	525.68	23.71	39.91	32.92	389.19	153.42
Median estimated relative bias		5.81	9.46	11.22	3.80	3.34	2.17	2.62	5.85	11.56	4.54	5.67
Significant bias		70.59	60.00	78.38	57.58	60.00	42.11	50.00	59.46	70.83	58.06	55.26
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	0.05	0.01	0.02	0.03	#	0.05	0.06	1.00	0.58	0.88

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
VADODAMT												
Veteran's benefits and DOD												
Before imputation												
Mean estimated relative bias		12.04	18.63	10.54	12.19	6.86	4.44	9.82	9.07	33.46	10.05	11.54
Median estimated relative bias		6.04	9.46	11.45	4.50	3.27	1.84	2.43	5.67	13.49	4.47	5.39
Significant bias		70.00	60.00	77.14	58.82	61.54	31.25	38.24	52.78	76.00	62.07	54.05
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.13*	0.01	0.22*	0.06	0.05*	0.07	0.08	0.05	0.34*	0.14*	0.14*
VOCHELP												
Vocational rehabilitation and training												
Before imputation												
Mean estimated relative bias		6.62	18.63	10.32	4.40	4.39	4.59	3.82	6.11	32.92	9.95	8.21
Median estimated relative bias		6.24	9.46	10.95	3.07	3.36	1.94	2.18	5.56	11.56	4.34	5.61
Significant bias		68.75	60.00	77.14	50.00	57.14	31.25	37.93	50.00	70.83	62.07	61.76
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.05	0.01	0.03	0.01	0.08	0.06	0.11	0.07	0.18*	0.28
BAYEAR												
Year received bachelor degree												
Before imputation												
Mean estimated relative bias		7.58	†	†	13.68	8.19	†	11.45	8.33	†	†	17.46
Median estimated relative bias		5.21	†	†	7.10	4.74	†	9.20	6.71	†	†	6.54
Significant bias		48.72	†	†	63.16	53.13	†	56.52	62.07	†	†	37.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
GPA												
Grade point average												
Before imputation												
Mean estimated relative bias		8.22	33.97	10.42	6.43	4.46	17.47	6.50	6.68	18.02	11.73	9.58
Median estimated relative bias		5.71	12.92	9.36	4.88	3.11	6.45	2.68	3.66	9.72	4.39	4.65
Significant bias		74.00	39.29	68.42	61.11	60.53	25.00	48.57	45.71	55.88	41.18	62.16
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.02	#	#	#	#	#	#	0.02	#	0.01*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
GRADPYR	Year began graduate degree											
Before imputation												
Mean estimated relative bias		13.12	†	†	20.59	16.31	†	21.93	10.64	†	†	125.36
Median estimated relative bias		5.96	†	†	3.42	4.81	†	7.16	5.19	†	†	8.39
Significant bias		51.28	†	†	21.05	45.16	†	46.15	44.83	†	†	37.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
HSGRADYY	High school graduation year											
Before imputation												
Mean estimated relative bias		9.06	30.33	9.92	6.85	6.76	6.79	14.09	13.06	15.09	9.35	10.60
Median estimated relative bias		5.51	13.85	9.56	6.30	5.16	2.18	4.37	5.04	9.45	5.30	7.30
Significant bias		72.00	34.78	76.32	71.79	74.36	0.00	56.76	60.53	52.94	42.86	41.03
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
PSECTYR	Year first enrolled in postsecondary education											
Before imputation												
Mean estimated relative bias		9.29	18.82	6.92	10.47	5.25	18.29	11.35	12.17	9.78	7.09	6.42
Median estimated relative bias		6.38	11.44	5.14	4.75	3.24	9.94	3.63	5.18	8.20	5.03	5.29
Significant bias		84.00	37.04	76.32	60.00	61.54	13.33	50.00	50.00	36.11	40.54	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
ALTANY	Alternative courses: took online, night, or weekend classes at NPSAS											
Before imputation												
Mean estimated relative bias		8.05	17.02	7.06	6.41	5.69	16.60	7.21	6.65	9.68	8.04	9.87
Median estimated relative bias		5.13	9.84	5.55	4.59	2.33	9.33	4.52	5.24	6.11	5.31	6.12
Significant bias		76.47	10.34	68.42	47.50	47.50	12.90	47.50	58.54	25.00	27.03	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.14	0.01	#	0.01	0.33*	0.01	0.03	0.21*	#	0.04*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
ALTNIGHT	Alternative courses: took classes at night in 2011–12											
Before imputation												
Mean estimated relative bias		21.06	77.31	11.13	10.14	10.09	32.37	10.92	12.87	19.02	15.24	13.27
Median estimated relative bias		8.16	33.63	8.75	8.18	4.55	13.10	6.66	7.90	13.29	12.53	8.79
Significant bias		76.47	20.69	71.05	50.00	52.50	3.23	50.00	56.10	13.89	24.32	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	0.09	0.02*	0.01	0.01	0.26*	0.08*	0.01	0.03	0.08*	0.28*
ALTONLN	Alternative courses: took classes only online in 2011–12											
Before imputation												
Mean estimated relative bias		21.08	77.31	11.12	10.14	10.16	32.37	10.97	12.69	18.94	15.24	13.29
Median estimated relative bias		8.15	33.63	8.70	8.18	4.84	13.10	6.70	7.71	13.30	12.53	8.83
Significant bias		76.47	20.69	73.68	50.00	52.50	3.23	50.00	56.10	13.89	24.32	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.07*	0.09	0.04*	0.08*	0.05*	0.41*	0.09*	0.05*	0.08	0.08	0.29*
ALTONLN2	Alternative courses: program at NPSAS was entirely online											
Before imputation												
Mean estimated relative bias		140.90	164.89	32.70	54.22	43.52	40.72	80.41	89.71	1,274.20	1,373.23	50.69
Median estimated relative bias		47.33	63.45	21.81	22.60	14.32	31.63	44.55	28.99	160.13	47.35	16.32
Significant bias		78.00	60.71	65.79	23.08	41.03	91.67	42.50	17.50	88.46	33.33	65.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
ALTWKND	Alternative courses: took classes on the weekend in 2011–12											
Before imputation												
Mean estimated relative bias		21.08	77.31	11.13	10.14	10.13	32.37	10.92	12.85	18.86	15.24	13.29
Median estimated relative bias		8.15	33.63	8.73	8.18	4.81	13.10	6.66	7.82	12.86	12.52	8.82
Significant bias		76.47	20.69	73.68	50.00	52.50	3.23	50.00	56.10	13.89	24.32	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.34	0.01	0.03	#	#	0.03*	0.01	0.14	0.13	0.17*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
ATTENDMR	Main reason for attending NPSAS											
Before imputation												
Mean estimated relative bias		736.77	206.83	31.97	60.86	210.21	19.01	1086.92	8610.26	158.97	34.36	1679.22
Median estimated relative bias		32.74	48.53	10.46	20.34	26.02	25.10	20.83	57.10	54.83	14.89	41.64
Significant bias		46.00	57.89	18.92	13.79	28.57	0.00	37.04	50.00	45.45	27.78	31.25
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.18*	0.65*	0.21*	0.04	0.11	‡	‡	‡	#	28.41*	1.54
BANK1	Bank accounts: had checking or savings account											
Before imputation												
Mean estimated relative bias		8.13	17.14	6.94	6.54	5.84	18.29	7.16	6.82	10.39	8.14	9.60
Median estimated relative bias		5.69	10.18	5.58	4.87	2.44	8.47	4.50	5.13	7.10	5.95	5.81
Significant bias		80.39	10.34	68.42	47.50	47.50	19.35	47.50	58.54	30.56	27.03	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.01	#	0.05	0.02	0.10	0.03	0.02	0.10*	0.02	#
BANK2	Bank accounts: individual or shared											
Before imputation												
Mean estimated relative bias		10.10	19.96	7.05	6.84	6.11	22.12	7.60	6.97	13.15	8.63	10.84
Median estimated relative bias		6.30	14.06	5.50	4.59	2.26	12.53	4.56	5.34	10.78	5.37	6.69
Significant bias		72.55	13.79	68.42	45.00	42.50	19.35	47.50	48.78	36.11	21.62	50.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.03	0.01	#	#	0.03	0.01	0.01	0.08*	0.01	#
CRBALCR	Credit cards: balance carried over each month											
Before imputation												
Mean estimated relative bias		16.69	24.09	10.49	9.57	10.99	26.53	10.82	10.26	20.45	11.29	16.13
Median estimated relative bias		9.33	16.50	6.55	6.93	5.22	20.38	6.63	7.84	17.95	8.85	9.16
Significant bias		80.39	10.00	63.16	45.00	57.50	16.13	45.00	48.78	38.89	8.11	62.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.01	0.03*	0.01	0.06	0.01	#	0.18*	#	0.03

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
CRBALDUE												
Credit cards: balance due on all credit cards												
Before imputation												
Mean estimated relative bias		20.54	36.66	17.52	18.49	20.68	40.92	22.83	23.25	31.74	17.58	21.81
Median estimated relative bias		10.65	19.53	10.86	10.11	9.92	24.71	12.95	15.39	26.92	15.17	12.48
Significant bias		56.86	3.33	65.79	42.50	62.50	22.58	55.00	56.10	55.56	24.32	62.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.19	0.04	0.08*	#	0.45*	0.09*	0.03	0.09	0.03	0.02
CRNUMCRD												
Credit cards: number of credit cards in own name												
Before imputation												
Mean estimated relative bias		8.15	17.11	6.95	6.50	5.97	18.41	7.35	6.90	10.49	8.10	9.77
Median estimated relative bias		5.40	10.81	5.59	4.86	2.51	9.52	4.52	4.78	7.37	6.11	5.93
Significant bias		80.39	13.33	68.42	47.50	50.00	16.13	47.50	53.66	30.56	24.32	60.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.04	0.03*	0.01	0.01	0.22*	#	0.05*	0.11	0.06	0.03
CRTUIT												
Credit cards: used credit cards to pay tuition and fees in 2011–12												
Before imputation												
Mean estimated relative bias		16.79	24.54	10.57	9.47	10.87	26.53	10.83	10.28	20.35	11.41	16.28
Median estimated relative bias		9.54	15.65	6.68	6.71	5.20	20.38	6.32	7.48	17.85	8.02	9.15
Significant bias		80.39	13.33	63.16	45.00	52.50	16.13	47.50	53.66	38.89	10.81	62.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.13	0.02*	0.01	#	0.13*	0.01	#	0.04	0.09*	0.01
CRTUIT2												
Credit cards: only source available to pay tuition and fees in 2011–12												
Before imputation												
Mean estimated relative bias		36.86	123.69	19.52	21.47	19.54	57.61	28.76	23.26	51.16	32.72	59.83
Median estimated relative bias		13.72	23.22	8.90	11.45	6.66	29.73	15.32	9.37	24.36	22.38	26.18
Significant bias		58.82	10.00	47.37	37.50	40.00	16.13	32.50	24.39	33.33	16.22	62.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	#	0.03*	#	#	0.03	0.01	0.02	0.04	0.20*	#

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DEGPR												
Before imputation												
Mean estimated relative bias	Prior degree earned since high school	7.11	19.16	6.21	5.49	4.87	13.88	5.69	5.37	7.66	7.37	7.73
Median estimated relative bias		4.29	11.17	5.05	3.86	2.17	6.46	2.97	3.51	5.80	5.08	4.72
Significant bias		76.47	28.00	63.16	55.00	57.50	10.00	46.15	46.34	22.86	35.14	50.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01*	0.02	0.01*	0.01	0.01	0.08	#	0.01	0.01	0.04	#
DEGPRAA												
Before imputation												
Mean estimated relative bias	Prior degree: associate's degree	25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	0.03*	0.02*	#	0.03	0.02	0.05	0.05	0.04*
DEGPRBA												
Before imputation												
Mean estimated relative bias	Prior degree: 4-year bachelor's degree	25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.07*	0.02	0.08*	#	0.03*	0.02	0.01	0.02	0.02	0.01	#
DEGPRCRT												
Before imputation												
Mean estimated relative bias	Prior degree: undergraduate certificate/diploma	25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.07*	#	0.05*	0.03	0.04*	0.03	0.01	0.01	0.03	0.05	0.02

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DEGPRDOT	Prior degree: doctor's degree, other											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.07	#	#	#	0.13*	#	0.15	0.13	#	0.30	#
DEGPRDPP	Prior degree: doctor's degree-professional practice											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	#	#	#	#	0.39	#	#	#	#	#
DEGPRDRS	Prior degree: doctor's degree-research/scholarship											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	0.40	#	#
DEGPRMS	Prior degree: master's degree											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	#	0.07*	0.02	0.02*	0.40*	0.01	0.01	#	0.01	0.05*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DEGPRPTB	Prior degree: post-BA certificate											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04	#	#	#	0.02	#	#	#	#	#	0.06
DEGPRPTM	Prior degree: post-MA certificate											
Before imputation												
Mean estimated relative bias		25.77	34.06	18.82	20.23	33.29	40.28	25.11	35.09	38.42	18.78	28.07
Median estimated relative bias		14.45	21.47	10.92	8.89	7.84	13.78	11.18	9.89	19.47	17.86	15.85
Significant bias		80.39	3.70	68.42	45.00	67.50	23.33	47.50	60.98	45.71	21.62	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.20	#	#	#	#	#	0.04	#	#	0.05
DEPCOLCS	Amount contributed to college costs for dependents in 2011–12											
Before imputation												
Mean estimated relative bias		73.55	99.58	65.12	283.18	128.24	53.69	95.30	137.65	355.88	80.28	210.09
Median estimated relative bias		38.92	72.63	55.39	34.96	40.09	18.18	30.54	42.19	56.80	36.39	32.85
Significant bias		70.59	31.25	76.32	62.50	64.86	16.67	42.86	69.44	53.85	36.67	52.63
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.11*	0.25	0.01	0.18*	0.13	1.24*	0.04	0.14	0.79	0.35	0.09
DEPCOST	Dependents: children in paid childcare - monthly costs											
Before imputation												
Mean estimated relative bias		38.23	727.61	53.97	53.69	73.09	60.80	45.44	51.09	38.15	47.62	39.01
Median estimated relative bias		27.63	66.70	44.60	41.58	29.28	26.45	23.62	27.70	33.33	19.68	21.68
Significant bias		72.55	42.11	78.95	68.57	79.49	21.05	48.57	47.22	51.61	46.88	70.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.12	0.01	0.02	0.02	0.10	0.06	0.06	0.01	0.05	0.06*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DEPOTCST												
Dependents: monthly cost of supporting dependents other than children												
Before imputation												
Mean estimated relative bias		37.91	49.18	42.67	236.88	64.92	70.45	59.83	98.89	62.80	31.57	51.02
Median estimated relative bias		36.97	16.54	42.88	33.04	41.31	29.48	26.19	41.27	47.39	21.60	24.16
Significant bias		64.71	15.38	73.68	54.55	55.26	6.25	45.71	54.29	37.93	35.48	63.16
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	0.22	0.06	0.04	0.03	0.04	0.12	0.11	0.12	0.14	0.02
DIS16A												
Disability: deaf or serious difficulty hearing												
Before imputation												
Mean estimated relative bias		8.11	16.95	6.90	6.40	5.85	18.48	7.01	6.59	10.38	8.10	9.53
Median estimated relative bias		5.76	10.19	5.48	4.65	2.30	8.96	4.25	5.43	7.31	6.15	5.84
Significant bias		80.39	10.71	68.42	47.50	42.50	16.13	47.50	48.78	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.01	#	0.01	#	#	#	0.11	#	0.04
DIS16B												
Disability: blind or serious difficulty seeing												
Before imputation												
Mean estimated relative bias		8.10	16.95	6.92	6.47	5.80	18.45	7.12	6.61	10.32	8.14	9.52
Median estimated relative bias		5.63	10.00	5.54	4.76	2.23	8.97	4.54	4.51	7.08	6.32	5.80
Significant bias		80.39	10.71	68.42	47.50	47.50	16.13	47.50	48.78	30.56	27.03	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.28*	0.01	#	#	0.53*	#	#	#	0.07	0.07
DIS17A												
Disability: serious difficulty concentrating, remembering, making decisions												
Before imputation												
Mean estimated relative bias		8.10	17.18	6.90	6.43	5.81	18.44	7.05	6.65	10.34	7.99	9.63
Median estimated relative bias		5.62	10.26	5.56	4.69	2.16	8.96	4.44	5.46	7.21	5.88	6.19
Significant bias		80.39	10.34	68.42	47.50	42.50	16.13	47.50	51.22	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.03	0.01	0.01	0.03*	0.08	0.03	0.06	0.13*	0.02	#

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
DIS17B	Disability: serious difficulty walking or climbing stairs											
Before imputation												
Mean estimated relative bias		8.08	16.95	6.94	6.44	5.82	18.35	6.92	6.74	10.33	8.05	9.58
Median estimated relative bias		5.53	10.00	5.60	4.58	2.23	8.96	4.31	5.11	7.07	5.98	6.14
Significant bias		80.39	10.71	68.42	47.50	47.50	16.13	47.50	58.54	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.01	0.03	#	0.01	#	#	#	0.01*	0.18*	0.03
DISTYPES	Disability: main type of condition or impairment											
Before imputation												
Mean estimated relative bias		17.13	41.30	18.54	17.46	23.46	67.39	22.63	33.95	16.61	26.82	27.71
Median estimated relative bias		16.25	18.80	15.78	16.05	15.55	22.32	14.48	24.13	12.79	15.51	21.13
Significant bias		54.90	17.24	65.79	35.00	52.50	22.58	40.00	41.46	19.44	16.22	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	0.83	0.06*	0.18	0.12	1.26	0.12	0.28	0.36*	0.12	0.06
EVER2PUB	Ever attended community college											
Before imputation												
Mean estimated relative bias		11.06	17.20	8.59	10.48	5.20	14.82	11.23	12.56	10.27	8.01	7.86
Median estimated relative bias		3.85	9.88	5.45	6.02	3.41	6.45	4.31	5.40	7.91	5.72	6.16
Significant bias		80.00	10.71	69.44	50.00	53.85	16.13	47.50	52.50	30.56	35.14	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.13*	0.09	#	0.02	0.02*	0.04	0.05*	0.05*	0.08*	0.02	0.01
EVER4YR	Ever attended 4-year institution											
Before imputation												
Mean estimated relative bias		12.68	17.20	7.28	5.37	3.67	19.65	5.43	5.39	10.44	7.88	7.84
Median estimated relative bias		7.44	9.88	5.39	3.45	1.79	9.43	2.30	3.52	7.70	5.13	4.23
Significant bias		78.00	10.71	68.42	64.29	56.25	12.90	64.52	66.67	30.56	32.43	66.67
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.20*	0.15	0.04*	#	#	0.14	#	#	0.06	0.05	#

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
FAMHELP												
	Other financial support received											
Before imputation												
Mean estimated relative bias		8.12	17.03	6.92	6.45	5.82	18.36	6.99	6.57	10.25	8.11	9.52
Median estimated relative bias		5.65	10.19	5.56	4.68	2.26	8.84	4.38	5.37	7.06	6.50	5.65
Significant bias		80.39	10.34	68.42	47.50	47.50	16.13	47.50	51.22	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	0.01	0.01	0.03	0.03*	#	0.04	0.03	0.01
FAMHPAM												
	Help from family and friends: total amount in 2011–12											
Before imputation												
Mean estimated relative bias		23.39	138.81	16.91	28.64	21.56	43.39	55.38	30.33	34.60	29.79	28.74
Median estimated relative bias		12.97	28.89	13.42	20.39	8.23	20.74	21.84	16.26	27.58	21.78	24.43
Significant bias		68.63	13.79	60.53	55.00	52.50	16.13	57.50	46.34	30.56	18.92	50.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.37	0.04	0.02	0.04	#	0.05	0.10	0.10*	0.23*	0.10*
FLACMAX												
	Federal loans: accepted maximum amount of federal loans offered in 2011–12											
Before imputation												
Mean estimated relative bias		576.73	45.04	2,928.81	852.24	304.11	21.36	166.46	367.53	541.99	12.99	407.44
Median estimated relative bias		14.00	20.75	25.87	10.72	8.68	14.77	4.39	9.60	9.81	8.57	8.94
Significant bias		73.47	38.10	81.08	52.63	60.53	19.23	44.74	52.63	25.71	33.33	60.53
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.09	#	0.04	0.06*	0.09	0.01	0.07*	#	0.05	0.04*
FLAVDL1												
	Way to avoid taking out additional federal loans: attend less costly school											
Before imputation												
Mean estimated relative bias		8.56	17.32	6.40	6.15	5.03	9.04	9.60	9.67	7.67	6.43	6.18
Median estimated relative bias		5.31	7.20	5.93	4.24	3.29	4.14	3.50	5.00	5.36	3.68	4.14
Significant bias		80.00	20.83	65.79	46.15	61.54	17.24	55.26	55.26	25.71	19.44	43.59
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.02	0.03	0.01	0.23	#	0.03	0.31*	0.09	0.02

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
FLAVDL2	Way to avoid taking out additional federal loans: fewer classes											
Before imputation												
Mean estimated relative bias		8.59	18.87	6.41	5.94	5.10	8.64	9.33	9.20	7.81	6.58	6.04
Median estimated relative bias		5.42	9.27	6.58	4.19	3.28	3.88	3.42	4.68	5.34	3.99	4.07
Significant bias		80.00	20.83	65.79	46.15	61.54	13.79	48.72	53.85	25.71	19.44	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	0.03	0.02	0.07*	0.03	0.43*	0.07	0.05	0.16	0.14	0.04
FLAVDL3	Way to avoid taking out additional federal loans: work more											
Before imputation												
Mean estimated relative bias		8.58	19.68	6.53	6.04	4.79	8.20	8.76	10.03	8.08	6.22	6.07
Median estimated relative bias		5.33	9.57	6.38	4.52	3.39	3.28	3.45	5.50	5.25	3.28	3.82
Significant bias		80.00	20.83	68.42	48.72	61.54	17.24	50.00	57.89	25.71	19.44	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.03	#	0.02	0.01	0.02	#	0.05	0.11*	0.03	0.03
FLDENY	Federal loans: turned down any federal loans in 2011–12											
Before imputation												
Mean estimated relative bias		14.97	59.86	16.47	12.82	15.05	25.42	29.60	24.46	11.99	8.99	17.42
Median estimated relative bias		9.49	18.98	9.69	10.72	6.71	10.93	9.65	11.70	8.10	5.42	8.15
Significant bias		78.00	40.00	81.58	58.97	61.54	25.81	62.50	65.00	27.78	32.43	48.72
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.11	0.01	0.02	#	0.11	0.01	0.02	0.25*	0.01	0.01
FLDENYRS	Federal loans: main reason for not accepting additional loans											
Before imputation												
Mean estimated relative bias		33.28	137.71	30.85	24.45	30.04	44.25	37.85	39.64	29.13	12.00	34.61
Median estimated relative bias		19.11	34.96	23.74	17.18	12.34	16.21	15.13	19.60	19.43	6.70	14.73
Significant bias		80.00	38.71	68.42	58.97	66.67	32.26	55.00	65.00	38.89	10.81	48.72
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.38	0.03*	0.04*	0.01	0.07	0.02	0.02	0.34*	0.04	0.04

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
GAINSUR												
Before imputation												
Mean estimated relative bias	Graduate assistantship: included health insurance	158.09	†	†	88.02	33.13	†	146.24	34.43	†	†	324.36
Median estimated relative bias		20.35	†	†	22.33	10.04	†	51.41	12.89	†	†	212.38
Significant bias		67.65	†	†	45.45	62.50	†	72.73	60.87	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	†	†	‡	#	†	‡	0.05	†	†	‡
GRADTAA												
Before imputation												
Mean estimated relative bias	Teaching assistantship duties: answered student emails	235.29	†	†	117.62	60.18	†	130.32	52.95	†	†	446.34
Median estimated relative bias		28.47	†	†	40.92	19.03	†	104.43	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	57.14	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	†	‡	0.03	†	‡	0.12	†	†	‡
GRADTAB												
Before imputation												
Mean estimated relative bias	Teaching assistantship duties: assisted faculty with grading	233.12	†	†	117.62	60.31	†	102.88	52.95	†	†	446.34
Median estimated relative bias		28.29	†	†	40.92	18.84	†	133.08	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	52.38	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	†	0.30	0.01	†	‡	0.17	†	†	43.60
GRADTAC												
Before imputation												
Mean estimated relative bias	Teaching assistantship duties: assumed teaching responsibility	235.40	†	†	117.62	60.20	†	130.32	52.95	†	†	446.34
Median estimated relative bias		28.44	†	†	40.92	18.98	†	104.43	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	57.14	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	†	‡	0.02	†	‡	0.12	†	†	‡

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public			Private nonprofit			Private for-profit			
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
GRADTAD	Teaching assistantship duties: held office hours											
Before imputation												
Mean estimated relative bias		235.71	†	†	117.62	60.31	†	130.32	52.95	†	†	446.34
Median estimated relative bias		28.35	†	†	40.92	18.84	†	104.43	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	52.38	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	†	‡	0.03*	†	‡	0.03	†	†	‡
GRADTAE	Teaching assistantship duties: led discussions											
Before imputation												
Mean estimated relative bias		232.70	†	†	117.62	60.18	†	102.88	52.95	†	†	446.34
Median estimated relative bias		28.41	†	†	40.92	19.03	†	133.08	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	57.14	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05	†	†	‡	0.06	†	‡	0.05	†	†	‡
GRADTAF	Teaching assistantship duties: supervised lab sections											
Before imputation												
Mean estimated relative bias		235.71	†	†	117.62	60.31	†	130.32	52.95	†	†	446.34
Median estimated relative bias		28.35	†	†	40.92	18.84	†	104.43	16.26	†	†	377.12
Significant bias		78.79	†	†	54.55	52.38	†	70.00	43.48	†	†	71.43
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	†	†	‡	#	†	‡	0.03	†	†	‡
GRJOBHR	Graduate school job: hours worked per week											
Before imputation												
Mean estimated relative bias		5.18	†	†	5.07	5.58	†	11.54	6.60	†	†	5.02
Median estimated relative bias		3.29	†	†	1.45	2.92	†	2.32	2.43	†	†	5.21
Significant bias		37.84	†	†	23.53	32.14	†	18.18	32.14	†	†	70.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.53*	#	#	0.54*	0.42*	#	0.85*	0.63*	#	#	0.89

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
GRJOBWK	Graduate school job: proportion of weeks worked											
Before imputation												
Mean estimated relative bias		56.74	†	†	53.76	37.60	†	28.10	33.61	†	†	412.55
Median estimated relative bias		13.43	†	†	18.14	11.61	†	11.21	15.86	†	†	281.95
Significant bias		64.86	†	†	47.06	46.43	†	13.64	50.00	†	†	70.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05	†	†	0.24*	0.06	†	0.33*	0.23*	†	†	10.93
HOMESTUD	Student owns home or pays mortgage											
Before imputation												
Mean estimated relative bias		8.06	19.14	6.88	7.38	8.84	18.06	10.82	10.92	10.52	8.67	10.04
Median estimated relative bias		5.41	10.64	5.53	5.27	4.69	7.79	7.06	7.09	7.39	8.14	6.60
Significant bias		76.47	10.71	68.42	50.00	65.00	6.45	50.00	51.22	30.56	32.43	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.12	0.04*	0.01	0.01	0.11	0.13*	#	0.09	0.11	0.03
HSCRDAP	Took AP courses while in high school											
Before imputation												
Mean estimated relative bias		10.49	40.01	9.08	7.38	5.65	11.89	16.74	11.16	10.50	9.35	12.00
Median estimated relative bias		7.15	17.40	6.03	5.72	3.80	7.96	3.86	6.07	6.87	5.18	7.78
Significant bias		81.63	34.62	62.16	55.26	55.26	10.34	42.11	51.28	20.00	33.33	47.37
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.03	0.02*	0.03*	0.01	0.35*	0.01	0.01	0.41*	0.19*	0.02
HSCRDCOL	Took college-level courses while in high school											
Before imputation												
Mean estimated relative bias		10.18	44.77	9.25	7.57	5.79	11.68	14.51	10.75	11.12	9.42	12.45
Median estimated relative bias		7.68	17.37	6.50	5.83	3.59	8.25	4.86	5.77	6.81	5.73	8.22
Significant bias		79.59	34.62	67.57	50.00	57.89	3.45	35.90	46.15	20.00	38.89	44.74
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.03	#	#	#	0.23	0.01	0.01	0.15*	0.11*	0.02

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public			Private nonprofit			Private for-profit			
			Less-than-2-year	2-year	4-year non-doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year	
HSCRDIB	Took IB courses while in high school											
Before imputation												
Mean estimated relative bias		10.00	38.55	9.11	7.25	5.73	11.02	16.45	10.16	10.66	9.48	12.57
Median estimated relative bias		8.17	18.34	6.32	5.54	3.52	8.20	4.99	5.82	7.48	5.46	8.33
Significant bias		75.51	34.62	64.86	50.00	52.63	6.90	41.03	46.15	25.71	33.33	44.74
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	#	0.01	0.06	0.02	0.02	#	0.03	0.34*	0.20*	0.01
HSTYPE	Type of high school attended											
Before imputation												
Mean estimated relative bias		8.64	20.75	7.70	10.29	4.59	11.38	10.00	11.58	9.65	8.58	7.91
Median estimated relative bias		5.71	11.08	5.63	5.50	3.33	6.21	3.78	5.46	7.25	6.70	5.96
Significant bias		76.00	11.11	68.42	50.00	51.28	#	41.03	50.00	11.11	37.84	51.28
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.18*	0.26*	0.18*	0.02*	0.01*	0.36*	0.02	0.01	0.39*	0.05*	0.06*
IMMIAGE	Age when arrived in the United States											
Before imputation												
Mean estimated relative bias		28.58	114.09	30.93	48.06	29.33	25.18	60.79	15.36	59.42	43.56	37.87
Median estimated relative bias		23.49	38.00	30.15	24.43	15.76	20.04	17.25	9.02	25.06	27.68	24.89
Significant bias		70.59	35.29	65.79	44.74	62.50	4.35	45.71	35.14	34.48	54.55	47.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.03	0.06*	0.05*	0.06*	#	0.22*	0.06	0.16	0.20	0.12*
JOBANY	Non-school job: had non-school job in 2011–12											
Before imputation												
Mean estimated relative bias		7.22	18.83	6.21	5.71	5.08	13.86	5.63	5.66	7.54	7.27	7.84
Median estimated relative bias		4.49	11.60	4.87	4.01	1.99	6.54	2.98	3.94	6.42	4.54	4.14
Significant bias		80.39	28.00	71.05	55.00	57.50	13.33	35.00	48.78	20.00	32.43	45.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.01	0.01	0.01	0.01	0.18*	#	#	0.08*	0.03	0.05*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
JOBEARN	Non-school job: total earnings											
Before imputation												
Mean estimated relative bias		7.69	17.74	6.71	6.58	5.83	14.78	7.78	6.96	9.23	8.20	9.21
Median estimated relative bias		5.16	13.76	4.65	5.78	2.41	8.28	4.97	4.77	7.43	5.71	5.31
Significant bias		78.43	22.22	60.53	52.50	55.00	12.90	65.00	53.66	25.00	32.43	47.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.32*	0.02	0.05	0.06*	0.28*	0.05*	0.07*	0.24*	0.13*	0.02
JOBHOUR	Non-school job: hours worked per week											
Before imputation												
Mean estimated relative bias		7.25	17.71	6.20	5.69	5.13	13.73	5.85	5.77	7.75	7.32	7.95
Median estimated relative bias		4.64	10.07	4.47	3.91	1.91	5.99	3.05	3.83	5.70	4.18	4.16
Significant bias		78.43	26.92	71.05	55.00	57.50	13.33	37.50	43.90	22.86	35.14	52.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.10	0.01*	0.02	#	0.14	0.01	0.01	0.01	0.07*	0.04*
JOBNUM	Non-school job: number of non-school jobs											
Before imputation												
Mean estimated relative bias		7.55	17.60	6.70	6.44	5.66	14.78	7.02	6.42	8.60	7.87	9.04
Median estimated relative bias		5.00	10.07	5.04	4.98	2.58	7.91	4.37	4.56	6.80	5.28	5.57
Significant bias		74.51	22.22	65.79	50.00	55.00	12.90	65.00	56.10	25.00	32.43	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.07*	0.12*	0.06*	0.08*	0.09*	0.25*	0.08*	0.08*	0.23*	0.10*	0.01
JOBONOFF	Non-school job: located primarily on or off campus											
Before imputation												
Mean estimated relative bias		12.41	25.95	8.66	8.01	8.92	36.25	9.74	11.18	13.95	11.22	12.80
Median estimated relative bias		8.33	13.69	6.76	6.51	3.60	16.28	4.34	7.67	9.38	6.12	8.69
Significant bias		70.59	11.11	71.05	42.50	55.00	16.13	40.00	51.22	36.11	27.03	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	#	0.10*	0.06*	0.01	0.01	0.07*	0.04	0.54*	0.13	0.05

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
JOBROLE												
Non-school job: primary role as student or employee												
Before imputation												
Mean estimated relative bias		12.53	26.13	8.72	8.03	8.95	34.69	9.87	10.97	14.28	11.31	12.97
Median estimated relative bias		8.54	13.94	6.95	6.38	3.30	13.98	4.87	7.52	9.94	6.27	8.70
Significant bias		70.59	11.11	71.05	42.50	57.50	16.13	40.00	51.22	38.89	27.03	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04*	0.06	0.04*	0.03*	0.02*	0.34*	0.04*	0.01	0.48*	0.04	0.02
LNREPAY												
Expect help with repaying student loans												
Before imputation												
Mean estimated relative bias		15.22	38.53	27.18	13.95	11.05	15.55	11.35	11.80	13.43	10.51	14.75
Median estimated relative bias		7.29	18.94	19.05	8.74	4.81	9.31	5.20	5.61	8.71	6.43	7.72
Significant bias		72.55	43.48	78.95	60.00	60.00	17.24	52.50	48.78	27.78	32.43	60.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	#	0.17*	#	0.04*	0.01	0.06*	0.08*	0.12*	0.10*	0.19*
MAJCHGFQ												
Majors: frequency of formally changed												
Before imputation												
Mean estimated relative bias		12.02	†	10.58	9.20	6.15	70.46	12.12	10.33	†	10.83	8.12
Median estimated relative bias		6.45	†	9.70	7.35	3.65	9.36	5.14	6.81	†	7.71	5.85
Significant bias		70.83	†	71.05	58.97	51.28	2.94	35.00	57.50	†	27.03	48.72
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	†	0.08*	0.10*	0.05*	0.26	0.04	0.14*	†	0.58*	0.30*
MNTRENT												
Monthly mortgage or rent amount												
Before imputation												
Mean estimated relative bias		8.06	19.03	6.91	7.48	8.97	17.53	11.27	11.11	10.99	8.71	9.72
Median estimated relative bias		5.06	11.04	5.62	5.53	4.45	7.62	7.01	7.00	7.45	7.18	6.55
Significant bias		76.47	10.34	65.79	50.00	57.50	9.68	57.50	46.34	30.56	32.43	50.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.10	0.03*	#	0.02	0.17	0.09*	0.03	0.13*	0.07	0.01

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
PARHELP	Help from parents: housing, tuition, and other expenses											
Before imputation												
Mean estimated relative bias		40.77	135.74	14.36	39.23	27.12	12.42	61.65	46.70	32.38	18.19	6,078.42
Median estimated relative bias		10.16	26.64	12.76	8.13	4.75	7.21	5.33	9.73	24.08	10.67	27.83
Significant bias		81.63	55.00	75.00	63.16	64.86	20.00	45.95	64.10	51.61	41.18	65.79
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
PARHPAMT	Help from parents: amount parents helped pay for expenses in 2011–12											
Before imputation												
Mean estimated relative bias		51.59	39.80	13.81	42.60	38.14	13.00	270.26	73.17	42.01	22.56	4398.98
Median estimated relative bias		10.75	23.02	10.82	9.53	3.72	12.59	4.83	9.86	23.85	13.50	30.41
Significant bias		67.35	52.94	63.89	55.26	51.35	12.00	40.54	58.97	58.06	44.12	63.16
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	#	#	#	#	#	#	#	#	#	#
PRIMLANG	English primary language spoken											
Before imputation												
Mean estimated relative bias		8.14	17.03	6.98	6.45	5.85	18.45	6.97	6.62	10.35	8.10	9.51
Median estimated relative bias		5.72	9.87	5.61	4.70	2.22	8.94	4.38	5.43	7.07	6.03	5.69
Significant bias		80.39	10.71	68.42	47.50	47.50	16.13	47.50	48.78	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	0.03	0.04*	0.05	0.05*	0.50*	0.08*	0.05*	0.16*	0.19*	0.12*
PRIMLGFQ	Frequency of speaking non-English language with primary caregiver											
Before imputation												
Mean estimated relative bias		24.57	216.94	30.52	36.77	24.67	30.74	18.75	16.26	35.53	37.75	21.75
Median estimated relative bias		12.98	37.80	20.29	24.13	11.91	20.76	8.17	9.52	9.35	22.77	12.54
Significant bias		86.27	39.29	73.68	55.00	67.50	12.90	25.00	34.15	19.44	29.73	25.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	0.13	0.02	0.03	0.02	0.72*	0.07*	0.06*	0.06	0.03	0.09*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
RAINDTRB												
Before imputation												
Mean estimated relative bias	Race: American Indian or Alaska Native recognized tribe	36.84	57.97	42.21	69.84	59.67	50.97	105.41	68.85	57.01	70.18	66.24
Median estimated relative bias		19.27	21.66	31.36	53.40	45.12	22.92	43.11	48.47	28.71	33.21	38.29
Significant bias		58.82	7.14	57.89	58.33	51.28	0.00	57.14	44.12	44.44	45.16	47.37
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	‡	0.05	0.02	0.01	‡	0.04	#	0.04	0.21*	0.05
REANOAPA												
Before imputation												
Mean estimated relative bias	Reason for not applying: did not want to take on the debt	67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	‡	#	#	#	‡	0.02	0.04	0.04	0.17*	0.05
REANOAPB												
Before imputation												
Mean estimated relative bias	Reason for not applying: forms were too much work	67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	‡	0.01	0.07	0.03	‡	#	0.03	0.09*	0.01	0.02
REANOAPC												
Before imputation												
Mean estimated relative bias	Reason for not applying: no information about how to apply	67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	‡	0.01	0.06	0.02	‡	0.02	0.01	0.05	1.55	0.05

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
REANOAPD												
Reason for not applying: no need												
Before imputation												
Mean estimated relative bias		67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	‡	0.03	0.04	0.02	‡	0.09	0.07	0.16	0.24	0.07
REANOAPE												
Reason for not applying: thought ineligible												
Before imputation												
Mean estimated relative bias		67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	‡	#	0.08*	#	‡	0.08	0.02	0.39*	0.26	0.17
REANOAPF												
Reason for not applying for aid in NPSAS year: other												
Before imputation												
Mean estimated relative bias		67.44	51.21	27.77	113.02	61.53	66.18	291.99	27.24	469.27	168.35	173.05
Median estimated relative bias		7.22	11.46	6.58	5.07	5.92	18.83	9.99	6.20	42.91	40.79	25.22
Significant bias		56.10	17.65	50.00	43.33	40.00	14.29	51.85	44.83	68.75	45.83	53.33
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02	‡	0.01	0.10*	0.01	‡	0.03	0.02	0.06	0.12	0.05
REFUND1												
Received a refund of scholarships or grants from NPSAS												
Before imputation												
Mean estimated relative bias		8.13	16.97	7.05	6.46	5.66	16.68	7.20	6.78	10.57	8.08	9.67
Median estimated relative bias		5.52	9.96	5.53	4.84	2.13	8.28	4.53	5.52	7.60	5.64	5.44
Significant bias		80.39	10.71	68.42	47.50	42.50	16.13	47.50	58.54	30.56	24.32	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.08	0.01	0.05*	0.02*	0.06	0.03*	0.04*	0.21*	0.07	0.04*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
REFUND2	Method of receiving refund from NPSAS											
Before imputation												
Mean estimated relative bias		30.72	60.86	42.00	30.46	23.57	156.51	26.62	25.16	48.87	31.46	45.81
Median estimated relative bias		16.90	13.94	21.78	17.58	14.11	25.47	15.34	15.24	32.24	16.45	19.53
Significant bias		82.35	30.77	84.21	65.00	62.50	26.67	57.50	60.98	41.67	43.24	67.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.26	0.04	0.03*	0.03	0.48*	0.06*	0.01	0.42*	0.22*	0.03
REMENGL	Remedial courses: number taken in English in 2011–12											
Before imputation												
Mean estimated relative bias		30.24	203.75	20.06	27.71	30.88	101.18	32.73	68.24	90.25	63.51	37.52
Median estimated relative bias		16.85	31.99	16.32	22.55	28.56	34.62	27.15	35.22	32.81	26.85	26.31
Significant bias		68.00	32.00	71.05	53.85	65.79	26.67	55.26	50.00	40.00	43.24	35.90
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	#	0.04	0.03	0.02	#	0.04	0.04	0.16*	0.14*	0.09*
REMETOOK	Remedial courses: took in 2011–12											
Before imputation												
Mean estimated relative bias		20.32	79.33	12.83	157.11	17.10	44.18	33.92	30.69	25.08	24.10	18.70
Median estimated relative bias		11.66	20.09	10.20	8.34	10.64	15.52	15.31	26.18	14.09	19.55	14.38
Significant bias		76.00	25.93	65.79	45.00	66.67	20.00	58.97	55.00	51.43	54.05	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.02	0.01	0.02	0.01	0.05	0.02	0.01	0.01	0.01	0.06*
REMEVER	Remedial courses: ever taken											
Before imputation												
Mean estimated relative bias		7.99	19.20	6.62	6.99	4.23	16.60	9.44	10.08	7.55	7.53	6.04
Median estimated relative bias		5.02	11.23	5.58	3.80	3.52	7.35	3.77	4.99	5.92	4.60	4.71
Significant bias		82.00	28.00	71.05	60.00	58.97	13.33	51.28	50.00	22.86	29.73	48.72
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.01	0.01	0.01*	0.01	0.11*	0.01	0.02	0.04	0.02

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
REMMATH	Remedial courses: number taken in math in 2011–12											
Before imputation												
Mean estimated relative bias		30.94	203.75	20.39	25.10	30.44	111.49	34.80	936.19	88.71	63.03	37.82
Median estimated relative bias		17.37	31.99	15.29	20.85	25.47	37.15	25.13	34.63	33.34	28.75	26.48
Significant bias		68.00	32.00	73.68	53.85	68.42	26.67	55.26	52.50	40.00	45.95	41.03
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	#	0.04*	0.02	0.06*	0.65	0.05	0.03	0.04	0.12	0.13*
REMREAD	Remedial courses: number taken in reading in 2011–12											
Before imputation												
Mean estimated relative bias		30.64	203.75	20.52	28.82	30.86	104.68	34.80	66.91	88.65	62.22	36.55
Median estimated relative bias		16.77	31.99	16.13	23.22	26.74	40.96	25.81	39.47	33.07	30.76	26.53
Significant bias		68.00	32.00	73.68	58.97	65.79	23.33	52.63	47.50	40.00	51.35	41.03
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.04	#	0.03	0.08*	0.04	0.49	0.05	0.23	0.16*	0.42*	0.02
REMWRITE	Remedial courses: number taken in writing in 2011–12											
Before imputation												
Mean estimated relative bias		29.81	203.75	20.18	26.27	30.60	110.65	33.67	68.32	90.22	62.55	36.68
Median estimated relative bias		16.94	31.99	15.65	22.69	26.39	39.44	24.99	32.71	32.59	31.59	25.97
Significant bias		68.00	32.00	73.68	56.41	65.79	26.67	52.63	45.00	40.00	51.35	38.46
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	0.42	0.04	0.04	0.03	0.49	0.05	#	0.19*	0.16*	0.08*
SIBCOLFT	First sibling to go to college											
Before imputation												
Mean estimated relative bias		8.12	17.18	6.91	6.34	5.89	18.36	7.08	6.67	10.40	8.05	9.59
Median estimated relative bias		5.62	10.26	5.57	4.53	2.28	8.75	4.30	5.53	7.45	6.06	6.11
Significant bias		80.39	10.34	68.42	47.50	47.50	16.13	47.50	58.54	30.56	27.03	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.01	0.01	0.01	#	0.09	0.02	0.01	0.02	0.04	#

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
SJEARN												
Work-study job: total earnings												
Before imputation												
Mean estimated relative bias		7.45	31.82	6.81	4.78	3.39	14.09	5.56	4.74	12.39	8.30	5.78
Median estimated relative bias		5.25	12.37	5.88	3.51	2.58	6.57	3.34	3.80	6.17	4.21	4.44
Significant bias		78.00	52.94	76.32	56.41	48.72	16.13	30.00	33.33	78.26	24.32	53.85
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.33*	#	0.45*	0.34*	0.54*	0.48*	0.06*	0.05	#	0.10	0.70*
SJHOURS												
Work-study job: hours worked per week												
Before imputation												
Mean estimated relative bias		7.46	31.82	6.82	4.83	3.34	14.01	5.63	4.78	12.39	8.00	5.73
Median estimated relative bias		5.24	12.37	5.87	3.49	2.72	5.96	3.24	3.92	6.17	4.00	4.26
Significant bias		78.00	52.94	76.32	56.41	48.72	25.81	30.00	41.03	78.26	27.03	53.85
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.26*	#	0.39*	0.30*	0.42*	0.24	0.09*	#	#	0.10	0.53*
SJMAJOR												
Work-study job: related to major or coursework												
Before imputation												
Mean estimated relative bias		69.99	†	43.58	120.42	52.49	142.73	143.46	39.38	†	28.47	50.20
Median estimated relative bias		40.63	†	24.17	33.70	25.46	25.68	15.31	19.86	†	18.05	32.89
Significant bias		87.50	†	55.26	61.54	66.67	26.67	50.00	56.41	†	13.51	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	0.01	#	0.01	#	#	#	†	0.17*	0.18*
SJONOFF												
Work-study job: located primarily on or off campus												
Before imputation												
Mean estimated relative bias		69.85	†	43.67	84.47	52.44	142.73	144.27	39.45	†	27.90	50.17
Median estimated relative bias		40.32	†	23.92	36.86	25.49	25.68	15.33	20.11	†	16.21	32.78
Significant bias		87.50	†	52.63	64.10	66.67	26.67	52.50	56.41	†	10.81	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03	†	0.06	0.01	0.01	0.27*	#	#	†	0.21*	0.13

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
SJSCHOOL												
Before imputation	Work-study job: for NPSAS or another institution or organization											
Mean estimated relative bias		70.32	†	44.85	85.15	52.44	142.73	143.61	39.48	†	28.45	53.10
Median estimated relative bias		39.98	†	25.24	36.99	25.43	25.68	15.14	19.81	†	16.74	35.13
Significant bias		83.33	†	55.26	61.54	66.67	26.67	50.00	56.41	†	13.51	46.15
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	†	0.01	0.01	0.01	0.03	#	#	†	0.10*	0.05
SJWKST												
Before imputation	Work-study job: had work-study job in NPSAS year											
Mean estimated relative bias		9.04	†	8.02	5.22	4.63	38.19	8.70	5.05	†	8.16	5.79
Median estimated relative bias		5.46	†	7.22	4.69	2.87	8.08	3.47	4.39	†	4.33	4.14
Significant bias		77.08	†	68.42	58.97	61.54	16.13	35.00	44.74	†	24.32	51.28
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	†	0.07*	0.01	0.13*	0.03	0.11*	0.10*	†	0.22*	0.21*
TRLNPAVT												
Before imputation	Traveling from residence to NPSAS: average minutes per day											
Mean estimated relative bias		9.84	20.09	7.74	11.28	8.19	20.89	25.19	17.36	10.72	8.33	46.85
Median estimated relative bias		6.20	8.97	5.73	8.07	6.07	9.04	10.20	7.66	8.54	5.37	19.71
Significant bias		56.00	10.71	65.79	47.50	46.15	9.68	57.50	40.00	30.56	18.92	58.97
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01*	#	#	#	#	0.03	0.02	0.04	0.01	0.05	#
TRLNPDAY												
Before imputation	Traveling between residence and NPSAS: days per week											
Mean estimated relative bias		8.93	19.82	7.34	10.62	7.43	19.84	20.77	15.35	10.21	8.39	18.33
Median estimated relative bias		5.64	9.36	5.53	5.78	6.21	7.67	9.31	6.27	7.61	6.43	11.67
Significant bias		56.00	10.71	63.16	47.50	51.28	9.68	57.50	40.00	27.78	29.73	66.67
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	0.02	0.07*	0.07*	0.04*	0.37*	0.15*	0.13*	0.40*	0.25*	0.21*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
TRLWKAVT	Traveling from residence to work:											
Before imputation	average minutes per day											
Mean estimated relative bias		12.34	42.86	9.00	8.14	10.20	69.18	13.42	14.54	14.30	11.29	12.79
Median estimated relative bias		7.94	15.75	7.43	6.57	5.04	17.13	9.40	9.55	10.55	5.78	8.40
Significant bias		80.39	11.11	65.79	47.50	62.50	12.90	67.50	48.78	38.89	21.62	55.00
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.03	#	#	0.01	0.09	0.02	0.02	0.05	#	0.02
TRLWKDAY	Traveling between residence and work: days per week											
Before imputation												
Mean estimated relative bias		11.87	26.47	8.71	7.68	9.29	73.46	12.11	12.78	13.54	10.53	13.02
Median estimated relative bias		7.35	14.24	7.10	6.46	4.38	16.21	8.34	8.82	9.59	5.51	9.57
Significant bias		84.31	11.11	68.42	52.50	62.50	12.90	67.50	51.22	38.89	27.03	57.50
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.21	0.02*	0.03	0.03*	0.18	0.06*	0.05	0.17*	0.12*	0.02
UMNEED1	Would have borrowed more money in NPSAS year											
Before imputation												
Mean estimated relative bias		9.00	16.95	7.21	10.38	5.10	19.57	10.94	12.51	10.03	7.85	7.92
Median estimated relative bias		5.64	9.98	5.63	5.92	3.56	9.19	4.01	5.12	6.89	4.91	6.19
Significant bias		76.00	10.71	65.79	50.00	53.85	19.35	45.00	52.50	30.56	24.32	56.41
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.06	#	0.03*	#	0.15	0.02	0.02	0.15*	0.05*	#
UMNEED2	Additional amount would have borrowed in NPSAS year											
Before imputation												
Mean estimated relative bias		18.41	34.71	16.10	28.44	16.46	33.28	79.67	120.22	27.05	20.20	20.84
Median estimated relative bias		11.40	25.10	11.57	13.16	7.60	15.15	11.84	14.55	18.29	11.52	10.35
Significant bias		66.00	10.71	71.05	55.00	53.85	12.90	47.50	52.50	36.11	37.84	41.03
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	#	0.02	0.03	0.01	0.09	0.04	0.06*	0.10*	0.06*	0.03

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
HCHONORS												
	Number of honors subjects											
Before imputation												
	Mean estimated relative bias	24.96	12.96	17.18	15.15	12.90	68.04	13.48	13.09	26.76	17.28	18.61
	Median estimated relative bias	12.02	10.23	8.20	8.98	6.66	17.02	6.62	7.71	9.25	8.97	10.03
	Significant bias	79.59	12.50	54.05	55.26	47.37	30.00	54.05	44.74	20.00	33.33	47.37
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.07*	0.28	0.10*	0.06*	0.07*	0.34*	0.03	0.11*	0.37*	0.35*	0.17*
HCMATHHI												
	Highest level of math completed/planned											
Before imputation												
	Mean estimated relative bias	13.08	10.97	9.20	7.68	8.15	53.34	7.64	8.89	9.24	8.33	9.03
	Median estimated relative bias	8.03	7.69	7.31	7.61	5.22	13.47	4.43	5.59	4.54	5.23	5.79
	Significant bias	75.51	9.52	78.38	55.26	68.42	13.79	52.78	47.37	17.14	30.56	36.84
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.10*	0.03	0.11*	0.07*	0.10*	0.12	0.06*	0.11*	0.17*	0.18*	0.12*
HCTKBIOL												
	Took/planned to take Biology											
Before imputation												
	Mean estimated relative bias	24.63	20.36	17.06	12.02	12.39	168.96	17.71	13.83	19.15	18.34	19.07
	Median estimated relative bias	12.66	12.25	7.86	7.09	8.50	20.46	7.30	9.18	14.03	9.27	12.32
	Significant bias	83.67	16.67	54.05	44.74	63.16	12.12	55.26	52.63	20.00	25.00	44.74
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.08*	#	0.02	#	0.13*	0.01*	0.05	#	0.04	0.24	0.08
HCTKCHEM												
	Took/planned to take Chemistry											
Before imputation												
	Mean estimated relative bias	25.93	22.80	17.49	12.21	12.35	156.45	18.26	14.58	20.19	18.79	20.01
	Median estimated relative bias	13.18	20.29	7.79	6.53	8.94	17.56	8.26	10.23	11.26	10.86	13.95
	Significant bias	83.67	29.17	54.05	50.00	55.26	12.12	57.89	52.63	20.00	25.00	47.37
After imputation												
	Percentage difference in pre-imputation and post-imputation means	0.03*	0.48	0.07*	0.04	0.08*	0.30*	#	0.11*	0.16*	0.23*	0.24*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
HCTKPHYS	Took/planned to take Physics											
Before imputation												
Mean estimated relative bias		28.64	20.17	19.52	14.17	14.12	149.89	24.24	15.77	20.75	20.41	20.42
Median estimated relative bias		13.68	12.08	10.90	6.48	8.69	20.21	8.50	10.56	9.68	12.21	12.70
Significant bias		81.63	25.00	54.05	42.11	63.16	27.27	55.26	57.89	17.14	19.44	36.84
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.34*	0.05*	0.08*	0.01	0.16*	#	0.08*	0.24*	0.18*	0.10*
HCYSENGL	Years completed/planned English											
Before imputation												
Mean estimated relative bias		24.72	15.79	16.38	11.64	11.79	169.72	13.83	13.37	21.18	17.38	18.86
Median estimated relative bias		12.13	9.20	7.72	7.99	8.20	21.26	6.47	8.48	17.01	10.42	11.54
Significant bias		85.71	0.00	51.35	50.00	55.26	12.12	56.76	50.00	20.00	22.22	44.74
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05	0.18	0.09	0.08*	0.04*	0.12	0.08	0.04	0.24*	0.20*	0.42*
HCYSLANG	Years completed/planned foreign languages											
Before imputation												
Mean estimated relative bias		24.58	15.96	14.97	11.90	11.42	148.11	13.44	11.97	22.60	16.40	18.73
Median estimated relative bias		13.04	10.01	6.64	8.16	6.34	24.96	5.52	7.36	12.18	8.86	7.86
Significant bias		77.55	12.50	59.46	50.00	60.53	15.15	48.65	50.00	20.00	27.78	42.11
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.06*	0.29*	0.10*	0.03	0.08*	0.32	0.08*	0.20*	0.29*	0.31*	0.14*
HCYSMATH	Years completed/planned math											
Before imputation												
Mean estimated relative bias		12.49	9.07	8.97	7.33	7.58	54.79	6.93	8.86	8.81	8.31	9.50
Median estimated relative bias		7.77	7.44	6.72	6.07	5.23	13.20	3.78	5.71	6.33	4.68	6.09
Significant bias		75.51	15.00	64.86	52.63	63.16	13.79	52.78	61.11	17.14	22.22	39.47
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.08*	0.37*	0.06*	0.09*	0.09*	0.16*	0.06*	0.16*	0.10*	0.13*	0.09*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
HCYSSCIE	Years completed/ planned science											
Before imputation												
Mean estimated relative bias		24.83	15.85	16.62	11.87	11.62	168.45	13.99	13.38	22.17	17.80	18.37
Median estimated relative bias		12.44	9.49	8.66	7.49	7.92	22.68	6.40	8.74	18.21	10.09	10.45
Significant bias		83.67	0.00	51.35	50.00	55.26	12.12	56.76	50.00	20.00	25.00	42.11
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.02*	0.80	0.08*	0.06*	0.04*	0.20*	0.05*	0.09*	0.20*	0.29*	0.15*
HCYSSOCI	Years completed/ planned social studies											
Before imputation												
Mean estimated relative bias		24.70	16.18	16.24	11.82	11.53	170.96	14.11	13.57	20.84	17.94	18.14
Median estimated relative bias		12.02	9.50	7.92	7.87	7.85	20.93	6.51	9.06	15.36	11.32	10.72
Significant bias		81.63	0.00	51.35	50.00	55.26	12.12	56.76	52.63	20.00	25.00	44.74
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.01	0.23	0.06*	0.03	0.01	0.18*	0.02	0.04	0.19*	0.12	0.17*
HSGPA	Grade point average in high school											
Before imputation												
Mean estimated relative bias		24.93	18.70	16.10	11.72	11.31	145.81	18.55	13.61	20.50	15.79	17.58
Median estimated relative bias		12.54	14.22	7.37	6.94	7.64	21.57	7.06	7.25	15.30	10.94	11.54
Significant bias		83.67	12.50	54.05	50.00	55.26	13.33	54.05	52.63	20.00	22.22	44.74
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.05*	0.78	0.19*	0.06*	0.13*	0.68*	0.14*	0.12*	0.60*	0.57*	0.46*
TEACTDER	ACT derived composite score											
Before imputation												
Mean estimated relative bias		18.10	9.03	13.29	8.95	9.14	39.38	10.30	10.63	17.31	14.33	13.85
Median estimated relative bias		9.19	4.37	5.98	7.24	6.26	16.91	4.21	5.85	10.84	10.34	7.10
Significant bias		75.51	14.29	62.16	50.00	65.79	21.43	50.00	47.22	22.86	27.78	39.47
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.07*	0.04*	0.01*	0.01*	0.08*	0.01*	0.02*	0.11*	0.11*	0.08*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
TESATDER	SAT derived combined score											
Before imputation												
Mean estimated relative bias		18.10	9.03	13.29	8.95	9.14	39.38	10.30	10.63	17.31	14.33	13.85
Median estimated relative bias		9.19	4.37	5.98	7.24	6.26	16.91	4.21	5.85	10.84	10.34	7.10
Significant bias		75.51	14.29	62.16	50.00	65.79	21.43	50.00	47.22	22.86	27.78	39.47
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.06*	0.04*	0.01*	0.01*	0.07*	0.01*	0.02*	0.10*	0.10*	0.07*
TESATMDE	SAT derived math score											
Before imputation												
Mean estimated relative bias		18.10	9.03	13.29	8.95	9.14	39.38	10.30	10.63	17.31	14.33	13.85
Median estimated relative bias		9.19	4.37	5.98	7.24	6.26	16.91	4.21	5.85	10.84	10.34	7.10
Significant bias		75.51	14.29	62.16	50.00	65.79	21.43	50.00	47.22	22.86	27.78	39.47
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.09*	0.04*	0.01*	0.01*	0.07*	#	0.02*	0.10*	0.10*	0.07*
TESATVDE	SAT derived verbal score											
Before imputation												
Mean estimated relative bias		18.10	9.03	13.29	8.95	9.14	39.38	10.30	10.63	17.31	14.33	13.85
Median estimated relative bias		9.19	4.37	5.98	7.24	6.26	16.91	4.21	5.85	10.84	10.34	7.10
Significant bias		75.51	14.29	62.16	50.00	65.79	21.43	50.00	47.22	22.86	27.78	39.47
After imputation												
Percentage difference in pre-imputation and post-imputation means		#	0.04	0.03*	0.01*	0.01*	0.07*	0.01*	0.02*	0.10*	0.10*	0.07*

See notes at end of table.

Table J-68. Summary of item nonresponse bias analysis for all students, by type of institution: 2012—Continued

Variable	Variable label	All students	Public				Private nonprofit			Private for-profit		
			Less-than-2-year	2-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-4-year	4-year non-doctorate-granting	4-year doctorate-granting	Less-than-2-year	2-year	4-year
TETOOK	Took SAT or ACT exams											
Before imputation												
Mean estimated relative bias		9.60	9.80	7.84	5.89	4.22	13.22	4.84	6.09	7.43	7.60	8.53
Median estimated relative bias		6.72	8.36	6.76	4.72	2.79	6.63	2.02	3.74	6.12	4.91	5.44
Significant bias		83.67	16.67	64.86	67.57	64.86	11.11	51.52	60.00	27.27	36.11	47.37
After imputation												
Percentage difference in pre-imputation and post-imputation means		0.03*	‡	0.02*	0.01	0.03*	0.11*	0.01*	#	0.09*	0.04*	0.02*

† Not applicable.

Rounds to zero.

‡ Row is suppressed. Contains less than 30 unweighted nonrespondents.

* $p < .05$. The difference between the pre-and post-imputation means.

NOTE: AGI = adjusted gross income; cat = categorical variables; cont = continuous variables; CPS = Central Processing System; EFC = expected family contribution; SAT = SAT Reasoning Test; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

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

Appendix K

Weighted-Analysis Considerations

The 2011–12 National Postsecondary Student Aid Study (NPSAS:12) sampling design was a stratified two-stage design. A stratified sample of postsecondary institutions was selected with probabilities proportional to a composite measure of size at the first stage, and a stratified systematic sample of students was selected from sample institutions at the second stage. At the first stage, about 24 percent of the eligible institutions were selected, but the institution sampling rates varied considerably by institution sampling strata.¹ At the second stage, potential first-time beginners and students at for-profit institutions were sampled at higher rates than other students. Statistical analyses were conducted with software that properly accounts for this complex survey design.

Most commonly used statistical computing packages (e.g., SAS and SPSS) assume that data were obtained from a simple random sample—they assume that the observations were independent and identically distributed. When the data were collected according to a complex sampling design, the simple random sampling assumption usually led to an underestimate of the sampling variance, which led to artificially small confidence intervals and liberal hypothesis test results (i.e., rejecting the null hypothesis when it is in fact true more often than indicated by the nominal Type I error level; Carlson, Johnson, and Cohen 1993).

Statistical strategies that were developed to address this issue include first-order Taylor-series expansion of the variance equation, bootstrap replication, balanced repeated replication, and the Jackknife approach (see, e.g., Wolter 1985). Special-purpose software packages that were developed for analysis of complex sample survey data include SUDAAN, WesVar, R, and Stata. Evaluations of the relative performances of these packages were reported by Cohen (1997). SAS and SPSS added procedures to address this issue, as well. The National Center for Education Statistics (NCES) also developed a software tool called PowerStats for analysis of complex survey data. Following is a list of these software packages and their websites, which have more information about the software and how to purchase or use them:

- SUDAAN: <http://www.rti.org/sudaan>;
- WesVar: http://www.westat.com/expertise/information_systems/WesVar;
- Stata: <http://www.stata.com>;
- SAS: <http://www.sas.com>;
- SPSS: <http://www.spss.com>;
- R: <http://cran.r-project.org/web/packages/survey/index.html>; and
- NCES PowerStats: <http://nces.ed.gov/datalab/index.aspx>.

When computing standard errors by using Taylor-series approximation, analysts should use the variables ANALSTR and ANALPSU in specifying analysis strata and analysis primary sampling units (PSUs). This method of variance estimation may overestimate the variance because it does not always account for the finite population correction (FPC) at the institution stage of sampling. Additionally, the analyst should specify the study weight (WTA000).

Below is an example of generic SUDAAN code to produce estimates and standard errors, using Taylor-series approximation and not accounting for the FPC. The symbols /* and */ in the

¹ From about 4 percent for private for-profit less-than-2-year institutions to 74 percent for public 4-year doctorate-granting institutions. For more details, see chapter 2.

code indicate the beginning and end of a comment, respectively. The dataset must be sorted by the analysis strata and analysis PSUs in order to run this analysis.

```
PROC DESCRIPT DATA=/* INSERT FILENAME */ DESIGN=WR;
  NEST ANALSTR ANALPSU;
  WEIGHT WTA000;
  VAR /* INSERT VARIABLES */;
  SUBPOPN /* INSERT DOMAIN OF INTEREST */;
  PRINT NSUM MEAN SEMEAN / STYLE=NCHS;
RUN;
```

When computing standard errors by using Taylor-series approximation, the analyst could, alternatively, use the variables FANALSTR, FANALPSU, FANALSSU, and PSUCOUNT in specifying analysis strata, analysis PSUs, analysis secondary sampling units (SSUs), and estimated number of PSUs in the stratum. This method of variance estimation accounts for the FPC at the institution stage of sampling.

Below is an example of generic SUDAAN code to produce estimates and standard errors with the use of Taylor-series approximation accounting for the FPC. The dataset must be sorted by the analysis strata, analysis PSUs, and analysis SSUs in order to run this analysis.

```
PROC DESCRIPT DATA=/* INSERT FILENAME */ DESIGN=WOR;
  NEST FANALSTR FANALPSU FANALSSU;
  TOTCNT PSUCOUNT _MINUS1__ _ZERO_;
  WEIGHT WTA000;
  VAR /* INSERT VARIABLES */;
  SUBPOPN /* INSERT DOMAIN OF INTEREST */;
  PRINT NSUM MEAN SEMEAN / STYLE=NCHS;
RUN;
```

When computing standard errors by using bootstrap replication, the analyst should specify the bootstrap weights WTA001–WTA200 in addition to specifying WTA000. For domains with very small sample sizes, e.g., students in tribal colleges, all replicate weights may be zero, and hence, standard errors cannot be computed (the software will give an error). In this situation, the domain of interest could be collapsed or combined with another domain in order to have sufficient sample size for computing standard errors.

Below is an example of generic SUDAAN code to produce estimates and standard errors with the use of bootstrap replication. The dataset does not have to be sorted to run this analysis.

```
PROC DESCRIPT DATA=/* INSERT FILENAME */ DESIGN=BRR;  
REPWGT WTA001-WTA200;  
WEIGHT WTA000;  
VAR /* INSERT VARIABLES */;  
SUBPOPN /* INSERT DOMAIN OF INTEREST */;  
PRINT NSUM MEAN SEMEAN / STYLE=NCHS;  
RUN;
```

Table K-1 summarizes the weight and variance estimation variables and how they are used in selected software packages that allow for Taylor series variance estimation (SUDAAN, Stata, the SAS survey data analysis procedures, IBM SPSS Complex Samples, and R) and bootstrap variance estimation (SUDAAN, Stata, the SAS survey data analysis procedures, WesVar, and R). Variance estimates and design effects given in appendix L were produced using the bootstrap replicate weights.

Table K-1. Use of analysis weights, replicate weights, and variance estimation strata, primary sampling unit (PSU), secondary sampling unit (SSU), and PSU count variables available from NPSAS:12, by selected survey data analysis software: 2012

Survey data analysis software	NPSAS:12 study members
Analysis weight for estimates	WTA000
Taylor series variance estimation (with replacement) Variance estimation stratum and PSU variables Software: statements, parameters, and keywords for Taylor series variance estimation (with replacement)	ANALSTR and ANALPSU
SUDAAN	DESIGN = WR WEIGHT WTA000; NEST ANALSTR ANALPSU;
Stata	svyset ANALPSU [pweight = WTA000], strata (ANALSTR) vce(LINEARIZED) VARMETHOD = TAYLOR
SAS survey data analysis procedures	WEIGHT WTA000; STRATA ANALSTR; CLUSTER ANALPSU; Method: WR
IBM SPSS Complex Samples	Weight: WTA000 Strata: ANALSTR Clusters: ANALPSU
R survey package ¹	mydesign<-svydesign(id=~ANALPSU, strata=~ANALSTR, weights=~WTA000)
Taylor series variance estimation (without replacement) Variance estimation stratum, PSU, SSU, and PSU count variables Software: statements, parameters, and keywords for Taylor series variance estimation (without replacement)	FANALSTR, FANALPSU, FANALSSU, and PSUCOUNT
SUDAAN	DESIGN = WOR WEIGHT WTA000; NEST FANALSTR FANALPSU FANALSSU; TOTCNT PSUCOUNT _minus1__zero_;
Stata	svyset FANALPSU [pw=WTA000], strata(FANALSTR) fpc(PSUCOUNT) FANALSSU, vce(LINEARIZED)
R survey package ¹	mydesign<-svydesign(id=~FANALPSU, strata=~FANALSTR, weights=~WTA000, fpc=~PSUCOUNT)
Bootstrap variance estimation Replicate weight variables Software: statements, parameters, and keywords for BRR variance estimation	WTA001 – WTA200
SUDAAN	DESIGN = BRR WEIGHT WTA000; REPWT WTA001 – WTA200;
Stata	svyset [pweight=WTA000], brrweight(WTA001 - WTA200) vce(BRR) VARMETHOD = BRR
SAS survey data analysis procedures	WEIGHT WTA000; REPWEIGHTS WTA001 – WTA200; Method: BRR
WesVar	Full sample weight: WTA000 Replicates: WTA001 – WTA200
R survey package ¹	mydesign<-svrepdesign(type="BRR", weights=~WTA000, repweights= "WTA00[1-200]", combined.weights=FALSE)

¹For the R survey package, “mydesign” can be renamed to any name for an R object to hold the specification of the survey design. For the without replacement design, the R survey package does not account for the second stage of sampling.

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

A quick analysis of NPSAS:12 data can be performed without using one of the software packages for analysis of complex survey data. The design effects tables that are presented in appendix L can be used to make approximate adjustments to the standard errors of survey statistics computed with the use of standard software packages that assume simple random sampling designs. For example, table L-8 shows design effects (DEFFs) and square roots of design effects (DEFTs) for undergraduate students at private nonprofit 4-year doctorate-granting institutions. If one has computed a statistic not listed in the table (e.g., mean Stafford Loan amount) for this domain of students, then the summary statistics from table L-8 suggest that the standard error computed from the statistical software package be multiplied by a survey DEFT of about 1.72 (the median for this domain). The range of DEFTs shown in table L-11 for this domain, however, is 0 to 2.66; therefore, one cannot be confident about the actual design-based standard error without performing the analysis with one of the software packages specifically designed for analysis of data from complex sample surveys.

References

- Carlson, B.L., Johnson, A.E., and Cohen, S.B. (1993). An Evaluation of the Use of Personal Computers for Variance Estimation With Complex Survey Data. *Journal of Official Statistics*, 9(4): 795–814.
- Cohen, S.B. (1997). An Evaluation of Alternative PC-Based Software Packages Developed for the Analysis of Complex Survey Data. *American Statistician*, 57(13): 285–292.
- Wolter, K. (1985). *Introduction to Variance Estimation*. New York: Springer-Verlag.

Appendix L

Design Effects

Table L-1. Design effects for all undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	70.70	0.56	0.15	3.82	14.57
Received any federal aid	TFEDAID>0	57.31	0.50	0.16	3.09	9.54
Received any state grant aid	STGTAMT>0	14.89	0.29	0.12	2.51	6.32
Received any institution grant aid	INGRTAMT>0	20.10	0.41	0.13	3.14	9.85
Received any work-study aid	TOTWKST>0	5.92	0.14	0.08	1.81	3.28
Received a Pell Grant	PELLAMT>0	41.26	0.35	0.16	2.22	4.92
Received a Direct Loan	STAFFAMT>0	40.11	0.09	0.16	0.59	0.34
Subsidized	STAFSUB>0	35.85	#	0.16	#	#
Unsubsidized	STAFUNSB>0	33.54	#	0.15	#	#
Married	SMARITAL=2	17.73	0.29	0.12	2.35	5.52
U.S. citizen	CITIZEN2=1	94.03	0.21	0.08	2.76	7.63
Enrolled in a Bachelor's degree program	UGDEG=3	46.37	0.22	0.16	1.35	1.83
Enrolled exclusively full-time	ATTNPTRN=1	50.45	0.40	0.16	2.44	5.98
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	61.55	0.32	0.16	2.04	4.15
Received any employer aid	EMPLYAM3>0	5.55	0.17	0.07	2.24	5.00
Worked while in school	JOBENR IN (2,3)	62.30	0.26	0.16	1.66	2.75
Worked full-time while in school	JOBENR=3	25.91	0.24	0.14	1.71	2.94
Worked part-time while in school	JOBENR=2	36.39	0.25	0.16	1.62	2.62
Primarily an employee who decided to enroll in school	JOBROLE=2	21.28	0.24	0.13	1.78	3.17
Has a disability	DISABLE=1	11.12	0.17	0.10	1.71	2.94
Attended more than one Institution in 2011–12	STUDMULT>1	8.25	0.28	0.09	3.15	9.91
Has dependents other than a spouse	DEPANY=1	27.50	0.28	0.14	1.93	3.72
U.S. Armed Forces veteran	VETERAN=1	3.71	0.12	0.06	2.01	4.05
Ever attended a community college	EVER2PUB=1	61.87	0.22	0.16	1.38	1.90
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.64	2.69
Median		†	†	†	1.97	3.88
75th percentile		†	†	†	2.48	6.15
Maximum		†	†	†	3.82	14.57

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-2. Design effects for undergraduate students at public less-than-2-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	70.68	2.88	2.03	1.42	2.01
Received any federal aid	TFEDAID>0	62.53	2.62	2.16	1.21	1.47
Received any state grant aid	STGTAMT>0	11.23	2.88	1.41	2.04	4.18
Received any institution grant aid	INGRTAMT>0	2.73	1.18	0.73	1.62	2.62
Received any work-study aid	TOTWKST>0	0.90	0.30	0.42	0.70	0.49
Received a Pell Grant	PELLAMT>0	56.95	2.63	2.21	1.19	1.41
Received a Direct Loan	STAFFAMT>0	20.36	1.70	1.80	0.95	0.90
Subsidized	STAFSUB>0	17.09	#	1.68	#	#
Unsubsidized	STAFUNSB>0	15.73	#	1.62	#	#
Married	SMARITAL=2	29.07	3.58	2.03	1.77	3.13
U.S. citizen	CITIZEN2=1	98.11	1.08	0.61	1.78	3.15
Enrolled in a Bachelors degree program	UGDEG=3	†	†	†	†	†
Enrolled exclusively full-time	ATTNPTRN=1	71.04	5.86	2.02	2.89	8.37
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	64.16	3.41	2.14	1.59	2.54
Received any employer aid	EMPLYAM3>0	1.89	1.37	0.61	2.26	5.10
Worked while in school	JOBENR IN (2,3)	53.25	4.57	2.23	2.05	4.22
Worked full-time while in school	JOBENR=3	18.20	3.06	1.72	1.78	3.15
Worked part-time while in school	JOBENR=2	35.05	4.09	2.13	1.92	3.69
Primarily an employee who decided to enroll in school	JOBROLE=2	23.27	3.82	1.89	2.03	4.11
Has a disability	DISABLE=1	16.05	3.90	1.64	2.38	5.67
Attended more than one Institution in 2011–12	STUDMULT>1	3.02	1.11	0.76	1.46	2.12
Has dependents other than a spouse	DEPANY=1	39.07	5.34	2.18	2.45	6.01
U.S. Armed Forces veteran	VETERAN=1	1.91	0.81	0.61	1.32	1.74
Ever attended a community college	EVER2PUB=1	39.34	3.88	2.18	1.78	3.17
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.21	1.47
Median		†	†	†	1.77	3.13
75th percentile		†	†	†	2.04	4.18
Maximum		†	†	†	2.89	8.37

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-3. Design effects for undergraduate students at public 2-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	57.46	0.94	0.29	3.27	10.69
Received any federal aid	TFEDAID>0	43.97	0.79	0.29	2.74	7.49
Received any state grant aid	STGTAMT>0	11.23	0.52	0.18	2.86	8.20
Received any institution grant aid	INGRTAMT>0	13.61	0.80	0.20	4.05	16.38
Received any work-study aid	TOTWKST>0	1.88	0.14	0.08	1.79	3.21
Received a Pell Grant	PELLAMT>0	37.47	0.59	0.28	2.12	4.50
Received a Direct Loan	STAFFAMT>0	17.81	0.15	0.22	0.68	0.46
Subsidized	STAFSUB>0	15.58	#	0.21	#	#
Unsubsidized	STAFUNSB>0	12.32	#	0.19	#	#
Married	SMARITAL=2	20.71	0.46	0.23	1.96	3.84
U.S. citizen	CITIZEN2=1	93.10	0.33	0.15	2.25	5.08
Enrolled in a Bachelors degree program	UGDEG=3	3.57	0.22	0.11	2.01	4.05
Enrolled exclusively full-time	ATTNPTRN=1	32.46	0.65	0.27	2.41	5.83
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	78.14	0.43	0.24	1.78	3.17
Received any employer aid	EMPLYAM3>0	4.13	0.20	0.12	1.75	3.08
Worked while in school	JOBENR IN (2,3)	67.08	0.44	0.27	1.62	2.62
Worked full-time while in school	JOBENR=3	31.59	0.45	0.27	1.66	2.76
Worked part-time while in school	JOBENR=2	35.48	0.48	0.28	1.73	2.99
Primarily an employee who decided to enroll in school	JOBROLE=2	27.12	0.46	0.26	1.79	3.22
Has a disability	DISABLE=1	12.19	0.28	0.19	1.47	2.16
Attended more than one Institution in 2011–12	STUDMULT>1	8.69	0.33	0.16	2.01	4.04
Has dependents other than a spouse	DEPANY=1	31.85	0.51	0.27	1.88	3.54
U.S. Armed Forces veteran	VETERAN=1	3.75	0.18	0.11	1.64	2.69
Ever attended a community college	EVER2PUB=1	100.00	#	#	†	†
Summary statistics						
Minimum			†	†	†	#
25th percentile			†	†	†	1.64
Median			†	†	†	1.79
75th percentile			†	†	†	2.25
Maximum			†	†	†	4.05

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-4. Design effects for undergraduate students at public 4-year non-doctorate-granting institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	69.00	0.79	0.59	1.35	1.82
Received any federal aid	TFEDAID>0	56.91	0.72	0.63	1.14	1.31
Received any state grant aid	STGTAMT>0	18.59	0.85	0.49	1.72	2.97
Received any institution grant aid	INGRTAMT>0	12.96	0.77	0.43	1.81	3.27
Received any work-study aid	TOTWKST>0	5.24	0.42	0.28	1.50	2.24
Received a Pell Grant	PELLAMT>0	40.42	0.56	0.62	0.90	0.81
Received a Direct Loan	STAFFAMT>0	38.47	0.34	0.62	0.55	0.31
Subsidized	STAFSUB>0	32.94	#	0.59	#	#
Unsubsidized	STAFUNSB>0	30.77	#	0.58	#	#
Married	SMARITAL=2	17.71	0.92	0.48	1.90	3.62
U.S. citizen	CITIZEN2=1	93.29	0.77	0.32	2.44	5.95
Enrolled in a Bachelors degree program	UGDEG=3	70.55	1.45	0.58	2.51	6.30
Enrolled exclusively full-time	ATTNPTRN=1	48.38	1.16	0.63	1.83	3.34
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	60.39	1.41	0.62	2.28	5.22
Received any employer aid	EMPLYAM3>0	5.42	0.37	0.29	1.29	1.67
Worked while in school	JOBENR IN (2,3)	65.57	0.86	0.60	1.43	2.04
Worked full-time while in school	JOBENR=3	25.26	0.81	0.55	1.48	2.18
Worked part-time while in school	JOBENR=2	40.31	0.75	0.62	1.21	1.46
Primarily an employee who decided to enroll in school	JOBROLE=2	17.35	0.77	0.48	1.61	2.60
Has a disability	DISABLE=1	10.57	0.52	0.39	1.33	1.76
Attended more than one Institution in 2011-12	STUDMULT>1	8.23	0.57	0.35	1.63	2.65
Has dependents other than a spouse	DEPANY=1	21.79	0.94	0.52	1.81	3.26
U.S. Armed Forces veteran	VETERAN=1	3.49	0.40	0.23	1.73	2.99
Ever attended a community college	EVER2PUB=1	35.66	1.35	0.61	2.23	4.97
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.25	1.57
Median		†	†	†	1.55	2.42
75th percentile		†	†	†	1.82	3.31
Maximum		†	†	†	2.51	6.30

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-5. Design effects for undergraduate students at public 4-year doctorate-granting institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	76.90	0.49	0.35	1.37	1.88
Received any federal aid	TFEDAID>0	62.72	0.28	0.41	0.70	0.48
Received any state grant aid	STGTAMT>0	23.81	0.46	0.36	1.27	1.62
Received any institution grant aid	INGRTAMT>0	25.08	0.76	0.36	2.08	4.32
Received any work-study aid	TOTWKST>0	6.13	0.28	0.20	1.40	1.95
Received a Pell Grant	PELLAMT>0	36.81	0.22	0.41	0.54	0.29
Received a Direct Loan	STAFFAMT>0	53.69	0.19	0.42	0.46	0.21
Subsidized	STAFSUB>0	46.00	#	0.42	#	#
Unsubsidized	STAFUNSB>0	44.56	#	0.42	#	#
Married	SMARITAL=2	9.98	0.37	0.25	1.46	2.13
U.S. citizen	CITIZEN2=1	94.89	0.24	0.19	1.30	1.68
Enrolled in a Bachelors degree program	UGDEG=3	97.74	0.16	0.13	1.31	1.72
Enrolled exclusively full-time	ATTNPTRN=1	61.77	0.54	0.41	1.32	1.75
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	39.33	0.55	0.41	1.33	1.77
Received any employer aid	EMPLYAM3>0	5.90	0.21	0.20	1.07	1.15
Worked while in school	JOBENR IN (2,3)	59.70	0.59	0.41	1.44	2.07
Worked full-time while in school	JOBENR=3	14.70	0.37	0.30	1.24	1.55
Worked part-time while in school	JOBENR=2	45.00	0.48	0.42	1.15	1.32
Primarily an employee who decided to enroll in school	JOBROLE=2	8.97	0.31	0.24	1.30	1.69
Has a disability	DISABLE=1	8.38	0.32	0.23	1.38	1.91
Attended more than one Institution in 2011–12	STUDMULT>1	9.95	0.32	0.25	1.26	1.58
Has dependents other than a spouse	DEPANY=1	11.84	0.32	0.27	1.18	1.38
U.S. Armed Forces veteran	VETERAN=1	2.08	0.15	0.12	1.26	1.58
Ever attended a community college	EVER2PUB=1	34.77	0.56	0.40	1.39	1.94
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.11	1.24
Median		†	†	†	1.28	1.65
75th percentile		†	†	†	1.38	1.89
Maximum		†	†	†	2.08	4.32

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-6. Design effects for undergraduate students at private nonprofit less-than-4-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	80.89	3.45	1.19	2.90	8.42
Received any federal aid	TFEDAID>0	68.50	2.03	1.40	1.44	2.09
Received any state grant aid	STGTAMT>0	8.54	4.21	0.84	4.98	24.84
Received any institution grant aid	INGRTAMT>0	19.49	8.32	1.20	6.95	48.30
Received any work-study aid	TOTWKST>0	4.48	2.66	0.62	4.27	18.20
Received a Pell Grant	PELLAMT>0	54.02	1.88	1.51	1.25	1.55
Received a Direct Loan	STAFFAMT>0	48.21	1.07	1.51	0.71	0.50
Subsidized	STAFSUB>0	45.74	#	1.50	#	#
Unsubsidized	STAFUNSB>0	42.61	#	1.49	#	#
Married	SMARITAL=2	23.53	3.74	1.28	2.92	8.53
U.S. citizen	CITIZEN2=1	80.36	10.56	1.20	8.80	77.47
Enrolled in a Bachelors degree program	UGDEG=3	0.92	0.88	0.29	3.06	9.39
Enrolled exclusively full-time	ATTNPTRN=1	86.68	4.26	1.03	4.15	17.21
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	58.65	5.21	1.49	3.50	12.27
Received any employer aid	EMPLYAM3>0	6.75	1.53	0.76	2.01	4.06
Worked while in school	JOBENR IN (2,3)	52.71	4.79	1.51	3.18	10.09
Worked full-time while in school	JOBENR=3	17.98	2.98	1.16	2.57	6.60
Worked part-time while in school	JOBENR=2	34.74	4.76	1.44	3.31	10.97
Primarily an employee who decided to enroll in school	JOBROLE=2	29.78	3.18	1.38	2.30	5.30
Has a disability	DISABLE=1	12.19	2.30	0.99	2.32	5.40
Attended more than one Institution in 2011–12	STUDMULT>1	4.32	1.79	0.61	2.92	8.52
Has dependents other than a spouse	DEPANY=1	40.51	3.53	1.48	2.38	5.68
U.S. Armed Forces veteran	VETERAN=1	4.56	1.57	0.63	2.49	6.21
Ever attended a community college	EVER2PUB=1	29.36	3.82	1.38	2.77	7.70
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	2.16	4.68
Median		†	†	†	2.84	8.06
75th percentile		†	†	†	3.41	11.62
Maximum		†	†	†	8.80	77.47

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-7. Design effects for undergraduate students at private nonprofit 4-year non-doctorate-granting institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	87.76	0.94	0.45	2.09	4.35
Received any federal aid	TFEDAID>0	70.05	0.90	0.63	1.43	2.04
Received any state grant aid	STGTAMT>0	23.95	1.06	0.59	1.80	3.25
Received any institution grant aid	INGRTAMT>0	57.58	1.68	0.68	2.47	6.09
Received any work-study aid	TOTWKST>0	24.32	0.91	0.59	1.55	2.39
Received a Pell Grant	PELLAMT>0	39.33	0.53	0.67	0.78	0.61
Received a Direct Loan	STAFFAMT>0	61.85	0.39	0.67	0.58	0.33
Subsidized	STAFSUB>0	54.69	#	0.69	#	#
Unsubsidized	STAFUNSB>0	55.04	#	0.68	#	#
Married	SMARITAL=2	13.18	1.25	0.47	2.68	7.16
U.S. citizen	CITIZEN2=1	95.89	0.50	0.27	1.83	3.36
Enrolled in a Bachelors degree program	UGDEG=3	90.13	1.11	0.41	2.70	7.29
Enrolled exclusively full-time	ATTNPTRN=1	70.25	1.20	0.63	1.91	3.65
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	38.31	1.03	0.67	1.54	2.37
Received any employer aid	EMPLYAM3>0	8.88	0.49	0.39	1.25	1.55
Worked while in school	JOBENR IN (2,3)	52.40	1.07	0.69	1.56	2.43
Worked full-time while in school	JOBENR=3	18.88	1.09	0.54	2.02	4.10
Worked part-time while in school	JOBENR=2	33.52	1.04	0.65	1.60	2.57
Primarily an employee who decided to enroll in school	JOBROLE=2	14.57	0.94	0.49	1.94	3.76
Has a disability	DISABLE=1	9.69	0.71	0.41	1.75	3.07
Attended more than one Institution in 2011–12	STUDMULT>1	8.13	0.89	0.38	2.37	5.60
Has dependents other than a spouse	DEPANY=1	18.81	1.16	0.54	2.15	4.62
U.S. Armed Forces veteran	VETERAN=1	3.78	0.65	0.26	2.49	6.20
Ever attended a community college	EVER2PUB=1	26.57	1.14	0.61	1.87	3.51
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.49	2.21
Median		†	†	†	1.82	3.31
75th percentile		†	†	†	2.12	4.49
Maximum		†	†	†	2.70	7.29

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-8. Design effects for undergraduate students at private nonprofit 4-year doctorate-granting institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	85.18	0.75	0.52	1.45	2.11
Received any federal aid	TFEDAID>0	66.17	0.65	0.69	0.93	0.87
Received any state grant aid	STGTAMT>0	17.83	0.89	0.56	1.59	2.53
Received any institution grant aid	INGRTAMT>0	57.85	1.25	0.72	1.73	3.00
Received any work-study aid	TOTWKST>0	24.73	1.07	0.63	1.70	2.89
Received a Pell Grant	PELLAMT>0	32.58	0.52	0.68	0.76	0.58
Received a Direct Loan	STAFFAMT>0	58.60	0.46	0.72	0.64	0.41
Subsidized	STAFSUB>0	51.82	#	0.73	#	#
Unsubsidized	STAFUNSB>0	52.07	#	0.73	#	#
Married	SMARITAL=2	12.27	1.16	0.48	2.42	5.84
U.S. citizen	CITIZEN2=1	93.05	0.77	0.37	2.07	4.28
Enrolled in a Bachelors degree program	UGDEG=3	95.88	0.74	0.29	2.56	6.53
Enrolled exclusively full-time	ATTNPTRN=1	70.94	1.25	0.66	1.89	3.55
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	36.01	0.92	0.70	1.31	1.71
Received any employer aid	EMPLYAM3>0	9.21	0.67	0.42	1.59	2.53
Worked while in school	JOBENR IN (2,3)	50.85	1.30	0.73	1.78	3.18
Worked full-time while in school	JOBENR=3	15.12	1.07	0.52	2.04	4.16
Worked part-time while in school	JOBENR=2	35.73	1.17	0.70	1.67	2.79
Primarily an employee who decided to enroll in school	JOBROLE=2	13.91	1.12	0.51	2.21	4.87
Has a disability	DISABLE=1	8.50	0.85	0.41	2.09	4.39
Attended more than one Institution in 2011–12	STUDMULT>1	8.00	0.58	0.40	1.46	2.12
Has dependents other than a spouse	DEPANY=1	15.74	1.16	0.53	2.17	4.73
U.S. Armed Forces veteran	VETERAN=1	2.74	0.63	0.24	2.66	7.10
Ever attended a community college	EVER2PUB=1	26.18	1.11	0.64	1.73	3.01
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.38	1.91
Median		†	†	†	1.72	2.95
75th percentile		†	†	†	2.08	4.33
Maximum		†	†	†	2.66	7.10

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-9. Design effects for undergraduate students at private for-profit less-than-2-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	88.75	1.02	0.47	2.17	4.72
Received any federal aid	TFEDAID>0	86.85	0.92	0.50	1.83	3.35
Received any state grant aid	STGTAMT>0	2.81	1.77	0.25	7.23	52.23
Received any institution grant aid	INGRTAMT>0	1.93	1.08	0.20	5.30	28.06
Received any work-study aid	TOTWKST>0	0.26	0.10	0.08	1.27	1.62
Received a Pell Grant	PELLAMT>0	75.58	1.00	0.64	1.57	2.46
Received a Direct Loan	STAFFAMT>0	74.73	0.46	0.64	0.72	0.52
Subsidized	STAFSUB>0	73.34	#	0.66	#	#
Unsubsidized	STAFUNSB>0	68.40	#	0.69	#	#
Married	SMARITAL=2	14.89	1.73	0.53	3.28	10.79
U.S. citizen	CITIZEN2=1	93.41	1.64	0.37	4.46	19.87
Enrolled in a Bachelors degree program	UGDEG=3	†	†	†	†	†
Enrolled exclusively full-time	ATTNPTRN=1	75.30	2.88	0.64	4.50	20.22
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	71.74	1.54	0.67	2.31	5.31
Received any employer aid	EMPLYAM3>0	2.83	0.45	0.25	1.82	3.32
Worked while in school	JOBENR IN (2,3)	48.09	1.93	0.74	2.61	6.81
Worked full-time while in school	JOBENR=3	14.96	1.09	0.53	2.05	4.21
Worked part-time while in school	JOBENR=2	33.13	1.36	0.70	1.95	3.80
Primarily an employee who decided to enroll in school	JOBROLE=2	8.65	1.23	0.42	2.96	8.73
Has a disability	DISABLE=1	10.67	0.93	0.46	2.02	4.08
Attended more than one Institution in 2011–12	STUDMULT>1	4.12	0.49	0.29	1.65	2.73
Has dependents other than a spouse	DEPANY=1	46.92	1.96	0.74	2.65	7.00
U.S. Armed Forces veteran	VETERAN=1	2.09	0.62	0.21	2.90	8.40
Ever attended a community college	EVER2PUB=1	37.38	1.78	0.72	2.49	6.18
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.65	2.73
Median		†	†	†	2.17	4.72
75th percentile		†	†	†	2.96	8.73
Maximum		†	†	†	7.23	52.23

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-10. Design effects for undergraduate students at private for-profit 2-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	82.43	1.91	0.43	4.44	19.76
Received any federal aid	TFEDAID>0	75.84	1.87	0.48	3.87	14.98
Received any state grant aid	STGTAMT>0	4.47	0.94	0.23	4.04	16.33
Received any institution grant aid	INGRTAMT>0	4.73	1.91	0.24	8.00	63.97
Received any work-study aid	TOTWKST>0	2.57	0.33	0.18	1.84	3.38
Received a Pell Grant	PELLAMT>0	60.62	1.31	0.55	2.37	5.63
Received a Direct Loan	STAFFAMT>0	61.63	0.59	0.55	1.08	1.17
Subsidized	STAFSUB>0	59.17	#	0.55	#	#
Unsubsidized	STAFUNSB>0	55.27	#	0.56	#	#
Married	SMARITAL=2	18.13	1.27	0.43	2.92	8.52
U.S. citizen	CITIZEN2=1	94.77	1.29	0.25	5.13	26.35
Enrolled in a Bachelors degree program	UGDEG=3	0.19	0.06	0.05	1.31	1.73
Enrolled exclusively full-time	ATTNPTRN=1	76.17	1.67	0.48	3.48	12.13
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	66.74	1.32	0.53	2.49	6.21
Received any employer aid	EMPLYAM3>0	3.30	0.52	0.20	2.56	6.55
Worked while in school	JOBENR IN (2,3)	47.50	1.64	0.56	2.92	8.53
Worked full-time while in school	JOBENR=3	19.15	0.90	0.44	2.03	4.12
Worked part-time while in school	JOBENR=2	28.35	1.41	0.51	2.76	7.65
Primarily an employee who decided to enroll in school	JOBROLE=2	18.78	0.92	0.44	2.08	4.32
Has a disability	DISABLE=1	11.72	0.90	0.36	2.47	6.12
Attended more than one Institution in 2011–12	STUDMULT>1	3.54	0.44	0.21	2.09	4.38
Has dependents other than a spouse	DEPNY=1	42.03	1.65	0.56	2.97	8.79
U.S. Armed Forces veteran	VETERAN=1	5.84	0.82	0.26	3.09	9.53
Ever attended a community college	EVER2PUB=1	35.61	1.40	0.54	2.59	6.69
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	2.05	4.22
Median		†	†	†	2.57	6.62
75th percentile		†	†	†	3.28	10.83
Maximum		†	†	†	8.00	63.97

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-11. Design effects for undergraduate students at private for-profit 4-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	90.50	0.85	0.20	4.20	17.64
Received any federal aid	TFEDAID>0	79.96	0.77	0.28	2.78	7.73
Received any state grant aid	STGTAMT>0	4.91	0.42	0.15	2.83	8.03
Received any institution grant aid	INGRTAMT>0	3.17	0.59	0.12	4.87	23.76
Received any work-study aid	TOTWKST>0	1.14	0.13	0.07	1.80	3.25
Received a Pell Grant	PELLAMT>0	63.65	0.86	0.33	2.59	6.70
Received a Direct Loan	STAFFAMT>0	73.52	0.14	0.30	0.45	0.21
Subsidized	STAFSUB>0	71.81	#	0.31	#	#
Unsubsidized	STAFUNSB>0	69.16	#	0.32	#	#
Married	SMARITAL=2	29.30	0.93	0.31	2.96	8.76
U.S. citizen	CITIZEN2=1	97.21	0.31	0.11	2.72	7.42
Enrolled in a Bachelors degree program	UGDEG=3	63.62	0.92	0.33	2.76	7.63
Enrolled exclusively full-time	ATTNPTRN=1	66.19	1.80	0.33	5.51	30.35
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	67.87	0.65	0.32	2.02	4.10
Received any employer aid	EMPLYAM3>0	8.17	1.64	0.19	8.67	75.20
Worked while in school	JOBENR IN (2,3)	66.65	0.70	0.33	2.16	4.65
Worked full-time while in school	JOBENR=3	45.40	1.00	0.34	2.91	8.49
Worked part-time while in school	JOBENR=2	21.25	0.70	0.28	2.49	6.21
Primarily an employee who decided to enroll in school	JOBROLE=2	41.58	0.95	0.34	2.79	7.79
Has a disability	DISABLE=1	15.93	0.68	0.25	2.67	7.15
Attended more than one Institution in 2011–12	STUDMULT>1	5.31	0.27	0.15	1.74	3.02
Has dependents other than a spouse	DEPANY=1	56.03	1.10	0.34	3.20	10.26
U.S. Armed Forces veteran	VETERAN=1	8.18	0.54	0.19	2.84	8.08
Ever attended a community college	EVER2PUB=1	43.88	1.04	0.34	3.04	9.24
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	2.09	4.38
Median		†	†	†	2.77	7.68
75th percentile		†	†	†	3.00	9.00
Maximum		†	†	†	8.67	75.20

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-12. Design effects for dependent undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	71.57	0.49	0.20	2.45	6.02
Received any federal aid	TFEDAID>0	57.67	0.39	0.22	1.78	3.17
Received any state grant aid	STGTAMT>0	19.66	0.36	0.18	2.01	4.05
Received any institution grant aid	INGRTAMT>0	28.82	0.47	0.20	2.33	5.43
Received any work-study aid	TOTWKST>0	9.76	0.22	0.13	1.70	2.88
Received a Pell Grant	PELLAMT>0	34.66	0.30	0.21	1.40	1.95
Received a Direct Loan	STAFFAMT>0	41.30	0.29	0.22	1.32	1.73
Subsidized	STAFSUB>0	34.55	0.25	0.21	1.18	1.40
Unsubsidized	STAFUNSB>0	34.56	0.27	0.21	1.25	1.57
Married	SMARITAL=2	†	†	†	†	†
U.S. citizen	CITIZEN2=1	94.44	0.24	0.10	2.37	5.64
Enrolled in a Bachelors degree program	UGDEG=3	58.59	0.37	0.22	1.68	2.84
Enrolled exclusively full-time	ATTNPTRN=1	60.82	0.45	0.22	2.07	4.29
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	45.32	0.45	0.22	2.05	4.18
Received any employer aid	EMPLYAM3>0	5.34	0.15	0.10	1.46	2.14
Worked while in school	JOBENR IN (2,3)	57.87	0.41	0.22	1.86	3.46
Worked full-time while in school	JOBENR=3	12.96	0.26	0.15	1.73	2.99
Worked part-time while in school	JOBENR=2	44.90	0.39	0.22	1.78	3.17
Primarily an employee who decided to enroll in school	JOBROLE=2	8.37	0.22	0.12	1.81	3.29
Has a disability	DISABLE=1	8.55	0.21	0.12	1.70	2.90
Attended more than one Institution in 2011–12	STUDMULT>1	9.18	0.24	0.13	1.85	3.42
Has dependents other than a spouse	DEPANY=1	†	†	†	†	†
U.S. Armed Forces veteran	VETERAN=1	†	†	†	†	†
Ever attended a community college	EVER2PUB=1	48.79	0.37	0.22	1.68	2.82
Summary statistics						
Minimum		†	†	†	1.18	1.40
25th percentile		†	†	†	1.68	2.82
Median		†	†	†	1.78	3.17
75th percentile		†	†	†	2.01	4.05
Maximum		†	†	†	2.45	6.02

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-13. Design effects for independent undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	69.88	0.81	0.22	3.71	13.75
Received any federal aid	TFEDAID>0	56.98	0.83	0.23	3.52	12.40
Received any state grant aid	STGTAMT>0	10.36	0.35	0.14	2.43	5.90
Received any institution grant aid	INGRTAMT>0	11.81	0.47	0.15	3.05	9.32
Received any work-study aid	TOTWKST>0	2.27	0.10	0.07	1.49	2.21
Received a Pell Grant	PELLAMT>0	47.53	0.67	0.24	2.85	8.10
Received a Direct Loan	STAFFAMT>0	38.98	0.30	0.23	1.28	1.65
Subsidized	STAFSUB>0	37.09	0.24	0.23	1.06	1.11
Unsubsidized	STAFUNSB>0	32.56	0.25	0.22	1.12	1.27
Married	SMARITAL=2	34.56	0.48	0.23	2.15	4.61
U.S. citizen	CITIZEN2=1	93.64	0.27	0.12	2.33	5.42
Enrolled in a Bachelors degree program	UGDEG=3	34.77	0.43	0.23	1.89	3.56
Enrolled exclusively full-time	ATTNPTRN=1	40.61	0.56	0.23	2.40	5.77
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	76.97	0.38	0.20	1.91	3.63
Received any employer aid	EMPLYAM3>0	5.74	0.30	0.11	2.71	7.32
Worked while in school	JOBENR IN (2,3)	66.50	0.37	0.22	1.65	2.73
Worked full-time while in school	JOBENR=3	38.20	0.40	0.23	1.73	3.00
Worked part-time while in school	JOBENR=2	28.31	0.35	0.21	1.63	2.65
Primarily an employee who decided to enroll in school	JOBROLE=2	33.53	0.38	0.22	1.69	2.87
Has a disability	DISABLE=1	13.55	0.27	0.16	1.65	2.72
Attended more than one Institution in 2011–12	STUDMULT>1	7.37	0.38	0.12	3.06	9.37
Has dependents other than a spouse	DEPANY=1	53.62	0.44	0.24	1.86	3.46
U.S. Armed Forces veteran	VETERAN=1	7.24	0.24	0.12	1.92	3.68
Ever attended a community college	EVER2PUB=1	74.30	0.33	0.21	1.58	2.50
Summary statistics						
Minimum		†	†	†	1.06	1.11
25th percentile		†	†	†	1.64	2.69
Median		†	†	†	1.90	3.60
75th percentile		†	†	†	2.57	6.61
Maximum		†	†	†	3.71	13.75

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-14. Design effects for low-income undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	80.64	0.63	0.26	2.44	5.97
Received any federal aid	TFEDAID>0	72.68	0.64	0.29	2.23	4.95
Received any state grant aid	STGTAMT>0	15.86	0.48	0.24	2.03	4.12
Received any institution grant aid	INGRTAMT>0	18.80	0.75	0.25	2.95	8.72
Received any work-study aid	TOTWKST>0	5.33	0.27	0.15	1.86	3.46
Received a Pell Grant	PELLAMT>0	69.30	0.62	0.30	2.07	4.28
Received a Direct Loan	STAFFAMT>0	44.63	0.64	0.32	1.99	3.95
Subsidized	STAFSUB>0	43.58	0.64	0.32	2.00	3.99
Unsubsidized	STAFUNSB>0	36.29	0.55	0.31	1.75	3.07
Married	SMARITAL=2	7.22	0.32	0.17	1.93	3.74
U.S. citizen	CITIZEN2=1	92.19	0.43	0.17	2.48	6.13
Enrolled in a Bachelors degree program	UGDEG=3	35.84	0.57	0.31	1.84	3.37
Enrolled exclusively full-time	ATTNPTRN=1	53.05	0.68	0.32	2.11	4.47
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	66.77	0.83	0.31	2.70	7.31
Received any employer aid	EMPLYAM3>0	3.11	0.18	0.11	1.62	2.62
Worked while in school	JOBENR IN (2,3)	53.36	0.58	0.32	1.80	3.25
Worked full-time while in school	JOBENR=3	18.39	0.43	0.25	1.71	2.91
Worked part-time while in school	JOBENR=2	34.97	0.55	0.31	1.79	3.19
Primarily an employee who decided to enroll in school	JOBROLE=2	15.59	0.43	0.24	1.83	3.34
Has a disability	DISABLE=1	16.05	0.39	0.24	1.66	2.74
Attended more than one Institution in 2011–12	STUDMULT>1	7.37	0.28	0.17	1.66	2.75
Has dependents other than a spouse	DEPANY=1	35.07	0.61	0.31	1.97	3.88
U.S. Armed Forces veteran	VETERAN=1	4.13	0.25	0.13	1.90	3.62
Ever attended a community college	EVER2PUB=1	67.38	0.48	0.30	1.56	2.45
Summary statistics						
Minimum		†	†	†	1.56	2.45
25th percentile		†	†	†	1.77	3.13
Median		†	†	†	1.92	3.68
75th percentile		†	†	†	2.09	4.37
Maximum		†	†	†	2.95	8.72

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-15. Design effects for middle-income undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	73.98	0.63	0.20	3.15	9.95
Received any federal aid	TFEDAID>0	62.44	0.61	0.22	2.74	7.53
Received any state grant aid	STGTAMT>0	17.40	0.35	0.17	2.03	4.13
Received any institution grant aid	INGRTAMT>0	18.77	0.47	0.18	2.62	6.87
Received any work-study aid	TOTWKST>0	5.61	0.17	0.11	1.57	2.45
Received a Pell Grant	PELLAMT>0	52.65	0.52	0.23	2.26	5.11
Received a Direct Loan	STAFFAMT>0	41.13	0.30	0.23	1.32	1.73
Subsidized	STAFSUB>0	39.92	0.28	0.22	1.25	1.56
Unsubsidized	STAFUNSB>0	33.11	0.25	0.22	1.18	1.38
Married	SMARITAL=2	22.01	0.38	0.19	2.02	4.10
U.S. citizen	CITIZEN2=1	93.58	0.25	0.11	2.23	4.99
Enrolled in a Bachelors degree program	UGDEG=3	42.08	0.37	0.23	1.62	2.63
Enrolled exclusively full-time	ATTNPTRN=1	46.71	0.48	0.23	2.11	4.45
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	66.00	0.41	0.22	1.87	3.48
Received any employer aid	EMPLYAM3>0	5.67	0.27	0.11	2.50	6.26
Worked while in school	JOBENR IN (2,3)	65.54	0.35	0.22	1.61	2.59
Worked full-time while in school	JOBENR=3	31.61	0.36	0.21	1.68	2.81
Worked part-time while in school	JOBENR=2	33.93	0.34	0.22	1.58	2.49
Primarily an employee who decided to enroll in school	JOBROLE=2	26.03	0.36	0.20	1.77	3.12
Has a disability	DISABLE=1	10.72	0.25	0.14	1.75	3.06
Attended more than one Institution in 2011–12	STUDMULT>1	7.74	0.31	0.12	2.56	6.57
Has dependents other than a spouse	DEPANY=1	32.70	0.37	0.22	1.74	3.01
U.S. Armed Forces veteran	VETERAN=1	4.55	0.18	0.10	1.88	3.53
Ever attended a community college	EVER2PUB=1	65.83	0.33	0.22	1.51	2.27
Summary statistics						
Minimum		†	†	†	1.18	1.38
25th percentile		†	†	†	1.59	2.54
Median		†	†	†	1.82	3.30
75th percentile		†	†	†	2.25	5.05
Maximum		†	†	†	3.15	9.95

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-16. Design effects for high-income undergraduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	58.51	0.80	0.32	2.51	6.28
Received any federal aid	TFEDAID>0	38.38	0.58	0.32	1.85	3.41
Received any state grant aid	STGTAMT>0	10.01	0.38	0.19	1.95	3.80
Received any institution grant aid	INGRTAMT>0	23.19	0.47	0.27	1.70	2.90
Received any work-study aid	TOTWKST>0	6.83	0.25	0.16	1.51	2.27
Received a Pell Grant	PELLAMT>0	3.26	0.17	0.12	1.46	2.14
Received a Direct Loan	STAFFAMT>0	35.37	0.52	0.31	1.68	2.81
Subsidized	STAFSUB>0	23.81	0.40	0.28	1.46	2.13
Unsubsidized	STAFUNSB>0	32.42	0.44	0.30	1.45	2.10
Married	SMARITAL=2	17.52	0.52	0.25	2.10	4.41
U.S. citizen	CITIZEN2=1	96.01	0.24	0.13	1.89	3.59
Enrolled in a Bachelors degree program	UGDEG=3	60.67	0.55	0.32	1.75	3.06
Enrolled exclusively full-time	ATTNPTRN=1	55.04	0.73	0.32	2.26	5.10
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	50.56	0.67	0.32	2.07	4.27
Received any employer aid	EMPLYAM3>0	6.96	0.24	0.17	1.45	2.11
Worked while in school	JOBENR IN (2,3)	62.80	0.48	0.31	1.52	2.30
Worked full-time while in school	JOBENR=3	21.30	0.48	0.27	1.79	3.21
Worked part-time while in school	JOBENR=2	41.50	0.48	0.32	1.52	2.30
Primarily an employee who decided to enroll in school	JOBROLE=2	17.05	0.42	0.24	1.72	2.96
Has a disability	DISABLE=1	8.49	0.28	0.18	1.53	2.34
Attended more than one Institution in 2011–12	STUDMULT>1	9.69	0.38	0.19	1.98	3.91
Has dependents other than a spouse	DEPANY=1	13.65	0.36	0.22	1.60	2.57
U.S. Armed Forces veteran	VETERAN=1	2.01	0.17	0.09	1.86	3.45
Ever attended a community college	EVER2PUB=1	51.51	0.53	0.32	1.64	2.70
Summary statistics						
Minimum		†	†	†	1.45	2.10
25th percentile		†	†	†	1.52	2.30
Median		†	†	†	1.71	2.93
75th percentile		†	†	†	1.92	3.70
Maximum		†	†	†	2.51	6.28

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-17. Design effects for all graduate students: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	70.41	0.65	0.36	1.80	3.22
Received any federal aid	TFEDAID>0	43.96	0.20	0.39	0.50	0.25
Received any state grant aid	STGTAMT>0	1.39	0.15	0.09	1.65	2.74
Received any institution grant aid	INGRTAMT>0	21.83	0.62	0.33	1.88	3.54
Received any work-study aid	TOTWKST>0	1.60	0.15	0.10	1.54	2.37
Received a Pell Grant	GRASTAMT>0	11.79	0.43	0.26	1.68	2.81
Received a Direct Loan	STAFFAMT>0	43.03	0.18	0.39	0.46	0.21
Subsidized	STAFSUB>0	40.41	#	0.39	#	#
Unsubsidized	STAFUNSB>0	37.19	#	0.38	#	#
Married	SMARITAL=2	40.05	0.73	0.39	1.88	3.52
U.S. citizen	CITIZEN2=1	87.70	0.49	0.26	1.88	3.54
Enrolled in a Masters degree program	GRADDEG=1	67.67	0.54	0.37	1.46	2.13
Enrolled exclusively full-time	ATTNPTRN=1	46.53	0.98	0.39	2.47	6.10
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	62.21	0.72	0.38	1.88	3.55
Received any employer aid	EMPLYAM3>0	13.89	0.56	0.27	2.05	4.19
Worked while in school	JOBENR IN (2,3)	67.73	0.70	0.37	1.89	3.57
Worked full-time while in school	JOBENR=3	47.47	0.69	0.40	1.75	3.06
Worked part-time while in school	JOBENR=2	20.26	0.55	0.32	1.74	3.03
Primarily an employee who decided to enroll in school	JOBROLE=2	43.81	0.79	0.39	2.02	4.08
Has a disability	DISABLE=1	5.29	0.36	0.18	2.03	4.12
Attended more than one Institution in 2011–12	STUDMULT>1	4.05	0.24	0.16	1.56	2.43
Has dependents other than a spouse	DEPANY=1	34.82	0.74	0.38	1.95	3.80
U.S. Armed Forces veteran	VETERAN=1	2.98	0.25	0.13	1.88	3.52
1-2 years between bachelors degree and graduate school	1<=GRADGAP<=2	24.86	0.62	0.34	1.82	3.32
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.55	2.40
Median		†	†	†	1.81	3.27
75th percentile		†	†	†	1.89	3.56
Maximum		†	†	†	2.47	6.10

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-18. Design effects for graduate students at public 4-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	66.79	0.86	0.58	1.49	2.22
Received any federal aid	TFEDAID>0	37.45	0.29	0.59	0.49	0.24
Received any state grant aid	STGTAMT>0	2.44	0.32	0.19	1.70	2.89
Received any institution grant aid	INGRTAMT>0	24.19	0.91	0.52	1.73	2.99
Received any work-study aid	TOTWKST>0	1.24	0.17	0.14	1.25	1.56
Received a Pell Grant	GRASTAMT>0	17.32	0.72	0.46	1.55	2.40
Received a Direct Loan	STAFFAMT>0	36.43	0.26	0.59	0.45	0.20
Subsidized	STAFSUB>0	34.07	#	0.58	#	#
Unsubsidized	STAFUNSB>0	29.03	#	0.55	#	#
Married	SMARITAL=2	42.21	1.03	0.60	1.72	2.94
U.S. citizen	CITIZEN2=1	86.53	0.77	0.42	1.84	3.39
Enrolled in a Masters degree program	GRADDEG=1	64.71	0.76	0.58	1.30	1.70
Enrolled exclusively full-time	ATTNPTRN=1	39.56	1.04	0.60	1.75	3.06
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	64.79	0.91	0.58	1.56	2.42
Received any employer aid	EMPLYAM3>0	14.11	0.61	0.43	1.43	2.04
Worked while in school	JOBENR IN (2,3)	65.27	1.06	0.58	1.82	3.33
Worked full-time while in school	JOBENR=3	43.43	1.08	0.61	1.78	3.17
Worked part-time while in school	JOBENR=2	21.84	0.78	0.50	1.54	2.37
Primarily an employee who decided to enroll in school	JOBROLE=2	41.22	1.09	0.60	1.81	3.28
Has a disability	DISABLE=1	4.89	0.41	0.26	1.57	2.46
Attended more than one Institution in 2011–12	STUDMULT>1	3.78	0.29	0.23	1.27	1.60
Has dependents other than a spouse	DEPNY=1	31.36	0.99	0.57	1.75	3.06
U.S. Armed Forces veteran	VETERAN=1	2.59	0.33	0.19	1.73	2.98
1-2 years between bachelors degree and graduate school	1<=GRADGAP<=2	24.35	0.86	0.52	1.65	2.72
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.28	1.65
Median		†	†	†	1.56	2.44
75th percentile		†	†	†	1.74	3.03
Maximum		†	†	†	1.84	3.39

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-19. Design effects for graduate students at private nonprofit 4-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	72.75	0.89	0.53	1.69	2.86
Received any federal aid	TFEDAID>0	47.00	0.30	0.59	0.50	0.25
Received any state grant aid	STGTAMT>0	0.52	0.10	0.09	1.17	1.38
Received any institution grant aid	INGRTAMT>0	22.73	1.07	0.50	2.16	4.66
Received any work-study aid	TOTWKST>0	2.47	0.33	0.18	1.78	3.16
Received a Pell Grant	GRASTAMT>0	8.26	0.56	0.33	1.73	3.00
Received a Direct Loan	STAFFAMT>0	45.98	0.27	0.59	0.46	0.21
Subsidized	STAFSUB>0	43.23	#	0.59	#	#
Unsubsidized	STAFUNSB>0	41.09	#	0.58	#	#
Married	SMARITAL=2	36.98	1.18	0.57	2.07	4.27
U.S. citizen	CITIZEN2=1	87.30	0.73	0.39	1.84	3.39
Enrolled in a Masters degree program	GRADDEG=1	66.48	0.86	0.56	1.54	2.38
Enrolled exclusively full-time	ATTNPTRN=1	48.27	1.37	0.59	2.32	5.38
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	57.93	1.01	0.59	1.73	3.00
Received any employer aid	EMPLYAM3>0	14.52	0.88	0.42	2.11	4.43
Worked while in school	JOBENR IN (2,3)	67.11	1.07	0.56	1.92	3.68
Worked full-time while in school	JOBENR=3	46.58	1.01	0.59	1.70	2.89
Worked part-time while in school	JOBENR=2	20.54	0.86	0.48	1.80	3.23
Primarily an employee who decided to enroll in school	JOBROLE=2	42.39	1.27	0.59	2.18	4.73
Has a disability	DISABLE=1	4.69	0.46	0.25	1.82	3.30
Attended more than one Institution in 2011–12	STUDMULT>1	3.84	0.34	0.23	1.49	2.23
Has dependents other than a spouse	DEPANY=1	33.55	1.12	0.56	2.01	4.03
U.S. Armed Forces veteran	VETERAN=1	2.20	0.26	0.17	1.51	2.27
1-2 years between bachelors degree and graduate school	1<=GRADGAP<=2	26.44	0.97	0.52	1.85	3.42
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.50	2.25
Median		†	†	†	1.75	3.08
75th percentile		†	†	†	1.96	3.85
Maximum		†	†	†	2.32	5.38

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Table L-20. Design effects for graduate students at private for-profit 4-year institutions: 2012

Variable	Defined as	Percent estimate	Design standard error	Simple random sample standard error	DEFT ¹	DEFF ²
Received any aid	TOTAID>0	76.83	3.13	0.91	3.43	11.75
Received any federal aid	TFEDAID>0	59.46	0.31	1.06	0.29	0.09
Received any state grant aid	STGTAMT>0	0.17	0.07	0.09	0.81	0.65
Received any institution grant aid	INGRTAMT>0	9.39	1.83	0.63	2.90	8.40
Received any work-study aid	TOTWKST>0	0.06	0.06	0.05	1.13	1.28
Received a Pell Grant	GRASTAMT>0	1.88	0.99	0.29	3.39	11.46
Received a Direct Loan	STAFFAMT>0	59.19	0.33	1.06	0.31	0.10
Subsidized	STAFSUB>0	55.98	#	1.07	#	#
Unsubsidized	STAFUNSB>0	56.21	#	1.07	#	#
Married	SMARITAL=2	41.97	2.36	1.07	2.21	4.90
U.S. citizen	CITIZEN2=1	93.67	1.06	0.53	2.01	4.05
Enrolled in a Masters degree program	GRADDEG=1	83.50	1.83	0.80	2.28	5.20
Enrolled exclusively full-time	ATTNPTRN=1	68.23	5.03	1.01	4.99	24.94
Enrolled part-time or part-year	ATTNSTAT IN (3, 4, 5, 6)	66.59	2.74	1.02	2.68	7.21
Received any employer aid	EMPLYAM3>0	10.85	2.51	0.67	3.73	13.92
Worked while in school	JOBENR IN (2,3)	79.61	1.58	0.87	1.82	3.30
Worked full-time while in school	JOBENR=3	66.51	2.23	1.02	2.18	4.75
Worked part-time while in school	JOBENR=2	13.10	1.88	0.73	2.58	6.66
Primarily an employee who decided to enroll in school	JOBROLE=2	58.91	2.15	1.06	2.02	4.09
Has a disability	DISABLE=1	8.92	2.02	0.62	3.28	10.74
Attended more than one Institution in 2011–12	STUDMULT>1	5.83	1.22	0.51	2.42	5.84
Has dependents other than a spouse	DEPANY=1	52.85	2.19	1.08	2.03	4.13
U.S. Armed Forces veteran	VETERAN=1	7.18	1.33	0.56	2.38	5.64
1-2 years between bachelors degree and graduate school	1<=GRADGAP<=2	21.56	2.56	0.89	2.88	8.28
Summary statistics						
Minimum		†	†	†	#	#
25th percentile		†	†	†	1.47	2.29
Median		†	†	†	2.25	5.05
75th percentile		†	†	†	2.89	8.34
Maximum		†	†	†	4.99	24.94

† Not applicable

Rounds to zero.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

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

Appendix M Imputations

Table M-1. Rate of missing data for all variables: 2012

Variable description	Variable name	Percent missing data rate		
		All students	Undergraduate students	Graduate students
AGE	Age as of 12/31/11	#	#	#
AGEGROUP	Age groups as of 12/31/07	#	#	#
ALTANY	Alternative courses: took online, night, or weekend classes at NPSAS	33.2	34.0	27.6
ALTNIGHT	Alternative courses: took classes at night in 2011–12	33.8	34.7	29.2
ALTONLN	Alternative courses: took classes only online in 2011–12	33.8	34.7	29.2
ALTONLN2	Alternative courses: program at NPSAS was entirely online	29.1	29.1	†
ALTWKND	Alternative courses: took classes on the weekend in 2011–12	33.8	34.7	29.2
ATTEND	Attendance intensity in fall	1.6	1.6	1.9
ATTENDMR	Main reason for attending NPSAS	54.4	54.4	†
BANK1	Bank accounts: had checking or savings account	34.0	34.8	28.8
BANK2	Bank accounts: individual or shared	34.2	35.0	29.5
BAYEAR	Year received bachelor degree	21.1	†	21.1
CITIZEN2	Citizenship (max non-citizen)	1.4	1.4	1.3
CRBALCR	Credit cards: balance carried over each month	34	35.2	29.8
CRBALDUE	Credit cards: balance due on all credit cards	36.3	37.2	32.5
CRNUMCRD	Credit cards: number of credit cards in own name	34.1	35.0	28.9
CRTUIT	Credit cards: used credit cards to pay tuition and fees in 2011–12	34.1	35.3	30.0
CRTUIT2	Credit cards: only source available to pay tuition and fees in 2011–12	34.0	34.6	31.5
DEGPR	Prior degree earned since high school	21.5	22.3	16.3
DEGPRAA	Prior degree: associate's degree	32.7	35.6	27.5
DEGPRBA	Prior degree: 4-year bachelor's degree	32.7	35.6	27.5
DEGPRCRT	Prior degree: undergraduate certificate/diploma	32.7	35.6	27.5
DEGPRDOT	Prior degree: doctor's degree, other	32.7	35.6	27.5
DEGPRDPP	Prior degree: doctor's degree-professional practice	32.7	35.6	27.5
DEGPRDRS	Prior degree: doctor's degree-research/scholarship	32.7	35.6	27.5
DEGPRMS	Prior degree: master's degree	32.7	35.6	27.5
DEGPRPTB	Prior degree: post-BA certificate	32.7	35.6	27.5
DEGPRPTM	Prior degree: post-MA certificate	32.7	35.6	27.5
DEPANY	Dependents: Has any dependents	10.7	10.0	14.9
DEPCARE	Dependents: children in paid childcare	39.3	40.1	34.9
DEPCHILD	Dependents: Has dependent children	6.9	6.3	10.7
DEPCOL	Number of dependents in college	13.3	12.4	17.5
DEPCOLCS	Amount contributed to college costs for dependents in 2011–12	41.9	43.9	35.3
DEPCOST	Dependents: children in paid childcare - monthly costs	40.6	42.0	34.9
DEPEND	Dependency status	13.8	16.0	†
DEPINC	Dependent parent income (cont)	31.4	31.4	†
DEPINCX	Dependent parent income (cat)	11.8	11.8	†
DEPNUM	Dependents: Has any dependents (number)	12.1	11.2	17.3
DEPNUMCH	Dependents: Has dependent children (number)	7.7	7.1	11.2
DEPNUMOT	Dependents: Has dependent(s) other than children (number)	12.8	12.0	17.9
DEPOTCST	Dependents: monthly cost of supporting dependents other than children	49.3	50.2	43.9
DEPOTHER	Dependents: Has dependent(s) other than children	12.0	11.2	17.3
DEPYNG	Dependents: Children, age of youngest	38.8	39.8	33.8
DIS16A	Disability: deaf or serious difficulty hearing	33.9	34.8	28.5
DIS16B	Disability: blind or serious difficulty seeing	33.9	34.8	28.6
DIS17A	Disability: serious difficulty concentrating, remembering, making decisions	33.9	34.8	28.6
DIS17B	Disability: serious difficulty walking or climbing stairs	33.9	34.7	28.6
DISTANCE	Distance from student's home to NPSAS school	10.3	10.3	†
DISTYPES	Disability: main type of condition or impairment	37.2	37.8	29.8

See notes at end of table.

Table M-1. Rate of missing data for all variables: 2012—Continued

Variable description	Variable name	Percent missing data rate		
		All students	Undergraduate students	Graduate students
DSTUINC	Dependent student income (cont)	31.4	31.4	†
DSTUINCX	Dependent student income (cat)	10.5	10.5	†
EFCCPS	EFC (CPS)	36.5	33.7	54.1
EMPLWAIV	Institutional tuition waivers for staff	6.3	6.7	4.1
EMPLYAM3	Employer aid (student & parents)	23.9	24.6	19.7
ENR01	Monthly enrollment status 2011/07	1.0	0.9	1.4
ENR02	Monthly enrollment status 2011/08	1.5	1.5	1.8
ENR03	Monthly enrollment status 2011/09	1.6	1.6	1.9
ENR04	Monthly enrollment status 2011/10	1.6	1.6	1.9
ENR05	Monthly enrollment status 2011/11	1.6	1.5	1.9
ENR06	Monthly enrollment status 2011/12	1.6	1.5	1.9
ENR07	Monthly enrollment status 2012/01	1.7	1.6	2.1
ENR08	Monthly enrollment status 2012/02	1.8	1.7	2.2
ENR09	Monthly enrollment status 2012/03	1.7	1.7	2.1
ENR10	Monthly enrollment status 2012/04	1.7	1.6	1.9
ENR11	Monthly enrollment status 2012/05	1.6	1.6	1.8
ENR12	Monthly enrollment status 2012/06	1.1	1.1	1.3
EVER2PUB	Ever attended community college	19.3	19.3	†
EVER4YR	Ever attended 4-year institution	18.0	18.0	†
FAMHELP	Other financial support received	33.5	34.4	28.1
FAMHPAM	Help from family and friends: total amount in 2011–12	33.6	34.2	27.2
FEDBEN	Received federal benefit: Any	12.4	11.6	17.7
FEDBENA	Received federal benefit: Food Stamp Benefit	22.1	22.1	21.8
FEDBENB	Received federal benefit: Free/Reduced Price School Lunch	22.1	22.1	21.8
FEDBENC	Received federal benefit: Supplemental Security Income	22.1	22.1	21.8
FEDBEND	Received federal benefit: TANF Benefits	22.1	22.1	21.8
FEDBENE	Received federal benefit: WIC Benefits	22.1	22.1	21.8
FLACMAX	Federal loans: accepted maximum amount of federal loans offered in 2011–12	46.5	46.5	†
FLAVDL1	Way to avoid taking out additional federal loans: attend less costly school	72.6	72.6	†
FLAVDL2	Way to avoid taking out additional federal loans: fewer classes	72.3	72.3	†
FLAVDL3	Way to avoid taking out additional federal loans: work more	72.2	72.2	†
FLDENY	Federal loans: turned down any federal loans in 2011–12	42.5	42.5	†
FLDENYRS	Federal loans: main reason for not accepting additional loans	42.1	42.1	†
GAINSUR	Graduate assistantship: included health insurance	21.4	†	21.4
GPA	Grade point average	6.6	6.6	†
GRADLVL	Graduate class level	7.6	†	7.6
GRADPYR	Year began graduate degree	29.5	†	29.5
GRADTAA	Teaching assistantship duties: answered student emails	27.5	†	27.5
GRADTAB	Teaching assistantship duties: assisted faculty with grading	27.4	†	27.4
GRADTAC	Teaching assistantship duties: assumed teaching responsibility	27.5	†	27.5
GRADTAD	Teaching assistantship duties: held office hours	27.4	†	27.4
GRADTAE	Teaching assistantship duties: led discussions	27.5	†	27.5
GRADTAF	Teaching assistantship duties: supervised lab sections	27.4	†	27.4
GRGRDAMT	Other graduate assistantship amount	17.6	†	17.6
GRINFEL	Graduate fellowship amount	0.1	†	0.1
GRJOBHR	Graduate school job: hours worked per week	12.5	†	12.5
GRJOBWK	Graduate school job: proportion of weeks worked	53.8	†	53.8
GRRESAMT	Graduate research assistantship amount	17.8	†	17.8
GRTEAAMT	Graduate teaching assistantship amount	17.7	†	17.7
GRTRNAMT	Graduate traineeship amount	0.1	†	0.1

See notes at end of table.

Table M-1. Rate of missing data for all variables: 2012—Continued

Variable description	Variable name	Percent missing data rate		
		All students	Undergraduate students	Graduate students
HCHONORS	Number of honors subjects	53.3	53.3	†
HCMATHHI	Highest level of math completed/planned	32.1	32.1	†
HCTKBIOL	Took/planned to take Biology	48.0	48.0	†
HCTKCHEM	Took/planned to take Chemistry	49.6	49.6	†
HCTKPHYS	Took/planned to take Physics	54.6	54.6	†
HCYSENGL	Years completed/planned English	48.3	48.3	†
HCYSLANG	Years completed/planned foreign languages	55.6	55.6	†
HCYSMATH	Years completed/planned math	27.9	27.9	†
HCYSSCIE	Years completed/planned science	48.7	48.7	†
HCYSSOCI	Years completed/planned social studies	48.6	48.6	†
HISPANIC	Race-ethnicity: Hispanic or Latino origin	3.9	3.9	3.7
HISPTYPE	Race-ethnicity: Type of Hispanic origin	8.5	8.9	5.8
HOMELESS	Homeless or at risk of homelessness	40.9	39.1	97.3
HOMESTUD	Student owns home or pays mortgage	36.1	37.4	28.6
HSCRDAP	Took AP courses while in high school	35.3	35.3	†
HSCRDCOL	Took college-level courses while in high school	37.1	37.1	†
HSCRDIB	Took IB courses while in high school	38.4	38.4	†
HSDEG	High school degree type	1.9	1.9	†
HSGPA	Grade point average in high school	46.0	46.0	†
HSGRADYY	High school graduation year	13.3	13.3	†
HSTYPE	Type of high school attended	32.8	32.8	†
IMMIAGE	Age when arrived in the United States	34.1	35.1	30.1
INATHAMT	Athletic scholarships	6.7	6.7	†
INJURIS	Tuition jurisdiction (in/out of area)-NPSAS inst	0.4	0.4	0.5
INLNAMT	Institutional loans	6.3	6.7	4.1
INSMERIT	Institutional merit-only grants	6.7	6.7	†
INSTNEED	Institutional need-based grants	6.7	6.7	†
INSTWRK	Institutional work-study	6.1	6.4	4.1
INSWAIV	Institutional tuition & fee waivers	6.3	6.7	4.1
ISTUINC	Independent student income (cont)	39.2	34.6	54.0
ISTUINCX	Independent student income (cat)	13.6	12.4	17.6
JOBANY	Non-school job: had non-school job in 2011–12	22.4	23.3	17.3
JOBEARN	Non-school job: total earnings	32.0	32.6	28.3
JOBHOUR	Non-school job: hours worked per week	23.9	24.7	18.9
JOBNUM	Non-school job: number of non-school jobs	29.7	30.5	25.0
JOBOFF	Non-school job: located primarily on or off campus	35.8	36.7	30.6
JOBROLE	Non-school job: primary role as student or employee	35.9	36.8	30.6
LNREPAY	Expect help with repaying student loans	40.8	43.0	28.9
LOCALRES	Housing	12.9	12.9	†
MAJCHGFQ	Majors: frequency of formally changed	46.3	46.3	†
MAJORNSF	Major supported by National Science Foundation	1.0	1.0	0.8
MAJORS	Field of study/major (detailed)	1.0	1.0	0.9
MILTYPE	Military service type	0.5	0.5	0.5
MNTRENT	Monthly mortgage or rent amount	37.0	38.3	30.1
ORPHAN	Orphan, ward of court, emancipated minor, or in legal guardianship	20.6	18.1	97.9
OTHFDGRT	Other federal grants (not Title IV)	6.3	6.7	4.1
PAGI	Dependent student parents AGI	31.6	31.6	†
PARBORN	Parent born in US, PR, or US Territory	33.9	34.8	28.6
PARHELP	Help from parents: housing, tuition, and other expenses	32.2	32.2	†
PARHPAMT	Help from parents: amount parents helped pay for expenses in 2011–12	33.1	33.1	†
PDADED	Father highest education level	18.8	18.1	23.0

See notes at end of table.

Table M-1. Rate of missing data for all variables: 2012—Continued

Variable description	Variable name	Percent missing data rate		
		All students	Undergraduate students	Graduate students
PFAMNUM	Family size (dependent)	11.1	11.1	†
PFEDTAX	Dependent student parents federal tax paid	35.1	35.1	†
PHSLOAN	Federal health professions loans	2.9	3.1	2.2
PINCOL	Number of family members in college (dependent)	18.9	18.9	†
PMARITAL	Marital status (parents)	10.7	10.7	†
PMOMED	Mother highest education level	20.1	19.6	23.0
PRIMLANG	English primary language spoken	33.8	34.7	28.4
PRIMLGFK	Frequency of speaking non-English language with primary caregiver	33.9	34.7	29.5
PRIVAIID	Private sources grants	0.3	0.3	0.2
PRIVLOAN	Private (alternative) loans	22.7	23.6	17.1
PROGSTAT	Completed degree program in 2011-2012	1.3	1.5	0.1
PSECTYR	Year first enrolled in postsecondary education	29.9	29.9	†
PTAXFILE	Dependent student parents federal tax filed	31.4	31.4	†
RAASIAN	Race--Asian	6.5	6.8	4.9
RABLACK	Race--Black or African-American	6.5	6.8	4.9
RAINDIAN	Race--American Indian or Alaska Native	6.5	6.8	4.9
RAINDTRB	Race: American Indian or Alaska Native recognized tribe	28.1	28.1	28.1
RAISLAND	Race--Native Hawaiian/other Pacific Islander	6.5	6.8	4.9
RAWHITE	Race--White	6.5	6.8	4.9
REANOAPA	Reason for not applying: did not want to take on the debt	41.0	40.7	42.4
REANOAPB	Reason for not applying: forms were too much work	41.0	40.7	42.4
REANOAPC	Reason for not applying: no information about how to apply	41.0	40.7	42.4
REANOAPD	Reason for not applying: no need	41.0	40.7	42.4
REANOAPE	Reason for not applying: thought ineligible	41.0	40.7	42.4
REANOAPF	Reason for not applying for aid in NPSAS year: other	41.0	40.7	42.4
REFUND1	Received a refund of scholarships or grants from NPSAS	33.5	34.4	27.8
REFUND2	Method of receiving refund from NPSAS	32.5	33.6	25.4
REMENGL	Remedial courses: number taken in English in 2011–12	39.4	39.4	†
REMETOOK	Remedial courses: took in 2011–12	35.2	35.2	†
REMEVER	Remedial courses: ever taken	23.6	23.6	†
REMMATH	Remedial courses: number taken in math in 2011–12	37.9	37.9	†
REMREAD	Remedial courses: number taken in reading in 2011–12	40.8	40.8	†
REMWRITE	Remedial courses: number taken in writing in 2011–12	40.4	40.4	†
SAGI	Independent student AGI	40.0	34.8	54.7
SAMESTAT	Attend institution in state of legal residence	1.3	1.3	1.8
SEOGAMT	Federal Supplemental Educational Opportunity Grant (SEOG)	2.6	2.6	†
SFEDTAX	Independent student federal tax paid	44.1	40.4	55.8
SIBCOLFT	First sibling to go to college	33.9	34.8	28.6
SINCOL	Number of family members in college (independent)	8.3	7.9	9.6
SJEARN	Work-study job: total earnings	26.7	26.7	†
SJHOURS	Work-study job: hours worked per week	26.6	26.6	†
SJMAJOR	Work-study job: related to major or coursework	35.4	35.4	†
SJONOFF	Work-study job: located primarily on or off campus	35.5	35.5	†
SJSCHOOL	Work-study job: for NPSAS or another institution or organization	35.8	35.8	†
SJWKST	Work-study job: had work-study job in NPSAS year	27.4	27.4	†
SMARITAL	Student's marital status	4.0	3.5	7.6
SPINCOL	Spouse attending college	19.9	18.8	22.9
SPSINC	Independent student spouse income (cont)	50.9	46.5	62.9
SPSINCX	Independent student spouse income (cat)	17.3	16.0	21.0
STATNEED	State need-based grants	6.3	6.7	4.1
STAXFILE	Independent student federal tax filed	39.2	34.5	54.0
STLNAMT	State loans	3.2	3.3	2.2

See notes at end of table.

Table M-1. Rate of missing data for all variables: 2012—Continued

Variable description	Variable name	Percent missing data rate		
		All students	Undergraduate students	Graduate students
STMERIT	State merit-only grants	6.3	6.7	4.1
STNOND1	State non-need grants	6.3	6.7	4.1
STUSTATE	State of legal residence (student)	1.3	1.2	1.7
STWKAMT	State work-study total	6.1	6.4	4.1
TEACTDER	ACT derived composite score	31.1	31.1	†
TESATDER	SAT derived combined score	31.1	31.1	†
TESATMDE	SAT derived math score	31.1	31.1	†
TESATVDE	SAT derived verbal score	31.1	31.1	†
TETOOK	Took SAT or ACT exams	15.7	15.7	†
TFEDWRK	Federal work-study	0.2	0.2	#
TRLNPAVT	Traveling from residence to NPSAS: average minutes per day	39.6	39.6	†
TRLNPDAY	Traveling between residence and NPSAS: days per week	40.2	40.2	†
TRLWKAVT	Traveling from residence to work: average minutes per day	37.2	38.3	30.8
TRLWKDAY	Traveling between residence and work: days per week	36.1	37.3	29.2
UGDEGAA	Associate's degree types	1.5	1.5	†
UMNEED1	Would have borrowed more money in NPSAS year	35.1	35.1	†
UMNEED2	Additional amount would have borrowed in NPSAS year	34.9	34.9	†
USBORN	Born in the U.S. (student)	33.9	34.7	28.5
VADODAMT	Veteran's benefits and DOD	7.1	7.5	4.1
VETBEN	Veteran's benefits	0.8	0.9	#
VETERAN	Veteran status	0.4	0.4	0.4
VOCHELP	Vocational rehabilitation and training	6.7	6.7	†

† Not applicable.

Rounds to zero.

NOTE: AGI = adjusted gross income; cat = categorical variables; cont = continuous variables; CPS = Central Processing System; EFC = expected family contribution; SAT = SAT Reasoning Test; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

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

Table M-2. Pre versus postimputation frequency distribution for eight variables: 2012

Variable	Percent		Difference pre-post ¹
	Preimputation frequency	Postimputation frequency	
Dependency status			
Dependent	40.9	45.5	-4.6
Independent	59.1	54.5	4.6
Dependents - has dependent children			
No	73.9	73.8	0.1
Yes	26.1	26.2	-0.1
Dependents has dependents			
No dependents	71.9	72.4	-0.5
Has dependents	28.1	27.6	0.5
Mother's highest education level			
Do not know	7.3	6.3	1.0
Did not complete high school	12.8	11.4	1.5
High school diploma or equivalent	37.2	33.1	4.2
Vocational or technical training	3.9	4.6	-0.7
Less than 2 years of college	7.2	8.3	-1.2
Associate's degree	10.0	11.4	-1.4
Two or more years of college but no degree	13.1	15.2	-2.1
Bachelor's degree	6.4	7.3	-1.0
Master's degree or equivalent	1.2	1.4	-0.2
First-professional degree	0.8	0.9	-0.1
Doctor's degree			
Student's marital status			
Single, divorced, or widowed	80.7	80.6	0.2
Married	17.1	17.2	-0.2
Separated	2.2	2.2	#
Military service type			
No military service	95.8	95.8	#
Active duty	0.5	0.5	#
Reserves	0.3	0.3	#
Veteran	3.3	3.3	#
National Guard	0.1	0.1	#
Number of family members in college (independent)			
One family member in college	89.0	88.4	0.6
Two family members in college	9.7	10.2	-0.5
Three family members in college	1.1	1.1	-0.1
Four family members in college	0.2	0.2	#
Five family members in college	#	#	#
Six family members in college	#	#	#
Disability			
No disability	89.0	89.1	-0.2
Disabled	11.0	10.9	0.2

Rounds to zero.

¹ Difference = (Pre-Post)/Pre.

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

Appendix N

Analysis Variables

Table N-1. Analysis variables: 2012

Variable name	Subject	Variable label
AGE	Student's characteristics	Age as of 12/31/2011
AGEGROUP	Student's characteristics	Age groups as of 12/31/2011
AGEPSE	Student's characteristics	Age at start of postsecondary education
AIDAPP	Financial aid: Application	Applied for any aid
AIDCST	Financial aid: Ratios	Ratio of total aid to student budget
AIDCTRL	Institution type	NPSAS institution control (with multiple)
AIDLEVL	Institution type	NPSAS institution level (with multiple)
AIDSECT	Institution type	NPSAS institution sector (with multiple)
AIDSECTG	Institution type	NPSAS institution type: Graduate (with multiple)
AIDSNEED	Financial aid: Need	Aid amount exceeding federal need
AIDSRC	Financial aid: Package	Aid package by source of aid
AIDTYPE	Financial aid: Package	Aid package by type of aid
ALTANY	Education: Courses	Alternative courses: took online, night, or weekend classes at NPSAS
ALTNIGHT	Education: Courses	Alternative courses: took classes at night in 2011–12
ALTONLN	Education: Courses	Alternative courses: proportion of NPSAS classes taken completely online
ALTONLN2	Education: Courses	Alternative courses: program at NPSAS was entirely online
ALTWKND	Education: Courses	Alternative courses: took classes on the weekend in 2011–12
ATTEND	Education: Attendance	Attendance intensity in fall
ATTEND2	Education: Attendance	Attendance intensity in fall (half-time)
ATTENDMR	Education: Attendance	Main reason for attending NPSAS
ATTNPT	Education: Attendance	Attendance intensity (half-time)
ATTNPTRN	Education: Attendance	Attendance intensity (all schools)
ATTNSTAT	Education: Attendance	Attendance pattern
BANK1	Finances	Bank accounts: had checking or savings account
BANK2	Finances	Bank accounts: individual or shared
BAYEAR	Education: Attainment	Year received bachelor's degree
BORAMT1	Financial aid: Borrowed cumulative	Cumulative amount borrowed for undergrad
BORAMT2	Financial aid: Borrowed cumulative	Cumulative amount borrowed for grad
BORAMT3	Financial aid: Borrowed cumulative	Cumulative amount borrowed for undergraduate and graduate
BUDGETAJ	Institution price	Student budget (attendance adjusted)
BUDNONAJ	Institution: expenses	Non-tuition expense budget (attendance adjusted)
CAGI	Finances: Income	Adjusted Gross Income (AGI)
CALSYS	Institutional characteristics	Institution calendar system
CAMPAMT	Financial aid: Federal	Federal campus based aid (Perkins, SEOG, FWSP)
CC2000	Institution type	Carnegie Classification (2000) for NPSAS institution
CC2010B	Institution type	Carnegie Classification 2010: Basic classification
CC2010C	Institution type	Carnegie Classification 2010: Basic classification (collapsed)
CC2010E	Institution type	Carnegie Classification 2010: Enrollment profile
CC2010G	Institution type	Carnegie Classification 2010: Graduate instructional program
CC2010P	Institution type	Carnegie Classification 2010: Undergraduate instructional program
CC2010S	Institution type	Carnegie Classification 2010: Size and setting
CC2010U	Institution type	Carnegie Classification 2010: Undergraduate profile
CINCOME	Finances: Income	Total income (continuous)
CITIZEN2	Student's characteristics	Citizenship
CLOCK	Institutional characteristics	Clock hour or credit hour institution
CNTLAFFI	Institution type	Institutional control of affiliation
COLLGRAD	Education: Program	Graduating senior in 2011–12
COMPTO87	Survey sample	Comparable to 1987 NPSAS
CONTROL	Institution type	NPSAS institution control
CRBALCR	Finances	Credit cards: balance carried over each month
CRBALDUE	Finances	Credit cards: balance due on all credit cards

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
CRNUMCRD	Finances	Credit cards: number of credit cards in own name
CRTUIT	Finances	Credit cards: used credit cards to pay tuition and fees in 2011-12
CRTUIT2	Finances	Credit cards: only source available to pay tuition and fees in 2011-12
CUMLNTP1	Financial aid: Borrowed cumulative	Cumulative loan type for undergrad
CUMLNTP2	Financial aid: Borrowed cumulative	Cumulative loan type for grad
CUMLNTP3	Financial aid: Borrowed cumulative	Cumulative loan type for undergrad and grad
DEGPR	Education: Attainment	Prior degree earned since high school
DEGPRAA	Education: Attainment	Prior degree: associate's degree
DEGPRBA	Education: Attainment	Prior degree: 4-year bachelor's degree
DEGPRCRT	Education: Attainment	Prior degree: undergraduate certificate/diploma
DEGPRDOT	Education: Attainment	Prior degree: doctor's degree, other
DEGPRDPP	Education: Attainment	Prior degree: doctor's degree-professional practice
DEGPRDRS	Education: Attainment	Prior degree: doctor's degree-research/scholarship
DEGPRMS	Education: Attainment	Prior degree: master's degree
DEGPRPTB	Education: Attainment	Prior degree: post-BA certificate
DEGPRPTM	Education: Attainment	Prior degree: post-MA certificate
DELAYENR	Education: Attendance	Delayed enrollment into PSE: Number of years
DEPANY	Student's family	Dependents: Has any dependents
DEPCARE	Student's family	Dependents: child in paid childcare
DEPCHILD	Student's family	Dependents: Has dependent children
DEPCOL	Student's family	Independent students: Number of dependents in college
DEPCOLCS	Finances	Amount contributed to college costs for dependents in 2011-12
DEPCOST	Student's family	Dependents: children in paid childcare - monthly costs
DEPEND	Student's characteristics	Dependency status
DEPEND2	Student's characteristics	Dependency status (3 categories)
DEPEND4	Student's characteristics	Dependency status (4 categories)
DEPEND5A	Student's characteristics	Dependency and marital status (separated is married)
DEPEND5B	Student's characteristics	Dependency and marital status (separated is unmarried)
DEPINC	Finances: Income	Dependent students: Parents' income
DEPNUM	Student's family	Dependents: Has any dependents (number)
DEPNUMCH	Student's family	Dependents: Has dependent children (number)
DEPNUMOT	Student's family	Dependents: Has dependent(s) other than children (number)
DEPOTCST	Student's family	Dependents: monthly cost of supporting dependents other than children
DEPOTHER	Student's family	Dependents: Has dependent(s) other than children
DEPTYPE	Student's family	Dependents: Types of dependents
DEPYNG	Student's family	Dependents: age of youngest child
DERMJRNM	Education: Program	Final derived Major - Numeric
DIS16A	Disabilities	Disability: deaf or serious difficulty hearing
DIS16B	Disabilities	Disability: blind or serious difficulty seeing
DIS17A	Disabilities	Disability: serious difficulty concentrating, remembering, deciding
DIS17B	Disabilities	Disability: serious difficulty walking or climbing stairs
DISABLE	Disabilities	Disability: has some types of disability
DISTANCE	Institutional characteristics	Distance from student's home (in miles) to NPSAS institution
DISTYPES	Disabilities	Disability: main type of condition or impairment
DSTUINC	Finances: Income	Dependent students: Income
E01	Education: Attendance	Monthly enrollment status (half-time) 2011/07
E02	Education: Attendance	Monthly enrollment status (half-time) 2011/08
E03	Education: Attendance	Monthly enrollment status (half-time) 2011/09
E04	Education: Attendance	Monthly enrollment status (half-time) 2011/10
E05	Education: Attendance	Monthly enrollment status (half-time) 2011/11
E06	Education: Attendance	Monthly enrollment status (half-time) 2011/12
E07	Education: Attendance	Monthly enrollment status (half-time) 2012/01

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
E08	Education: Attendance	Monthly enrollment status (half-time) 2012/02
E09	Education: Attendance	Monthly enrollment status (half-time) 2012/03
E10	Education: Attendance	Monthly enrollment status (half-time) 2012/04
E11	Education: Attendance	Monthly enrollment status (half-time) 2012/05
E12	Education: Attendance	Monthly enrollment status (half-time) 2012/06
EFC	Financial aid: Need	Expected Family Contribution
EFCAID	Financial aid: Need	Aid subject to federal EFC limitation
EFCCPS	Financial aid: Need	Expected Family Contribution (from CPS)
EFFORT18	Financial aid: Ratios	Net price after all aid except work-study as percent of income
EFFORT20	Financial aid: Ratios	Net price after grants and loans as percent of income
EFFORT3	Financial aid: Ratios	Net price after grants as percent of income
EFFORT9	Financial aid: Ratios	Net tuition after all grants as percent of income
EMPLWAIV	Financial aid: Grants	Institutional tuition waivers for staff
EMPLYAM3	Financial aid: Grants	Employer aid (student & parents)
EMPLYAMT	Financial aid: Grants	Employer aid (includes college staff)
ENLEN	Education: Attendance	Number of total months enrolled
ENR01	Education: Attendance	Monthly enrollment status 2011/07
ENR02	Education: Attendance	Monthly enrollment status 2011/08
ENR03	Education: Attendance	Monthly enrollment status 2011/09
ENR04	Education: Attendance	Monthly enrollment status 2011/10
ENR05	Education: Attendance	Monthly enrollment status 2011/11
ENR06	Education: Attendance	Monthly enrollment status 2011/12
ENR07	Education: Attendance	Monthly enrollment status 2012/01
ENR08	Education: Attendance	Monthly enrollment status 2012/02
ENR09	Education: Attendance	Monthly enrollment status 2012/03
ENR10	Education: Attendance	Monthly enrollment status 2012/04
ENR11	Education: Attendance	Monthly enrollment status 2012/05
ENR12	Education: Attendance	Monthly enrollment status 2012/06
ENRFALL	Education: Attendance	Enrolled any time between July and December, 2011
ENRFSIZE	Institutional characteristics	NPSAS institution fall enrollment
ENRSPR	Education: Attendance	Enrolled any time between January and June, 2012
ENRSTAT	Education: Attendance	Enrollment pattern
ESUBMX2	Financial aid: Federal loans	Direct Subsidized Loan individual maximum
ETOTMX2	Financial aid: Federal loans	Direct Subsidized and Unsubsidized Loan individual total maximum
EVER2PUB	Education: Attendance	Ever attended community college
EVER4YR	Education: Attendance	Ever attended 4-year institution
FAMHELP	Finances	Other financial support received
FAMHPAM	Finances	Help from family and friends: total amount in 2011-12
FEDAPP	Financial aid: Application	Applied for federal aid
FEDBEN	Finances: Support	Received federal benefit: Any
FEDBENA	Finances: Support	Received federal benefit: Food Stamp Benefit
FEDBENB	Finances: Support	Received federal benefit: Free or Reduced Price School Lunch Benefits
FEDBENC	Finances: Support	Received federal benefit: Supplemental Security Income Benefits
FEDBEND	Finances: Support	Received federal benefit: TANF Benefits
FEDBENE	Finances: Support	Received federal benefit: WIC Benefits
FEDCUM1	Financial aid: Borrowed cumulative	Cumulative federal loan amount for undergrad
FEDCUM2	Financial aid: Borrowed cumulative	Cumulative federal loan amount for grad
FEDCUM3	Financial aid: Borrowed cumulative	Cumulative federal loan amount for undergrad and grad
FEDDUE1	Financial aid: Federal loans	Cum. federal loan amount owed, principal & interest, undergraduate
FEDDUE2	Financial aid: Federal loans	Cum. federal loan amount owed, principal & interest, graduate
FEDDUE3	Financial aid: Federal loans	Cum. federal loan amount owed, principal & interest, undergrad & grad

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
FEDGRPCT	Financial aid: Ratios	Ratio of federal grants to total aid
FEDLNPAK	Financial aid: Package	Federal loan package by type of loan
FEDNEED	Financial aid: Federal	Federal need-based aid
FEDOWE1	Financial aid: Borrowed cumulative	Cumulative federal loan amount owed for undergrad
FEDOWE2	Financial aid: Borrowed cumulative	Cumulative federal loan amount owed for grad
FEDOWE3	Financial aid: Borrowed cumulative	Cumulative federal loan amount owed for undergrad or grad
FEDPACK	Financial aid: Package	Federal aid package by type of aid
FEDPCT	Financial aid: Ratios	Ratio of federal aid to total aid
FGRTLN	Financial aid: Federal	Total federal loans and grants
FLACMAX	Financial aid: Federal loans	Federal loans: accepted maximum amount offered in 2011-12
FLAVDL1	Financial aid: Federal loans	Way to avoid additional federal loans: attend less costly school
FLAVDL2	Financial aid: Federal loans	Way to avoid additional federal loans: fewer classes
FLAVDL3	Financial aid: Federal loans	Way to avoid additional federal loans: work more
FLDENY	Financial aid: Federal loans	Federal loans: turned down any in 2011-12
FLDENYRS	Financial aid: Federal loans	Federal loans: main reason for not accepting additional loans
FLNPCT6	Financial aid: Ratios	Ratio of fed loans to fed aid (excl Direct PLUS to parents, Veterans')
GAINSUR	Financial aid: Institutional	Graduate assistantship: included health insurance
GENDER	Student's characteristics	Gender
GLOANSR2	Financial aid: Package	Loan package by type of loan
GLOANSRC	Financial aid: Package	Loan package by source of loan
GPA	Education: Program	Grade point average
GPLUSAMT	Financial aid: Federal loans	Direct PLUS Loans to graduate students
GPLUSCUM	Financial aid: Borrowed cumulative	Cumulative Direct PLUS Loans to graduate students amount
GPLUSRAT	Financial aid: Ratios	Ratio of Direct PLUS Loans to graduate students to total loans
GRADDEG	Education: Program	Graduate degree program
GRADGAP	Education: Attendance	Years between BA and graduate school
GRADGPG	Education: Program	Graduate degree programs
GRADLVL	Education: Program	Graduate class level
GRADMAJ	Education: Program	Graduate field of study
GRADPGM	Education: Program	Graduate programs
GRADPYR	Education: Program	Year began graduate degree
GRADSTAT	Education: Attendance	Graduate degree and attendance pattern
GRADTAA	Financial aid: Institutional	Teaching assistantship duties: answered student emails
GRADTAB	Financial aid: Institutional	Teaching assistantship duties: assisted faculty with grading
GRADTAC	Financial aid: Institutional	Teaching assistantship duties: assumed teaching responsibility
GRADTAD	Financial aid: Institutional	Teaching assistantship duties: held office hours
GRADTAE	Financial aid: Institutional	Teaching assistantship duties: led discussions
GRADTAF	Financial aid: Institutional	Teaching assistantship duties: supervised lab sections
GRASTAMT	Financial aid: Other	Total assistantships amount
GRFELAMT	Financial aid: Total	Graduate fellowship amount
GRGRDAMT	Financial aid: Other	Other graduate assistantship amount
GRINFEL	Financial aid: Grants	Graduate fellowship amount
GRJOBHR	Financial aid: Institutional	Graduate school job: hours worked per week
GRJOBWK	Financial aid: Institutional	Graduate school job: proportion of weeks worked
GRNTSRC	Financial aid: Package	Grant package by source of grant
GRRESAMT	Financial aid: Other	Graduate research assistantship amount
GRTCST	Financial aid: Ratios	Ratio of grant aid to student budget
GRTEAAMT	Financial aid: Other	Graduate teaching assistantship amount
GRTLON	Financial aid: Ratios	Ratio of grants to total loans

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
GRTPCT	Financial aid: Ratios	Ratio of grants to total aid
GRTPCTTN	Financial aid: Ratios	Ratio of grant aid to tuition
GRTRATIO	Financial aid: Ratios	Ratio of grants to grants and loans
GRTRNAMT	Financial aid: Other	Graduate traineeship amount
GRTSNEED	Financial aid: Need	Grant amount exceeding federal need
HBCU	Institutional characteristics	Historical black college indicator
HCHONORS	High school	Number of honors subjects
HCMATHHI	High school	Highest level of math completed or planned
HCSCINUM	High school	Number of science courses taken
HCTKBIOL	High school	Took or planned to take biology
HCTKCHEM	High school	Took or planned to take chemistry
HCTKPHYS	High school	Took or planned to take physics
HCYSENGL	High school	Years completed or planned English
HCYSLANG	High school	Years completed or planned foreign languages
HCYSMATH	High school	Years completed or planned math
HCYSSCIE	High school	Years completed or planned science
HCYSSOCI	High school	Years completed or planned social studies
HISPANIC	Student's characteristics	Race: Hispanic or Latino origin
HISPTYPE	Student's characteristics	Hispanic type
HLOFFER	Institutional characteristics	Highest level of offering at NPSAS institution
HOMELESS	Student's characteristics	Homeless or at risk of homelessness
HOMESTUD	Finances	Student owns home or pays mortgage
HSCRDANY	Education: Program	Earned any college credits in high school (uses HSCRDAP and HSCRDCOL)
HSCRDAP	High school	Took AP courses while in high school
HSCRDCOL	High school	Took college-level courses while in high school
HSCRDIB	High school	Took IB courses while in high school
HSDEG	High school	High school degree type
HSGPA	High school	Grade point average in high school
HSGRADYY	High school	High school graduation year
HSIZE	Student's family	Family size (dependent & independent)
HSTYPE	High school	Type of high school attended
IMMIAGE	Student's characteristics	Age when arrived in the United States
IMMIGEN	Student's characteristics	Immigrant generational status
IMMIGRA	Student's characteristics	Immigrant status
INATHAMT	Financial aid: Grants	Athletic scholarships
INCOME	Finances: Income	Total income by dependency (categorical)
INCOMEG	Finances: Income	Total income (categorical)
INCPCT1	Financial aid: Ratios	Student budget as percent of income
INCPCT2	Financial aid: Ratios	Tuition as percent of income
INDEPINC	Finances: Income	Independent students: student and spouse's income
INGRTAMT	Financial aid: Grants	Institutional grants total
INJURIS	Institution: expenses	Tuition jurisdiction
INLNAMT	Financial aid: Institutional	Institutional loans
INSMERIT	Financial aid: Grants	Institutional merit-only grants
INSTAMT	Financial aid: Institutional	Institutional aid total
INSTCAT	Institution type	Institutional category
INSTCAT2	Institution type	Institutional category and control
INSTGPCT	Financial aid: Ratios	Ratio of institutional grants to total aid
INSTNEED	Financial aid: Grants	Institutional need-based grants

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
INSTNOND	Financial aid: Grants	Institutional non-need & merit grants
INSTPACK	Financial aid: Package	Aid package with institutional aids
INSTPCT	Financial aid: Ratios	Ratio of institution aid to total aid
INSTSTAT	Institutional characteristics	NPSAS institution state
INSTWRK	Financial aid: Institutional	Institutional work-study
INSWAIV	Financial aid: Grants	Institutional tuition & fee waivers
ISTUINC	Finances: Income	Independent students: Income (continuous)
JOBANY	Employment	Job: Had job in 2011-12 (excluding work-study/assistantship)
JOBEARN	Employment	Job: Earnings from work while enrolled (excl work-study/assistantship)
JOBEARN2	Employment	Job: Earnings from work while enrolled (including work-study)
JOBENR	Employment	Full-time or part-time job while enrolled in school (excl. work-study)
JOBENR2	Employment	Full-time or part-time job while enrolled in school (incl. work-study)
JOBHOUR	Employment	Job: Hours worked per week (excluding work-study/assistantship)
JOBHOUR2	Employment	Job: Hours worked per week (including work-study)
JOBONOFF	Employment	Job: Located primarily on or off campus
JOBROLE	Employment	Job: Primary role: student or employee (excl work-study/assistantship)
JOBROLE2	Employment	Job: Primary role as student or employee (including work-study)
JOBTYP2	Employment	Type of job student had (including work-study)
LEVEL	Institution type	NPSAS institution level
LNREPAY	Financial aid: Loans	Expect help with repaying student loans
LOANCST	Financial aid: Ratios	Ratio of loans to student budget (excludes Direct PLUS to parents)
LOANCST2	Financial aid: Ratios	Ratio of loans to student budget (includes Direct PLUS to parents)
LOANPCT	Financial aid: Ratios	Ratio of loans to total aid (excluding Direct PLUS Loans to parents)
LOANPCT2	Financial aid: Ratios	Ratio of loans to total aid (including Direct PLUS Loans to parents)
LOANSRC	Financial aid: Package	Loan package by source of loan
LOCALE	Institutional characteristics	Degree of urbanization
LOCALEST	Student's characteristics	Degree of Urbanization of student's permanent address
LOCALRES	Student's characteristics	Residence while enrolled
MAJCHGFQ	Education: Program	Majors: frequency of formally changed
MAJORNSF	Education: Program	Major field of study with a focus on NSF STEM fields
MAJORS	Education: Program	Field of study or major (detailed)
MAJORS12	Education: Program	Field of study or major: Undergraduate
MAJORS23	Education: Program	Field of study: undergraduate (23 categories)
MAJORS2Y	Education: Program	Field of study: undergraduate (11 categories)
MAJORS4Y	Education: Program	Field of study: undergraduate (10 categories)
MAJORSGR	Education: Program	Graduate field of study or major
MERITAID	Financial aid: Total	Total merit-only grants
MFT	Education: Attendance	Number of full-time months enrolled
MHT	Education: Attendance	Months enrolled half-time
MILTYPE	Student's characteristics	Military type
MLT	Education: Attendance	Months enrolled less than half-time
MNTRENT	Finances	Monthly mortgage or rent amount
MPT	Education: Attendance	Number of part-time months enrolled
NEEDAID	Financial aid: Total	Total need-based grant aid
NEEDAID1	Financial aid: Total	Total need-based aid
NETCST1	Financial aid: Net price	Student budget minus all aid
NETCST10	Financial aid: Net price	Tuition and fees minus federal grants
NETCST12	Financial aid: Net price	Tuition and fees minus state grants
NETCST13	Financial aid: Net price	Tuition and fees minus institutional grants
NETCST14	Financial aid: Net price	Tuition and fees minus all non-federal grants

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
NETCST15	Financial aid: Net price	Tuition and fees minus state and institutional grants
NETCST16	Financial aid: Net price	Student budget minus federal and state grants
NETCST17	Financial aid: Net price	Student budget minus all grants and loans
NETCST18	Financial aid: Net price	Student budget minus all aid except work-study
NETCST2	Financial aid: Net price	Student budget minus federal grants
NETCST20	Financial aid: Net price	Student budget minus all grants & loans (incl Direct PLUS to parents)
NETCST3	Financial aid: Net price	Student budget minus all grants
NETCST4	Financial aid: Net price	Student budget minus grants and half of loans
NETCST41	Financial aid: Net price	Student budget minus all aid except private loans
NETCST9	Financial aid: Net price	Tuition and fees minus all grants
NFEDCUM1	Financial aid: Borrowed cumulative	Cumulative non-federal loan amount for undergrad
NFEDCUM2	Financial aid: Borrowed cumulative	Cumulative non federal loan amount for grad
NFEDCUM3	Financial aid: Borrowed cumulative	Cumulative non federal loan amount for undergrad and grad
NP12ID	Survey sample	Case ID
NUMJOB	Employment	Job: Number (excluding work-study/assistantship)
NUMJOB2	Employment	Job: Number (including work-study)
OBEREG	Institutional characteristics	NPSAS institution region
ORPHAN	Student's characteristics	Orphan, ward of court, emancipated minor, or in legal guardianship
ORPHHOME	Student's characteristics	Orphan or homeless
OTHFDGRT	Financial aid: Grants	Other federal grants (not Title IV)
OTHGTAMT	Financial aid: Grants	Outside grants (private & employer)
OTHRSCR	Financial aid: Other	Outside sources total
OTHTYPE	Financial aid: Other	Total other type of aid (Direct PLUS, job training, assistantships, VA)
OTHTYPE2	Financial aid: Other	Total other type of aid including work-study
OWEAMT1	Financial aid: Borrowed cumulative	Amount still owed on all undergraduate loans
OWEAMT2	Financial aid: Borrowed cumulative	Amount still owed on all graduate loans
OWEAMT3	Financial aid: Borrowed cumulative	Amount still owed on all education loans
PAGI	Finances: Income	Dependent students: Parents adjusted gross income
PARBORN	Student's characteristics	Parent born in US, PR, or US Territory
PAREduc	Parents and family	Parents' highest education level
PARHELP	Finances	Help from parents: housing, tuition, and other expenses
PARHPAMT	Finances	Help from parents: amount parents helped pay for expenses in 2011-12
PCTALL	Finances: Income	Income percentile rank for all students
PCTDEP	Finances: Income	Income percentile dependent students
PCTENR2M	Institutional characteristics	Percent enrolled: two or more races
PCTENRAN	Institutional characteristics	Percent enrolled: American Indian/Alaskan Native
PCTENRAP	Institutional characteristics	Percent enrolled: Asian/Pacific Islander
PCTENRAS	Institutional characteristics	Percent enrolled: Asian
PCTENRBK	Institutional characteristics	Percent enrolled: black, non-Hispanic
PCTENRHS	Institutional characteristics	Percent enrolled: Hispanic
PCTENRNH	Institutional characteristics	Percent enrolled: Native Hawaiian or Other Pacific Islander
PCTENRNR	Institutional characteristics	Percent enrolled: Nonresident Alien
PCTENRUN	Institutional characteristics	Percent enrolled: Race/ethnicity unknown
PCTENRWH	Institutional characteristics	Percent enrolled: white
PCTINDEP	Finances: Income	Income percentile independent students
PCTPOV	Finances: Income	Income percent of poverty level
PDATED	Parents and family	Father's highest education level
PELLAMT	Financial aid: Federal grants	Federal Pell grant
PELLCST	Financial aid: Ratios	Ratio of Pell grant to student budget

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
PELLCUM	Financial aid: Federal grants	Cumulative Pell amount
PELLFST	Financial aid: Federal grants	First year received a Pell grant
PELLLST	Financial aid: Federal grants	Last year received a Pell grant
PELLPACK	Financial aid: Package	Aid package with Pell grants
PELLRAT1	Financial aid: Ratios	Ratio of Pell grant to total aid
PELLRAT2	Financial aid: Ratios	Ratio of Pell grant to total grants
PELLYRS	Financial aid: Federal grants	Number of years received Pell grants
PERKAMT	Financial aid: Federal loans	Perkins loan
PERKCUM1	Financial aid: Borrowed cumulative	Cumulative Perkins amount for undergrad
PERKCUM2	Financial aid: Borrowed cumulative	Cumulative Perkins amount for grad
PERKCUM3	Financial aid: Borrowed cumulative	Cumulative Perkins amount for undergrad and grad
PFAMNUM	Parents and family	Dependent students: Family size
PFEDTAX	Finances: Income	Dependent students: Parents federal tax paid
PGMSEC	Education: Program	Graduate program and institution type
PHSLOAN	Financial aid: Federal loans	Federal health professions loans
PINCOL	Parents and family	Dependent students: Number of family members in college
PLUSAMT	Financial aid: Federal loans	Direct PLUS Loans to parents
PLUSCUM	Financial aid: Borrowed cumulative	Cumulative Direct PLUS Loans to parents amount
PLUSPCT	Financial aid: Ratios	Ratio of Direct PLUS Loans to parents to total aid
PMARITAL	Parents and family	Dependent students: Parents' marital status
PMOMED	Parents and family	Mother's highest education level
PRIMLANG	Student's characteristics	English primary language spoken
PRIMLGfq	Student's characteristics	Frequency of speaking non-English language with primary caregiver
PRIVAIID	Financial aid: Grants	Private source grants
PRIVAMT	Financial aid: Other	Total private sources grants and loans
PRIVCST	Financial aid: Ratios	Ratio of private loans to student budget
PRIVLOAN	Financial aid: Loans	Private (alternative) loans
PRIVLRAT	Financial aid: Ratios	Ratio of private loans to total loans
PRIVPACK	Financial aid: Package	Package of private and non-private loans
PRIVPCT	Financial aid: Ratios	Ratio of private loans to total aid
PROGSTAT	Education: Attainment	Completed degree program in 2011-12
PSECTYR	Education: Attendance	Year first enrolled in postsecondary education
PTAXFILE	Finances: Income	Dependent students: Parents federal tax filed
RAASIAN	Student's characteristics	Race: Asian
RABLACK	Student's characteristics	Race: Black or African American
RACE	Student's characteristics	Race/ethnicity (with multiple)
RACE2	Student's characteristics	Race/ethnicity (with multiple) without foreign students
RACECEN	Student's characteristics	Race/ethnicity census categories
RACESEX	Student's characteristics	Race/ethnicity (with multiple) and gender
RAINDIAN	Student's characteristics	Race: American Indian or Alaska Native
RAINDRB	Student's characteristics	Race: American Indian or Alaska Native recognized tribe
RAISLAND	Student's characteristics	Race: Native Hawaiian or other Pacific Islander
RAWHITE	Student's characteristics	Race: White
REANOAPA	Financial aid: Application	Reason for not applying: did not want to take on the debt
REANOAPB	Financial aid: Application	Reason for not applying: forms were too much work
REANOAPC	Financial aid: Application	Reason for not applying: no information about how to apply
REANOAPD	Financial aid: Application	Reason for not applying: no need
REANOAPE	Financial aid: Application	Reason for not applying: thought ineligible
REANOAPF	Financial aid: Application	Reason for not applying for aid in NPSAS year: other

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
REFUND1	Financial aid	Received a refund of scholarships or grants from NPSAS
REFUND2	Financial aid	Method of receiving refund from NPSAS
REMENGL	Education: Courses	Remedial courses: number taken in English in 2011-12
REMETK2	Education: Courses	Remedial courses: Took in 2011-12 (1st & 2nd year students)
REMETOOK	Education: Courses	Remedial courses: took in 2011-12
REMEVER	Education: Courses	Remedial courses: ever taken
REMMATH	Education: Courses	Remedial courses: number taken in math in 2011-12
REMREAD	Education: Courses	Remedial courses: number taken in reading in 2011-12
REMWRITE	Education: Courses	Remedial courses: number taken in writing in 2011-12
RISKINDX	Student's characteristics	Index of risk and nontraditional students
SAGI	Finances: Income	Independent students: Adjusted gross income
SAMESTAT	Student's characteristics	Attend institution in state of legal residence
SECTOR1	Institution type	NPSAS institution type (IPEDS sector)
SECTOR10	Institution type	NPSAS institution sector - 10 categories
SECTOR4	Institution type	NPSAS institution sector (4 with multiple)
SELECTV2	Institutional characteristics	Selectivity (4-year institutions)
SEOGAMT	Financial aid: Grants	Federal Supplemental Educational Opportunity Grant (SEOG)
SFAMNUM	Student's family	Independent students: Family size
SFEDTAX	Finances: Income	Independent students: Federal tax paid
SIBCOLFT	Parents and family	First sibling to go to college
SIBINCOL	Parents and family	Dependent students: Have siblings in college
SINCOL	Student's family	Independent students: Number of family members in college
SINGLPAR	Student's characteristics	Single parent independent students
SJEARN	Employment	Work-study job: total earnings
SJHOURS	Employment	Work-study job: hours worked per week
SJMAJOR	Employment	Work-study job: related to major or coursework
SJONOFF	Employment	Work-study job: located primarily on or off campus
SJSCHOOL	Employment	Work-study job: for NPSAS or another institution or organization
SJWKST	Employment	Work-study job: had work-study job in 2011-12
SMARITAL	Student's characteristics	Marital status
SNEED1	Financial aid: Need	Student budget minus EFC
SNEED2	Financial aid: Need	Student budget minus EFC minus total aid
SNEED3	Financial aid: Need	Student budget minus EFC minus federal grants
SNEED4	Financial aid: Need	Student budget minus EFC minus grants and federal need aid
SNEED5	Financial aid: Need	Student budget minus EFC minus all grants
SNEED7	Financial aid: Need	Student budget minus EFC, federal and state grants
SNEED8	Financial aid: Need	Student budget minus EFC & federal, state, and other grants
SNEED9	Financial aid: Need	Student budget minus EFC & all aid except private loans
SPINCOL	Student's family	Independent students: Spouse attending college
SPSINC	Finances: Income	Independent students: Spouse's income
STAFCT1	Financial aid: Federal loans	Direct Subsidized Loan maximum
STAFCT2	Financial aid: Federal loans	Direct Subsidized and Unsubsidized Loan total maximum
STAFCT3	Financial aid: Federal loans	Direct Sub. & Unsub. Loan individual total maximum for aid applicants
STAFFAMT	Financial aid: Federal loans	Direct Subsidized and Unsubsidized Loans
STAFFRAT	Financial aid: Ratios	Ratio of Direct Subsidized and Unsubsidized Loans to total loans
STAFFST	Financial aid: Federal loans	Year of first Direct Subsidized or Unsubsidized Loan
STAFLLST	Financial aid: Federal loans	Year of last Direct Subsidized or Unsubsidized Loan
STAFSUB	Financial aid: Federal loans	Direct Subsidized Loans
STAFATYPE	Financial aid: Federal loans	Direct Subsidized and Unsubsidized Loan types received
STAFUNSB	Financial aid: Federal loans	Direct Unsubsidized Loans

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
STAFYRS	Financial aid: Federal loans	Number of years received Direct Subsidized or Unsubsidized Loans
STAPCT	Financial aid: Ratios	Ratio of state aid to total aid
STATEAMT	Financial aid: State	State aid total
STATNEED	Financial aid: State	State need-based grants
STATNOND	Financial aid: State	State non-need & merit grants
STAXFILE	Finances: Income	Independent students: Federal tax filed
STEMMAJ	Education: Program	Major field of study with a focus on STEM fields
STFCUM1	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized and Unsubsidized Loans for undergrad
STFCUM2	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized and Unsubsidized Loans for grad
STFCUM3	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized & Unsubsidized Loans for undergrad & grad
STGRPCT	Financial aid: Ratios	Ratio of state grants to total aid
STGTAMT	Financial aid: State	State grants total
STLNAMT	Financial aid: State	State loans
STMERIT	Financial aid: State	State merit-only grants
STNOND1	Financial aid: State	State non-need grants
STSBCEUM1	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized Loans for undergrad
STSBCEUM2	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized Loans for grad
STSBCEUM3	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized Loans for undergrad and grad
STSUBMX	Financial aid: Federal loans	Direct Subsidized Loan program maximum
STTOTMX	Financial aid: Federal loans	Direct Subsidized and Unsubsidized Loan program maximum
STUDMULT	Education: Attendance	Number of institutions attended
STUSTATE	Student's characteristics	State of legal residence
STWKAMT	Financial aid: State	State work-study
STYPELST	Student's characteristics	Student type indicator
SUBCEUM1	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized and Perkins Loans for undergrad
SUBCEUM2	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized and Perkins Loans for grad
SUBCEUM3	Financial aid: Borrowed cumulative	Cumulative Direct Subsidized and Perkins Loans for undergrad and grad
SUBLOAN	Financial aid: Federal loans	Federal subsidized loans (Direct Subsidized & Perkins)
T4LNAMT1	Financial aid: Federal loans	Title IV loans (excludes Direct PLUS Loans to parents)
T4LNAMT2	Financial aid: Federal loans	Title IV loans (includes Direct PLUS Loans to parents)
TEACTDER	Student's characteristics	ACT derived composite score
TESATDER	Student's characteristics	SAT derived composite score
TESATMDE	Student's characteristics	SAT derived math score
TESATVDE	Student's characteristics	SAT derived verbal score
TETOOK	Student's characteristics	Took SAT or ACT exams
TFEDAID	Financial aid: Federal	Total federal aid (excludes Veterans'/DOD)
TFEDAID2	Financial aid: Federal	Total federal aid (includes Veterans'/DOD)
TFEDAID6	Financial aid: Federal	Total federal aid (excludes Direct PLUS to parents and Veterans'/DOD)
TFEDGRT	Financial aid: Federal grants	Total federal grants
TFEDGRT2	Financial aid: Federal grants	Total federal grants and Veterans'/DOD
TFEDLN	Financial aid: Federal loans	Total federal loans (excludes Direct PLUS Loans to parents)
TFEDLN2	Financial aid: Federal loans	Total federal loans (includes Direct PLUS Loans to parents)
TFEDWRK	Financial aid: Federal	Federal work-study
TGRTLN	Financial aid: Total	Total loans and grants
TITIVAMT	Financial aid: Federal	Total federal Title IV aid
TNFEDAID	Financial aid: Total	Total non-federal aid
TNFEDGRT	Financial aid: Total	Total non-federal grants
TNFEDLN	Financial aid: Total	Total non-federal loans
TOTAID	Financial aid: Total	Total aid amount
TOTAID2	Financial aid: Total	Total federal (Title IV), state, & institutional aid

See notes at end of table.

Table N-1. Analysis variables: 2012—Continued

Variable name	Subject	Variable label
TOTAID4	Financial aid: Total	Total aid excluding Direct PLUS Loans to parents
TOTAID5	Financial aid: Total	Total aid excluding work-study
TOTAID6	Financial aid: Total	Total aid (excludes Direct PLUS Loans to parents and Veterans'/DOD)
TOTAID7	Financial aid: Total	Total aid (excludes Veterans'/DOD)
TOTAID8	Financial aid: Total	Total aid without private loans
TOTAL	Institutional characteristics	NPSAS institution 12-month total enrollment
TOTDUE1	Financial aid: Total	Cum. amount owed, principal & interest, all loans for undergraduate
TOTDUE2	Financial aid: Total	Cum. amount owed, principal & interest, all loans for graduate
TOTDUE3	Financial aid: Total	Cum. amount owed, principal & interest, all education loans
TOTGRT	Financial aid: Total	Total grants
TOTGRT2	Financial aid: Total	Total grants and Veterans'/DOD
TOTGRT4	Financial aid: Total	Total state and institutional grants
TOTLOAN	Financial aid: Total	Total loans (excluding Direct PLUS Loans to parents)
TOTLOAN2	Financial aid: Total	Total loans (including Direct PLUS Loans to parents)
TOTLOAN3	Financial aid: Total	Total loans excluding private loans
TOTNOND3	Financial aid: Total	Institutional no-need and state no-need grants
TOTWKST	Financial aid: Total	Total work-study
TRIO	Student's characteristics	TRIO program eligibility criteria
TRLNPAVT	Residence	Traveling from residence to NPSAS: average minutes per day
TRLNPDAY	Residence	Traveling between residence and NPSAS: days per week
TRLWKAVT	Employment	Traveling from residence to work: average minutes per day
TRLWKDAY	Employment	Traveling between residence and work: days per week
TUITION2	Institution price	Tuition and fees paid
UGDEG	Education: Program	Undergraduate degree program
UGDEGAA	Education: Program	Associate's degree type
UGLVL1	Education: Program	Class level
UGLVL2	Education: Program	Class level (for loans)
UMNEED1	Financial aid: Need	Would have borrowed more money in NPSAS year
UMNEED2	Financial aid: Need	Additional amount would have borrowed in NPSAS year
UNSBLOAN	Financial aid: Total	Total unsubsidized loans (all sources)
USBORN	Student's characteristics	Born in the U.S. (student)
VADODAMT	Financial aid: Other	Veterans' benefits and Department of Defense
VETBEN	Financial aid: Other	Veterans' benefits
VETERAN	Student's characteristics	Veteran status
VOHELP	Financial aid: State	Vocational rehabilitation and training
WORKPCT	Financial aid: Ratios	Ratio of work-study to total aid

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

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NPSAS:12 Field Test

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Chapter 1. Overview

This report describes the methods and results for the field test of the 2011–12 National Postsecondary Student Aid Study (NPSAS:12), conducted for the National Center for Education Statistics (NCES), U.S. Department of Education (ED), Washington, DC, as authorized by the Higher Education Act (HEA) of 2008, 20 U.S.C. § 1015 (2007).

This cycle of NPSAS occurs 4 years after the last data collection in response to the need to collect periodic information on financial aid programs. The large-scale and rapid changes in federal policy concerning postsecondary student aid necessitate such frequent studies. Eligibility restrictions change, size of grant and loan amounts fluctuate, and the balance between various aid options changes dramatically. A recurring study like NPSAS is essential to helping predict future costs for financial aid because loan programs create continued obligations for the federal government as long as the loans are being repaid.

The major purpose of NPSAS:12 field test was to plan, implement, and evaluate operational and methodological procedures, instruments, and systems that are proposed for use in the full-scale study, particularly procedures that had not been previously tested.

Several experiments were conducted during the field test, including:

- *Propensity design experiment*—an experiment to predict a sample member’s propensity to respond to the survey and to tailor incentives to increase responses of low propensity groups;
- *Informational video*—testing an informational video to communicate information about the study and how to respond; and
- *Instrumentation experiments*—testing new data collection features and implementations, such as visual sliders scales and scale start positions.

Chapter 1 of this report provides an overview of NPSAS. Chapter 2 describes the sampling design and the steps used to select institution and student samples. Chapter 3 describes the design, outcomes, and evaluation activities associated with institution data collection. Chapter 4 provides details on the student interview design, data collection, outcomes and evaluations. Chapter 5 includes information on the student records matching activities and outcomes. Postdata collection data file processing is described in Chapter 6, including editing, weighting, imputation, bias analysis, and variance estimation. Chapter 7 gives recommendations for the full-scale study.

Chapter 2. Sampling Design

This chapter provides a detailed summary of the sampling design of NPSAS:12 field test and the sampling methods implemented in the study. All sampling procedures and methods were developed in consultation with a Technical Review Panel (TRP) composed of nationally recognized experts in higher education. Participant eligibility requirements and the multiple stages of sampling are described, including procedures for identifying the longitudinal cohort for the Beginning Postsecondary Student Longitudinal Study (BPS).

2.1 Respondent Universe

The institution sampling frame for NPSAS:12 field test was constructed using the 2009 Integrated Postsecondary Education Data System (IPEDS) header, Institution Characteristics (IC), Fall and 12-Month Enrollment, and Completions files. All eligible students from sampled institutions comprised the student sampling frame. A small number of institutions on the frame contained missing enrollment information. This information was imputed for these institutions using the latest IPEDS imputation procedures.

2.1.1 Institution Universe

To be eligible for NPSAS:12 field test, students must have been enrolled in a NPSAS eligible institution in any term or course of instruction at any time during the 2010–11 academic year. Institutions must have also met the following requirements:

- offer an educational program designed for persons who have completed secondary 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 more than the employees or members of the company or group (e.g. union) that administers the institution;
- be located in 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 ED.¹

Institutions providing only avocational, recreational, or remedial courses or only in-house courses for their own employees or members were excluded. U.S. service academies were excluded because of their unique funding/tuition base.

The above institution eligibility conditions were consistent with all previous NPSAS studies with three exceptions: 1) Title IV participation, 2) inclusion of correspondence schools, and 3) exclusion of Puerto Rico. The requirement that an institution be eligible to distribute federal Title IV

¹ A Title IV eligible institution is an institution that has a written agreement (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.

aid was implemented beginning with NPSAS:2000. Institutions that offered only correspondence courses, provided these same institutions were also eligible to distribute federal Title IV student aid, were first included in NPSAS:04. Institutions in Puerto Rico were not originally included in NPSAS in 1987, but were subsequently added to administrations of NPSAS between 1993 and 2008. Puerto Rico institutions are not included in the 2012 administration of NPSAS.

2.1.2 Student Universe

Students eligible for NPSAS:12 field test were those who attended a NPSAS eligible institution during the 2010–11 academic year and who were

- enrolled in *either*: (a) an academic program; (b) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree; (c) exclusively noncredit remedial coursework but determined by the institution to be eligible for Title IV aid; *or* (d) 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 currently enrolled in high school; and
- not solely enrolled in a General Educational Development (GED) or other high school completion program.

2.2 Institution and Student Samples

NPSAS:12 field test institution sample included all levels (less-than-2-year, 2-year and 4-year) and controls (public, private nonprofit and private for-profit) of Title IV eligible postsecondary institutions in the United States. The student sample was randomly selected from lists of students enrolled at sampled institutions between July, 1 2010 and April 30, 2011.

2.2.1 Institution Sample

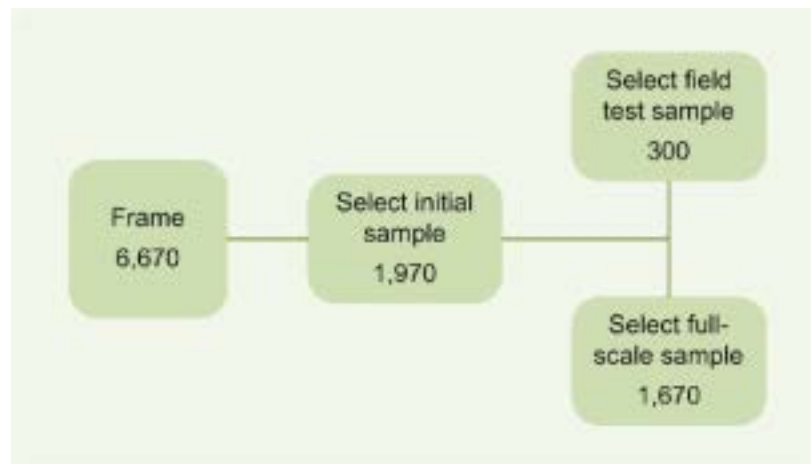
The institution samples for the field test and full-scale studies were selected simultaneously, prior to the field test study, using stratified random sampling with probabilities proportional to a composite measure of size (Folsom, Potter, and Williams 1987). Institution measure of size was determined using annual enrollment data from the most recent IPEDS 12-Month Enrollment Component and first time beginner (FTB) enrollment data from the most recent IPEDS Fall Enrollment Component. Using composite measure of size sampling ensures that target sample sizes are achieved within institution and student sampling strata, while also achieving approximately equal student weights across institutions.

For NPSAS:12, the field test institution sample was selected using statistical procedures rather than purposively as had been done in past NPSAS cycles. This provided more control to ensure that the field test and the full-scale institution samples have similar characteristics. It also allowed inferences to be made to the target population, supporting the analytic needs of the field test experiments and instrument.

From the stratified frame, a total of 1,970 institutions were to participate in either the full-scale or field test study. From the 1,970 institutions selected for participation a subsample of 300 institutions was selected using simple random sampling within institution strata to comprise the field test sample. The remaining 1,670 institutions comprise the sample for the full-scale study. This sampling process eliminated the possibility that an institution would be burdened with participation in both the field test and full-scale samples and maintained the representativeness of the full-scale

sample. Figure 1 shows the flow of institution sampling activities. Unlike in past NPSAS cycles no schools were designated as “certainty institutions,” that is, while there were some certainty institutions in the initial sample selection, these institutions were not guaranteed to be selected for the full-scale study. All institutions in NPSAS:12 sample were eligible for either the full-scale or field test studies.

Figure 1. Institution sample flow: 2011



Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Study (NPSAS:12) field Test.

The institution strata used for the sampling design, which are based on institution level, control, and highest level of offering, include:

1. public less-than-2-year,
2. public 2-year,
3. public 4-year non-doctorate-granting,
4. public 4-year doctorate-granting,
5. private nonprofit less-than-4-year,
6. private nonprofit 4-year non-doctorate-granting,
7. private nonprofit 4-year doctorate-granting,
8. private for-profit less-than-2-year,
9. private for-profit 2-year, and
10. private for-profit 4-year.

Due to the growth of the for-profit sector, private for-profit 4-year and private for-profit 2-year institutions are separated into their own stratum unlike in previous administrations of NPSAS.

Within each institution stratum, additional implicit stratification for the full-scale was accomplished by sorting the sampling frame within stratum by the following classifications: (1) historically Black colleges and universities indicator; (2) Hispanic-serving institutions indicator (3) Carnegie classifications of degree-granting postsecondary institutions;² (4) 2-digit Classification of

² We will decide what, if any, collapsing is needed of the categories for the purposes of implicit stratification.

Instructional Programs (CIP) code of the largest program at less-than-2-year institutions; (5) the Office of Business Economics Region from the IPEDS header file (Bureau of Economic Analysis of the U.S. Department of Commerce Region); (6) state and system for states with large systems, e.g., the SUNY and CUNY systems in New York, the state and technical colleges in Georgia, and the California State University and University of California systems in California; and (7) the institution measure of size. The objective of this implicit stratification was to approximate proportional representation of institutions on these measures.

Table 1 shows sampled institutions' eligibility rates, rates of providing student enrollment lists, and past NPSAS participation by institution stratum. Overall, almost 100 percent of the sampled institutions met the eligibility requirements; of those, approximately 51 percent provided enrollment lists. The institution response rate is below what has been obtained for other NPSAS field tests, primarily due to the termination of sampling and institution contacting once a sufficient number of lists for sampling were received.

Table 1. Unweighted percentage of sampled, eligible, and participating field test institutions, by institution type: 2011

Institution type	Sampled institutions	Eligible institutions					
		Total		Provided enrollment lists		Participated in past NPSAS cycles	
		Number	Percent	Number	Percent	Number	Percent
Total	300	300	99.7	150	51.0	220	73.3
Public							
Less-than-2-year	10	10	100.0	#	42.9	#	42.9
2-year	70	70	100.0	40	52.2	50	77.6
4-year non-doctorate-granting	20	20	100.0	10	59.1	20	95.5
4-year doctorate-granting	40	40	100.0	20	57.5	40	100.0
Private nonprofit							
Less-than-4-year	10	10	85.7	#	57.1	10	71.4
4-year non-doctorate-granting	50	50	100.0	20	50.0	40	80.4
4-year doctorate-granting	40	40	100.0	20	50.0	30	76.3
Private for-profit							
Less-than-2-year	10	10	100.0	#	44.4	#	44.4
2-year	20	20	100.0	10	45.0	10	50.0
4-year	40	40	100.0	20	45.5	20	43.2

Rounds to zero.

NOTE: 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) Field Test.

2.2.2 Student Sample

NPSAS:12 year covers the time period between July 1 and June 30, to coincide with the federal financial aid award year. To facilitate timely completion of data collection and data file preparation, institutions were asked to submit enrollment lists for all eligible students enrolled at any time between July 1 and April 30 or, for institutions with continuous enrollment, between July 1 and March 31. The March 31 deadline for continuous enrollment institutions was used for the field test due to the compressed data collection schedule and will not be used in the full-scale.

Because previous cycles of NPSAS have shown that the terms beginning in May and June add little to enrollment and aid totals, May-June starters were excluded to allow institutions to provide enrollment lists earlier which, in turn, allowed the student interview process to begin earlier. In the full-scale study, poststratification of survey estimates based on IPEDS records on enrollment and National Student Loan Data System (NSLDS) records on financial aid distributed will adjust for the survey year's inclusion of any terms that begin by April 30 and the consequent exclusion of a small number of students newly enrolled in May or June.

To create the student sampling frame, each participating institution was asked to submit a list of eligible students. The requests for student enrollment lists specifically indicated how institutions should handle special cases, such as students taking only correspondence or distance learning courses, and foreign exchange, continuing education, extension division, and nonmatriculated students. The data required for each enrollee were the following:

- student's name;
- student ID;
- Social Security number;
- date of birth;
- date of high school graduation (month and year);
- degree level during the last term of enrollment (undergraduate, masters, doctoral-research/scholarship/other, doctoral-professional practice, or other graduate);
- class level if undergraduate (first year, second year, third year, fourth year, or fifth year or higher);
- major;
- CIP code;
- indicator of whether the institution received an Institutional Student Information Record (ISIR) (an electronic record summarizing the results of the student's Free Application for Federal Student Aid [FAFSA] processing) from the Central Processing System (CPS);
- FTB status; and
- contacting information, such as cell phone number, local telephone number and address, permanent telephone number and address, campus e-mail address, and permanent e-mail address.

Requesting contact information for eligible students prior to sampling allowed for student record abstraction and student interviewing to begin shortly after sample selection which helped to ensure the management of the field test schedule for data collection, data processing, and file development.

Student sample sizes for the field test were formulated to ensure representation of various types of students. Specifically, the sample included a large number of potential first-time beginners to provide a sufficient sample size to obtain a sample yield of at least 1,000 students for BPS field test. As shown in table 2, NPSAS:12 field test sample included 4,530 students of which 4,130 were

potential FTBs, 200 were other undergraduate students, and 200 were graduate students. There were six student sampling strata:

- two sampling strata for undergraduate students:
 - FTB and
 - other undergraduate;
- four sampling strata for graduate students
 - masters;
 - doctoral-research/scholarship/other;
 - doctoral-professional practice; and
 - other graduate students.

Table 2. Expected and actual student samples, by student type and level of institution: 2011

Student type and level of institution	Student sample size	
	Expected ¹	Actual
Total	4,530	4,590
First-time beginner	4,130	4,160
Less-than-2-year	230	190
2-year	1,920	2,120
4-year	1,980	1,850
Other undergraduate	200	200
Less-than-2-year	20	20
2-year	70	60
4-year	120	130
Graduate (4-year)	200	220
Master's	160	110
Doctoral-research/scholarship/other	10	40
Doctoral-professional practice	10	30
Other graduate	20	50

¹Based on sampling rates, using the 2008–09 Integrated Postsecondary Education Data System (IPEDS) header, 12-Month and Fall Enrollment, and Completion files counts.

NOTE: 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) Field Test.

The student sampling procedures implemented in the field test were comparable to those planned for the full-scale study. Students were sampled at fixed rates according to student education level and institution sampling strata. Sample yield was monitored and sampling rates were adjusted when necessary, resulting in a statistical sample of the required sample size for the field test. The same approach will be used for the full-scale study.

The expected and actual student sample sizes, by student type and level of institution, are shown in table 2. Overall, the application of predetermined sampling rates yielded a sample that met expectations. Graduate students, 2-year institutions, and FTB students yielded overall samples

slightly above expectations. Sample sizes will be monitored closely in the full-scale study to ensure that the desired sample distribution is achieved.

Institutions providing student enrollment lists were asked to correct any of the following problems:

- the education level of each student was not included or was unclear;
- first-time beginning students were not identified (unless the institution explicitly indicated that no such students were enrolled at the institution); or
- the number of students listed was inconsistent with the latest IPEDS data as described below.

Reviewing the counts from the enrollment lists provided by institutions against the student full-year enrollment counts from the 2009 IPEDS 12 Month Enrollment Component was performed as a quality control checks were performed. Lists were reviewed and unduplicated, if necessary, to ensure students were listed only once per list. . Since IPEDS does not have unduplicated annual FTB counts, the unduplicated FTB counts from the enrollment lists provided by institutions were checked against adjusted full-year enrollment counts. Percentages of FTBs computed from the 2009 IPEDS Fall Enrollment Component were multiplied by full-year undergraduate enrollment counts from the 2009 IPEDS 12 Month Enrollment Component to estimate the numbers of full-year FTBs.

Upper and lower bounds were formed around the IPEDS counts to create a range. If the student enrollment list count was within the prescribed range, the enrollment list passed quality control; otherwise, it failed.³

For undergraduates and graduates, the list failed if its count was either 50 percent less or 50 percent more than the IPEDS enrollment count. For FTBs, the failure occurred if the list count was either 50 percent less or 100 percent more than the adjusted IPEDS enrollment count.

In the interest of time, student samples for the field test were selected from the first 150 institutions that provided lists that passed the above quality control checks.

Table 3 shows the field test student sample by institution type. About 59 percent of the overall student sample was enrolled in public institutions, 28 percent were enrolled in private for-profit institutions, and 12 percent were enrolled in private nonprofit institutions. Approximately 48 percent of all students sampled were enrolled in 2-year institutions.

³ In the event that an institution had an imputed IPEDS enrollment count, lists were compared with IPEDS but were not failed.

Table 3. Initial classification of field test student sample, by institution characteristics and student type: 2011

Institution characteristics	Student type							
	Total sample		FTB		Other undergraduate		Graduate ¹	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	4,590	100.0	4,160	100.0	200	100.0	230	100.0
Institution level								
Less-than-2-year	210	4.5	190	4.6	20	7.4	#	0.4
2-year	2,180	47.5	2,120	51.0	60	29.6	#	0.4
4-year non-doctorate-granting	1,370	29.9	1,240	29.8	80	37.0	60	27.0
4-year doctorate-granting	830	18.0	610	14.7	50	26.1	160	72.1
Institution control								
Public	2,730	59.4	2,520	60.5	90	42.4	120	54.0
Private nonprofit	570	12.3	420	10.0	60	27.6	90	41.2
Private for-profit	1,300	28.3	1,230	29.5	60	30.1	10	4.9
Institution type								
Public								
Less-than-2-year	30	0.7	30	0.7	#	1.5	#	0.4
2-year	1,840	40.1	1,800	43.3	40	19.7	#	#
4-year non-doctorate-granting	270	5.8	220	5.4	20	7.4	30	12.4
4-year doctorate-granting	590	12.8	470	11.2	30	13.8	90	41.2
Private nonprofit								
Less-than-4-year	50	1.1	50	1.1	10	3.5	#	#
4-year non-doctorate-granting	270	6.0	230	5.4	20	11.8	20	10.2
4-year doctorate-granting	240	5.3	150	3.5	30	12.3	70	31.0
Private for-profit								
Less-than-2-year	170	3.8	160	3.9	10	5.9	#	#
2-year	290	6.3	280	6.6	10	6.4	#	0.4
4-year	840	18.2	790	19.0	40	17.7	10	4.4

Rounds to zero.

¹Includes master's, doctoral-research/scholarship/other, doctoral-professional practice, and other graduate students.

NOTE: Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

2.3 First-Time Beginners Sample

To be eligible for BPS field test, students must have begun their postsecondary education for the first time after completing high school on or after July 1, 2010. Close attention was paid to accurately identifying FTBs in NPSAS field test to avoid unacceptably high rates of misclassification (e.g., false positives).⁴ High rates of misclassification can and have resulted in (1) excessive cohort loss, (2) excessive cost to “replenish” the sample, and (3) an inefficient sample design (excessive oversampling of “potential” FTBs) to compensate for anticipated misclassification error. To address this concern, participating institutions were asked to provide additional information for all eligible students and matching to administrative databases was utilized to further eliminate false positives prior to sample selection.

⁴ A student identified by the institution on the enrollment list as an FTB who turns out to not be an FTB is a false positive.

Participating institutions were asked to provide the FTB status and high school graduation date for every enrolled eligible student. High school graduation date was used to remove students from the frame that did not meet NPSAS eligibility requirement of high school completion. FTB status along with class level and student level were used to exclude misclassified FTB students in their third year or higher and/or not those who were not an undergraduate student. FTB status along with date of birth were used to identify students older than 18 to send for presampling matching to administrative databases.

If the FTB indicator was not provided for a student on the lists but the student was 18 years of age or younger and did not appear to be dually enrolled in high school, the student was sampled as an FTB. Otherwise, if the FTB indicator was not provided for a student on the list and the student was over the age of 18, then the student was sampled as an “other undergraduate” but would be included in BPS cohort if identified during the student interview as an FTB.

Prior to sampling, students over the age of 18 listed as potential FTBs were matched to NSLDS records to determine if any had a federal financial aid history predating NPSAS year (earlier than July 1, 2010 for the field test). Since NSLDS maintains current records of all Title IV federal grant and loan funding, any student with data showing disbursements from the prior year could be reliably excluded from the sampling frame of FTBs. Given that about 60 percent of FTBs receive some form of Title IV aid in their first year, this matching process could not exclude all listed FTBs with prior enrollment, but significantly improved the accuracy of the list prior to sampling, yielding fewer false positives. After undergoing NSLDS matching, students over the age of 18 still listed as potential FTBs were matched to the National Student Clearinghouse (NSC) for further narrowing of potential FTBs based on evidence of earlier enrollment.

Matching to NSLDS identified about 19 percent of cases as false positives and matching to NSC identified about 14 percent of cases as false positives. In addition to NSLDS and NSC, a subset of potential FTBs on the student sampling frame was sent to CPS for matching to evaluate the benefit of the CPS match for the full-scale study. Of the 58,690 students sent, CPS identified about 10 percent as false positives (table 4). Overall, matching to all sources identified about 32 percent of potential FTB students over the age of 18 as false positives, with many of the false positives identified by CPS also identified by NSLDS or NSC. The matching appeared most effective among public 2-year and private for-profit institutions. While public less-than 2-year institutions have a high percent of false positives, they represent a small percentage of the total sample.

Since this presampling matching was new, the FTB sample size was set high to ensure that a sufficient number of true FTBs would be interviewed. In addition, FTB selection rates were set taking into account the error rates observed in NPSAS:04 and BPS:04/06 within each sector. These rates were adjusted to reflect the improvement in the accuracy of the frame from the NSLDS and NSC record matching. Sector-level FTB error rates from the field test will be used to help determine the rates necessary for full-scale student sampling.

Table 4. Potential first-time beginners false positive rates, by source and institution type: 2011

Institution type	Total			NSLDS			NSC			CPS		
	Sent for matching	False positives	Percent false positive	Sent for matching	False positives	Percent false positive	Sent for matching	False positives	Percent false positive	Sent for matching	False positives	Percent false positive
Total	143,650	46,090	32.1	143,650	27,550	19.2	116,100	16,430	14.1	58,690	5,980	10.2
Public												
Less-than 2-year	720	360	50.2	720	220	29.8	510	150	29.1	#	#	#
2-year	48,090	16,790	34.9	48,090	10,600	22.0	37,490	5,150	13.7	22,210	3,300	14.9
4-year non-doctorate-granting	9,910	1,540	15.6	9,910	670	6.7	9,240	650	7.0	5,650	540	9.5
4-year doctorate-granting	38,200	6,970	18.2	38,200	1,610	4.2	36,590	4,750	13.0	19,160	1,230	6.4
Private												
Nonprofit												
Less-than-4-year	520	140	26.3	520	50	8.7	470	80	16.3	300	40	14.0
4-year non-doctorate-granting	5,770	1,800	31.2	5,770	1,160	20.1	4,610	570	12.3	4,150	250	6.0
4-year doctorate-granting	14,170	3,730	26.3	14,170	1,840	13.0	12,340	1,740	14.1	6,580	550	8.4
For-profit												
Less-than-2-year	2,180	1,100	50.4	2,180	730	33.6	1,450	370	25.4	#	#	#
2-year	4,320	1,770	41.0	4,320	1,100	25.5	3,220	670	20.8	#	#	#
4-year	19,770	11,890	60.2	19,770	9,580	48.4	10,190	2,310	22.7	640	60	9.1

Rounds to zero.

NOTE: NSLDS = National Student Loan Data System; NSC = National Student Clearinghouse; and CPS = Central Processing 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) Field Test.

Chapter 3.

Institution Data Collection Design, Outcomes, and Evaluation

Institutions selected for NPSAS:12 field test were contacted and encouraged to participate in the study by institution contactors who worked with institution coordinators (ICs) to obtain enrollment lists and, subsequently, student records for the students selected for the field test sample. An institution website was used to aid in data collection, offering a variety of methods through which institutions could provide the requested data. Outcomes and evaluations of the field test design and systems provided information for consideration in planning for the full-scale study.

3.1 Institution Data Collection Design and Systems

NPSAS:12 field test institution data collection was facilitated by institution contactors and an institution website and occurred in a stepwise fashion, beginning with the designation of an IC, then submission of an enrollment list, and finally submission of student records data for sampled students. This section provides details of the design and systems used for institution data collection.

3.1.1 Institution Recruitment and Student Enrollment List Acquisition Design and Systems

The initial step in institution data collection was to verify the contact information for the chief administrator (CA) of each sampled institution by telephone. The updated contact information was entered into the Institution Contacting System (ICS), which was used to track the status of each institution and schedule appropriate follow-up. Each interaction with the institution as well as the overall progress of institution recruitment and list collection was recorded in the ICS.

Once contact information for the CA was verified, institution recruitment and student list acquisition proceeded in the following three steps:

1. The CA of each sampled institution was sent a letter, asking them to designate an IC to coordinate data collection at their school.
2. The IC was mailed a request to complete the Institution Registration Page (IRP) on NPSAS institution website. Term information used to set a deadline for providing the student list was entered on the IRP.
3. The IC uploaded the student enrollment list to the NPSAS website (or, alternatively provided as an encrypted, password-protected file via e-mail or a secure fax transmission to an electronic fax server).

3.1.2 Student Records Collection Design and Systems

NPSAS:12 field test used four modes for student record abstraction: (1) Case Mode, in which institution staff entered data directly into the web-based system one student at a time; (2) Grid Mode, in which institution staff entered data directly into the web-based system for multiple students at a time in a format resembling a grid; (3) Template Upload, in which institution staff downloaded an Excel template, entered data into it, then uploaded it back to the website; and (4) Data Files Upload, in which institution staff created data files following provided specifications.

The student records instrument consisted of four components grouped by topic: (1) Contact Information; (2) Student Info and Budget, which collected student characteristics and need analysis information; (3) Enrollment, which collected degree program and progress, term, tuition and placement test information; and (4) Aid Awarded, which collected information about federal, state, institution, graduate, and government/private aid.

ICs were first asked to complete their institution-level information (term system, placement tests, and institution grants and scholarships). After providing these data, the ICs could provide data for students and choose which mode worked best for the institution: Case-Mode, Grid-Mode, Template Upload, or Data Files Upload.

3.2 Institution Data Collection

This section provides a summary of information and materials provided to institutions on the website, a summary of log-in procedures, and a summary of data security measures

3.2.1 Institutions Website

NPSAS:12 field test institutions website was designed to provide institutions with reliable, user-friendly access to all study documents and instructions, as well as a secure platform for providing the requested electronic enrollment lists and student record data.

The website was used for the institution data entry tasks: completing the Designate a Coordinator form, completing the IRP, uploading a Student List, providing Institution Information (step 1 of Student Records collection) and providing Student Records data.

3.2.2 Contacting Institutions

The endorsement of NPSAS by organizations and associations concerned with postsecondary education was used to encourage institutions to participate and to confirm the legitimacy of the study. Twenty-six such organizations had endorsed NPSAS in 2008 and they all renewed their endorsement of NPSAS:12. The list of endorsing organizations was featured on project correspondence, including all letters and brochures, as well as the project website.

Prior to institution recruitment each of the 300 sampled institutions was called by a trained institution contactor in order to verify the address, confirm eligibility for the sample (as appropriate), and update contact information for the institution's chief administrator (e.g., the president or chancellor).

Institution recruitment began with an initial mailing to the chief administrators at each institution. Two days later, the institution contactors made follow-up calls to the chief administrators' offices to prompt for designation of ICs.

Once the IC was named, the next step was to confirm study participation with the designated IC and to set a customized deadline date for the student list, based on the institution's term structure. ICs followed up with each institution to prompt for completion of the list by the scheduled due date.

3.2.3 Student Enrollment List Acquisition

The instructions for compiling and uploading the student enrollment list were available to institutions on NPSAS institution website, by postal mail, or by e-mail. All of the institutions accessed the instructions on the institution website—none requested the instructions by postal mail or by e-mail.

Institutions were asked to provide enrollment list information for all students enrolled at any time between July 1, 2010, and April 30, 2011 (March 31 for continuous enrollment institutions) (see section 2.2.2). Institutions were encouraged to upload their student enrollment list using the secure upload interface on the website.

The following data items were requested for each listed student;

- name;
- Social Security number (SSN);
- student ID number (if different from SSN);
- student level (undergraduate, masters, doctoral-research/scholarship/other, doctoral-professional practice, other graduate);
- first-time beginner (FTB) indicator;
- class level of undergraduates (first year, second year, etc.);
- date of birth (DOB);
- high school graduation date (month and year);
- Classification of Instructional Programs code or major;
- Indicator of whether the institution received an Institutional Student Information Record (ISIR) (an electronic record summarizing the result of the student's Free Application for Federal Student Aid [FAFSA] processing) from the Central Processing System (CPS); and
- Contact information (local and permanent street address and telephone number and school and home e-mail address).

Multi-campus institution systems with centralized record-keeping systems were encouraged to submit a single student enrollment list encompassing all their sampled institutions. Five such systems provided lists for their sampled institutions.

Field test protocols called for half of the field test institutions to be included in the student sample. Completion rates were monitored by stratum. Once the target participation rate in each stratum was obtained follow-up efforts for that stratum were curtailed. Remaining institutions which indicated they were working to complete a list by their scheduled deadline were allowed to upload their lists.

3.2.4 Student Records Collection

The first step in the student records collection effort was to send the student sample to CPS to obtain financial aid application data. Data elements retrieved from CPS were loaded into the student records database. Elements added included an indicator of whether the student had been

matched successfully to the CPS system and selected variables for use in student records software edit checks. The student records system was customized by loading names of institution financial aid programs and up to 12 state financial aid programs to assist in identifying common types of financial aid received by students.

Once the student records list was initialized for a particular institution, an informational packet on the student records collection process was sent to the designated IC. These packets included instructions for accessing NPSAS:12 field test institution website and logging in the secure site with their ID and password. In addition, staff made follow-up telephone calls to notify institutions that student records data collection had begun. Using daily status reports that summarized the progress of the institutions, staff called institutions periodically to prompt completion of student records collection.

3.3 Institution Data Collection Outcomes

This section provides results of institution recruitment and the data collection activities associated with enrollment lists and student records. Of the 300 eligible institutions, 95 percent agreed to participate. The requirements for field test sampling were met after 150 of these 300 institutions submitted lists, the remaining institutions were not required to provide lists. Of the 150 institutions from which students were sampled, 97 percent provided data from student records for the sample students.

3.3.1 Institution Recruitment and Student Enrollment List Acquisition

Eligible sample institutions were asked to participate at two points in the survey process: (1) at the sample selection stage, by providing a comprehensive list of enrolled students for sample selection and (2) after the sample selection stage, by providing data from student records for the sample students. Consequently, the potential for institution nonresponse existed at these two points in the survey process.

Of the 300 eligible institutions, 95 percent of the chief administrators agreed to participate; all of these appointed an IC to assist with study requirements. The first request of the ICs was to provide a student enrollment list to be used for selecting the student sample. Approximately 10 institutions explicitly refused to provide an enrollment list. As discussed in section 2.2.2, the first 150 lists that met the sample size goals by institution stratum and passed QC checks were used for selecting samples of students. A total of 240 lists were received. Once a sufficient number of lists were received per stratum, follow-up with nonresponding institutions was suspended. List provision varied by type of institution, but, in general, about half of the institutions in each stratum provided lists that were used for sampling students. The percentage of institutions providing enrollment lists across strata ranged from about 43 percent to 59 percent. The lowest participation rates were among the public less-than-2-year institutions.

3.3.2 Student Records Collection Outcomes

The second request of the ICs was to provide student records for the sample students. Of the 150 institutions from which students were sampled, 97 percent provided data from student records for the sample students.

At the institution level, an institution was classified as having completed the student records collection if data were obtained for at least one sample student. Table 5 shows the institution participation rate for student records and the method used by institution characteristics. The high

proportion of institutions providing student records data (97 percent) indicates that there were no major hindrances for institution record abstraction in the field test. Most institutions (60 percent) chose to key the data into the web-based student records application as their primary mode; specifically, 36 percent chose Case-Mode and 24 percent choose Grid-Mode. However, 60 percent of the private, for-profit institutions preferred to produce and upload data files. Part of the reason for this is the presence of three systems that reported for multiple campuses in the sample through one coordinator. These coordinators were encouraged to use the Data Files Upload mode because they were reporting for multiple schools and more students..

Table 5. Student record collection methods, by institution characteristics and highest offering: 2011

Institution characteristic	Institutions providing lists	Student records collection method									
		Overall		Case mode		Grid mode		Template upload		Data files upload	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	150	150	97.4	50	36.2	40	24.2	30	21.5	30	18.1
Institution level											
Less-than-2-year	10	10	100.0	#	14.3	#	28.6	#	14.3	#	42.9
2-year	50	50	97.9	20	36.2	10	14.9	20	38.3	10	10.6
4-year non-doctorate-granting	60	50	94.6	20	35.9	10	22.6	10	13.2	20	28.3
4-year doctorate-granting	40	40	100.0	20	40.5	20	35.7	10	14.3	#	9.5
Institution control											
Public	70	70	98.6	30	37.0	20	23.3	20	28.8	10	11.0
Private nonprofit	50	50	100.0	20	47.8	20	37.0	10	13.0	#	2.2
Private for-profit	30	30	90.9	10	16.7	#	6.7	10	16.7	20	60.0

Rounds to zero.

NOTE: All percentages are unweighted and based on the number of eligible institutions within the row under consideration. 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) Field Test.

Table 6 shows student records collection rates, by institution characteristics. From the 97 percent of institutions that provided student records data, student-level data were obtained for 93 percent of eligible sample members.

Table 6. Student record collection results, by institution characteristics: 2011

Institution characteristic	Institutions providing lists	Institution-level participation		Total eligible students ¹	Student records collected	
		Number	Percent		Number	Percent
Total	150	150	97.4	4,450	4,150	93.3
Institution level						
Less-than-2-year	10	10	100.0	200	190	95.0
2-year	50	50	97.9	2,170	2,010	92.4
4-year nondoctorate-granting	60	50	94.6	1,240	1,140	91.3
4-year doctorate-granting	40	40	100.0	830	810	98.4
Institution control						
Public	70	70	98.6	2,710	2,540	93.6
Private nonprofit	50	50	100.0	570	560	98.8
Private for profit	30	30	90.9	1,170	1,050	90.1
Institution type						
Public						
Less-than-2-year	#	#	100.0	30	30	96.4
2-year	40	30	97.1	1,830	1,680	91.5
4-year nondoctorate-granting	10	10	100.0	270	260	97.7
4-year doctorate-granting	20	20	100.0	590	570	98.0
Private nonprofit						
Less-than-4-year	#	#	100.0	50	50	96.2
4-year nondoctorate-granting	20	20	100.0	270	270	98.5
4-year doctorate-granting	20	20	100.0	240	240	99.6
Private for profit						
Less-than-2-year	#	#	100.0	170	170	94.8
2-year	10	10	100.0	290	280	96.9
4-year	20	20	85.0	710	610	86.1

Rounds to zero.

¹ These were students determined to be eligible through student records. Some of these students may subsequently have been deemed ineligible during the student interview. For purposes of this analysis, eligibility is based solely on student records.

NOTE: Detail may not sum to totals because of rounding. All percentages are unweighted and based on the number of eligible students within the row under consideration.

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

3.4 Institution Data Evaluation

Several evaluation activities were conducted for institution data collection activities. These included evaluations of enrollment list acquisition, accuracy, and format; and student records acquisition and format.

3.4.1 Enrollment List Acquisition

The acquisition of enrollment lists was evaluated by the number received as well as by the dates when they were received. Institutions were asked to send enrollment lists between January 24, 2011, and April 15, 2011. The month the lists were received is important because sampled students were sent to data collection on a flow basis: the later the list was received the shorter the time available for the sample member to complete the survey before the end of data collection. Table 7

shows the flow of student list receipt by institution calendar system and month. Approximately 75 percent of the lists arrived during the first 2 months of the year.

Ultimately, 150 of the 300 eligible institutions in NPSAS:12 field test sample provided student enrollment lists (see section 3.2.3) that were used for sampling students.

Table 7. Enrollment list receipt, by institution calendar system and month: 2011

Month	Total enrollment lists		Semester/trimester/quarter		Continuous/other	
	Number	Percent	Number	Percent	Number	Percent
All months	150	100.0	130	83.0	30	17.0
January	40	22.9	30	25.2	#	11.5
February	80	52.9	80	62.2	#	7.7
March	10	7.8	10	5.5	10	19.2
April	30	16.3	10	7.1	20	61.5

Rounds to zero.

NOTE: 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) Field Test.

3.4.2 Enrollment List Accuracy and Format

Instructions detailing the student data elements to be included on enrollment lists were provided on NPSAS institution website to improve the accuracy of the lists. However, institutions made some format errors when submitting enrollment lists such as excluding specified data elements and providing data which were not requested.

Accuracy errors were identified by comparing institution-provided data to Integrated Postsecondary Education Data System (IPEDS) data for the institutions. Institutions submitting counts with discrepancies were contacted to reconcile the data. Table 8 presents a summary of lists received that contained format or accuracy problems. Approximately 77 percent of enrollment lists that were used for sampling did not have any problems.

Table 8. Enrollment list problems encountered, by institution type: 2011

Institution type	Institutions providing lists	Lists with no problems		Lists with problems	
		Number	Percent	Number	Percent
All institutions	150	120	76.5	40	23.5
Public					
Less-than-2-year	#	#	#	#	100.0
2-year	40	30	74.3	10	25.7
4-year non-doctorate-granting	10	10	76.9	#	23.1
4-year doctorate-granting	20	20	82.6	#	17.4
Private nonprofit					
Less-than-4-year	#	#	75.0	#	25.0
4-year non-doctorate-granting	20	20	87.0	#	13.0
4-year doctorate-granting	20	20	89.5	#	10.5
Private for-profit					
Less-than-2-year	#	#	100.0	#	#
2-year	10	10	77.8	#	22.2
4-year	20	10	55.0	10	45.0

Rounds to zero.

NOTE: 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) Field Test.

3.4.3 Evaluation of Enrollment List Quality

Enrollment lists were evaluated to ensure students were not entered into the sample more than once. Student samples were selected as institution enrollment lists were received and then added to the master student sample which included all student sample members selected. Because it was possible for a student to attend more than one sampled institution, each institution's sample was checked against the master sample before being added to avoid duplication.

The presence of key variables on enrollment lists was also evaluated. As in NPSAS:08 and NPSAS:04, institutions were asked to provide contact information on the student enrollment lists for NPSAS:12. The contact data were to include local and permanent addresses and telephone numbers, as well as campus and permanent e-mail addresses. Nearly all (99 percent) of the enrollment lists used for sampling included some contact information (table 9). However, many institutions provided only one address, telephone number, and e-mail address. Frequently, the data labels did not identify whether the information was local or permanent.

Institutions were also asked to provide SSN and DOB on the student lists. Approximately 99 percent of lists contained SSNs for at least some of the students. Of the enrollment lists used for sampling, 98 percent included DOB.

For the first time in the administration of NPSAS, institutions were asked to provide high school graduation date (month and year). This was used to identify ineligible students on the enrollment lists, including students concurrently enrolled in high school who were identified as FTBs. About 80 percent of the lists used for sampling contained high school graduation date.

Table 9. Institutions providing student contact information, Social Security number, date of birth, and high school graduation date, by institution type: 2011

Institution type	Address		Social Security number		Date of birth	
	Number	Percent	Number	Percent	Number	Percent
Total	150	99.35	150	98.69	150	98.04
Public						
Less-than-2-year	#	100.0	#	100.0	#	100.0
2-year	40	100.0	30	97.1	30	97.1
4-year non-doctorate-granting	10	100.0	10	100.0	10	100.0
4-year doctorate-granting	20	95.7	20	95.7	20	95.7
Private nonprofit						
Less-than-4-year	#	100.0	#	100.0	#	100.0
4-year non-doctorate-granting	20	100.0	20	100.0	20	100.0
4-year doctorate-granting	20	100.0	20	100.0	20	100.0
Private for-profit						
Less-than-2-year	#	100.0	#	100.0	#	100.0
2-year	10	100.0	10	100.0	10	100.0
4-year	20	100.0	20	100.0	20	95.0
<hr/>						
Institution type	E-mail address		Telephone number		High school graduation date	
	Number	Percent	Number	Percent	Number	Percent
Total	140	94.1	150	99.4	120	80.4
Public						
Less-than-2-year	#	66.7	#	100.0	#	33.3
2-year	30	97.1	40	100.0	30	97.1
4-year non-doctorate-granting	10	100.0	10	100.0	10	92.3
4-year doctorate-granting	20	95.7	20	95.7	20	95.7
Private nonprofit						
Less-than-4-year	#	100.0	#	100.0	#	100.0
4-year non-doctorate-granting	20	100.0	20	100.0	20	69.6
4-year doctorate-granting	20	100.0	20	100.0	20	79.0
Private for-profit						
Less-than-2-year	#	25.0	#	100.0	#	75.0
2-year	10	77.8	10	100.0	10	55.6
4-year	20	95.0	20	100.0	10	55.0

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. All percentages are unweighted and based on the number of eligible institutions within the row under consideration.

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

3.4.4 Evaluation of Student Records Quality

The student records format was evaluated for item-level completeness of institution submissions. Table 10 shows student records completion rates for key data elements overall and by method of abstraction (case mode, grid mode, CSV upload, Excel upload). Variability in item-level response reflects the variability of institution record-keeping; not all data elements are available at every institution. However, most of the key data elements have a high percentage of item-level completeness. Furthermore, all types of abstraction methods achieved high completion rates overall.

Marital status and having at least two telephone numbers were two items with low completion rates (47 percent and 31 percent, respectively) because these are often not included in student records. Not all students receive financial aid; however 77 percent of students received some amount of federal, state, institution, or some other type of aid. ICs who provided the data were often financial aid personnel. Thus, they were familiar with this type of information and knew how to access it quickly and accurately.

Table 10. Student records item level completion rates, by primary mode: 2011

Data element	Total		Primary mode							
			Case mode		Grid mode		CSV upload		Excel upload	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	4,150	100.0	1,170	28.2	740	17.8	1,060	25.6	1,180	28.4
Student characteristics										
Gender	3,970	95.6	1,130	96.9	730	99.3	1,020	96.0	1,080	91.5
Marital status	1,950	46.9	750	64.6	300	41.1	350	32.6	540	45.9
Citizenship	3,900	94.0	1,120	96.1	710	95.5	1,040	97.4	1,030	87.7
High school completion type	3,530	85.1	980	84.2	630	84.6	970	91.0	950	80.9
Race	2,990	72.2	820	70.1	610	82.8	670	62.6	900	76.1
Hispanic status	3,210	77.4	810	69.2	560	75.1	930	86.9	920	78.4
At least one telephone number	4,080	98.2	1,160	99.1	730	98.2	1,040	98.1	1,150	97.4
At least two telephone numbers	1,280	30.9	450	38.6	290	39.8	180	17.0	350	30.1
Enrollment										
Type of degree program	4,020	96.8	1,130	96.7	710	96.5	1,060	99.6	1,110	94.5
Type of advanced degree program	4,140	99.7	1,170	99.7	730	99.1	1,060	100.0	1,170	99.7
Student class level	3,400	81.9	960	81.8	550	73.7	1,060	99.5	840	71.2
Tuition jurisdiction classification	3,860	93.1	1,020	87.0	670	91.1	1,060	100.0	1,110	94.3
Total tuition amount	3,470	83.5	920	78.3	650	88.4	1,020	96.0	880	74.4
Any financial aid received	3,200	77.0	900	76.8	570	77.1	820	77.4	900	76.7

NOTE: Detail may not sum to totals because of rounding. CSV = comma separated values

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

Chapter 4.

Student Interview Design, Data Collection, Outcomes, and Evaluation

NPSAS:12 field test, which included both well established NPSAS items and new items intended for the Beginning Postsecondary Student (BPS) follow-up study, was designed for web and telephone administration. Sample members were primarily located using batch address and telephone sources and were asked to complete the interview between March and June 2011. Analysis and evaluation of data collection results provided information for consideration in planning the full-scale study.

4.1 Student Interview Design and Systems

NPSAS:12 field test student interview was based in part on core data elements used in previous NPSAS student interviews, and in part on a human capital framework redesign. The interview, tested prior to data collection in focus groups and through cognitive interviewing, consisted of seven sections and included two instrument experiments. This section provides the details of the student interview design and of the various systems used to support the instrumentation process and data collection. Experiments are described in Chapter 5.

4.1.1 Student Interview Design

The content of NPSAS:12 field test interview included core data elements used in previous NPSAS student interviews as well as elements identified through a redesign that used a human capital framework to create new questions focused on student decision making. New student interview items were developed and refined with input from the study's Technical Review Panel (TRP) and through feedback from focus groups and cognitive interviewing of items.

The core data elements maintained in NPSAS:12 field test student interview included such long-standing NPSAS items as student high school characteristics, postsecondary enrollment and characteristics, field of study, financial aid sources and amounts, student employment and earnings, credit cards, parent and family characteristics, student demographic characteristics, and limiting mental or physical conditions. New student interview items were created largely to collect base year data for BPS follow-up study, and were designed using an econometric framework that addresses student persistence in postsecondary education. These new interview items included questions centering on students' anticipated labor market outcomes of persistence (financial and nonfinancial), foregone wages, probabilistic estimates of persistence in education and persistence in field of study, and other constructs suggested by behavioral economics.

Planning for redesign of NPSAS interview included focus groups conducted in March and April of 2010. A total of 50 students from less-than-2-year, 2-year, and 4-year public and nonprofit postsecondary institutions participated in six focus groups in the Philadelphia, Pennsylvania area. Focus group questions were designed to elicit student feedback to broad questions about terminology, experiences, and decisions related to students' postsecondary education. The full NPSAS:12 field test interview, particularly newly designed items, were then tested through web and telephone cognitive interviews conducted from October to December of 2010. Forty-eight

participants, evenly divided among less-than-2-year, 2-year, and 4-year public and nonprofit postsecondary institutions, provided feedback to refine student interview items.

NPSAS:12 field test student interview consisted of seven sections, grouped by topic. Respondents were guided through each section of the interview according to skip logic that took into account information recorded as the respondent progressed through the interview. Following are descriptions of the seven interview sections.

1. *Enrollment* collected information on the respondent's attendance at the sampled institution (referred to as NPSAS institution) in the 2010–11 school year, including degree or certificate type, dates attended, enrollment intensity, and undergraduate or graduate year. It also captured high school completion information, dates of any previous degrees, and enrollment information for any additional schools attended in the 2010–11 school year. The section concluded by obtaining information about the respondent's date of birth, marital status, and gender. First-time beginners (FTBs) also received questions about their intent to complete their degree at NPSAS institution, expected degree completion date, and likelihood of degree completion.
2. *Education Experiences* gathered information on the respondent's high school experiences (e.g., math courses, Advanced Placement and International Baccalaureate participation), NPSAS institution major or field of study, remedial coursework since high school, and highest degree ever expected. Students identified as FTBs were asked to identify their last high school and received questions about family and friend support for persistence in college, academic and social integration at NPSAS institution, difficulty scheduling classes at NPSAS institution, and services used at NPSAS institution.
3. *Financial Aid* collected information on grants, scholarships, federal loans and private loans the respondent received during the 2010–11 school year; the amount borrowed and amount owed for undergraduate or graduate education; whether family or friends would assist in repaying loans; and the cost of books and supplies in the 2010–11 school year. This section concluded with questions about undergraduate-level work-study jobs and assistantships and graduate-level assistantships, fellowships, and traineeships. Respondents who were FTBs received additional questions about their thoughts on borrowing loans and whether the cost of attending NPSAS institution met their expectations.
4. *Current Employment* captured information about nonschool related employment the respondent had during the school year (e.g., number of jobs, earnings, hours worked, commute time, impact on course-taking, and campus access). Respondents who were FTBs also received questions about their work plans if they had not been enrolled at NPSAS institution in the 2010–11 school year and the ways in which their life might change once they complete their education.
5. *Income and Expenses* collected information about annual income, family and household composition, use of credit cards, residence and commute time while attending NPSAS institution, and receipt of untaxed benefits. Respondents who were FTBs also received questions about day care and college costs for their dependent children; the number and cost of supporting other dependents; use of federal loans, private loans, money received from family and friends, and credit cards for expenses; and a set of discount rate questions.

6. *Background* obtained information about student demographic characteristics, including citizenship and immigration age, first language, foreign language use, ethnicity and race, parents' highest level of education, military service, and disability status. Respondents who were FTBs also provided ratings of their physical and mental health.
7. *Locating*, which only first-time beginning respondents received, collected contact information for the follow-up study.

Coding systems. Assisted coding systems (coders) were used in the interview to standardize the collection and coding of the respondent's postsecondary institutions attended during NPSAS year, last high school, major or field of study, and hypothetical occupation. The name or title of each of these items was entered as a text string in each coder, and a keyword search conducted on an underlying database returned a list of possible matches. Following are descriptions of the individual coding systems and sources:

- The *postsecondary institution coder* was developed from the set of institutions contained in the Integrated Postsecondary Education Data System (IPEDS), developed by NCES (<http://nces.ed.gov/ipeds/>).
- The *major coder* was constructed using the 2010 Classification of Instructional Programs taxonomy, also developed by NCES (<http://nces.ed.gov/ipeds/cipcode>).
- The *occupation coder* was built from the Occupational Information Network Online (O*NET OnLine) database (<http://onetonline.org>).
- The *high school coder* was developed using the Private School Universe Survey for private schools (<http://nces.ed.gov/surveys/pss/>) and the Common Core of Data for public schools (<http://nces.ed.gov/ccd/>).

4.2 Student Interview Data Collection

The NPSAS:12 student interview data collection involved training of data collection staff and locating, contacting, and interviewing sample members. A study website and help desk were used to provide information and guidance to sample members. Two experiments were also conducted in the field test and are described in chapter 5.

4.2.1 Interviewing

Data collection for NPSAS:12 field test interview consisted of two phases: the early response phase and the production phase).

1. *Early response phase.* This phase began in March 2011 and lasted approximately 3 weeks. Data collection began with a mailing or e-mail, or both, to sample members encouraging them to complete the NPSAS survey over the Web. The telephone interview was available to sample members who contacted the Help Desk, but no outbound telephone contacts were made. The early response phase began in waves, based on when sample member information was received from institutions and batch tracing procedures were completed. Sample members who completed the interview were eligible to receive an incentive of \$15, \$30, or \$45 based on their response propensity experiment group assignments (see section 5.3).
2. *Production phase.* The production phase began approximately 3 weeks after the start of the early response phase on April 28, 2011. During the production phase telephone

interviewers called sample members to encourage completion of the interview either online or over the telephone. Sample members who completed the interview during the production phase were eligible to receive the same incentives as during the early response phase.

Both the Web and telephone versions of the survey were available to sample members throughout the entire data collection, although the Web survey was encouraged during the early response period. The Web and telephone versions of the survey were identical except that the telephone version included instructions for the telephone interviewer administering the survey.

4.3 Student Interview Data Collection Quality Control

A number of QC procedures were implemented throughout the course of NPSAS:12 student interview data collection. These procedures included frequent interview monitoring of telephone interviewers, quality circle feedback meetings, and interviewer debriefings at the conclusion of the study.

QCS and project staff regularly monitored live and recorded telephone interviews throughout NPSAS:12 data collection. Monitoring was conducted to meet the following data quality objectives:

- identification of problem items in the interview,
- reduction in the number of interviewer errors,
- improvement in interviewer performance through reinforcement of effective strategies, and
- assessment of the quality of the data collected.

In addition, Quality Circle meetings were held to serve as a tool for ensuring communication between project staff, call center staff, and telephone interviewers. These meetings were used to reinforce content from training and the goals of the study and to provide interviewers with the opportunity to share their experiences and strategies for gaining cooperation.

At the conclusion of NPSAS:12 data collection, project staff held a debriefing meeting with interviewers to learn more about their experiences, and administered an anonymous survey of the interviewers. The interviewers reported positive overall experiences working on the study and provided suggestions for improving full-scale data collection. Project staff prepared a summary of the debriefing meeting and survey for consideration when planning the full-scale survey.

4.4 Student Interview Data Collection Outcomes

Approximately 89 percent ($n = 3,860$) of eligible sample members were located with about 250 sample members determined to be ineligible for the study. Of eligible sample members who were located, 69 percent completed the full interview. An additional 60 partial interviews were completed by sample members who completed at least the enrollment portion but did not complete the entire survey.

4.4.1 Student Locating Results

Locating rates, shown in table 11 ranged from 96 percent for students enrolled at private nonprofit 4-year doctorate-granting institutions to 80 percent for students enrolled at private for-

profit 2-year institutions. Among the total undergraduate students, potential first-time beginners were located at a significantly lower rate than other undergraduate students (87 percent compared to 97 percent) ($\chi^2 = 47.5582, p < .0001$). Graduate students (95 percent) were more easily located than undergraduate students overall (88 percent) ($\chi^2 = 10.1045, p < .001$).

Table 11. Student locating, by institution characteristics and student type: 2011

Institution characteristics and student type	Eligible sample	Located	
		Number	Percent of eligible sample
Total	4,350	3,860	88.8
Institution level			
Less-than-2-year	190	160	84.4
2-year	2,080	1,820	87.9
4-year non-doctorate-granting	1,260	1,100	87.2
4-year doctorate-granting	810	770	94.8
Institution control			
Public	2,610	2,360	90.4
Private nonprofit	560	530	95.3
Private for-profit	1,180	970	82.1
Institution type			
Public			
Less-than-2-year	30	20	88.9
2-year	1,750	1,560	89.1
4-year non-doctorate-granting	260	240	91.5
4-year doctorate-granting	570	540	94.3
Private nonprofit			
Less-than-4-year	50	50	90.0
4-year non-doctorate-granting	270	260	95.5
4-year doctorate-granting	240	230	96.3
Private for-profit			
Less-than-2-year	170	140	83.6
2-year	280	220	80.0
4-year	740	610	82.6
Student type			
Total undergraduate	4,090	3,620	88.4
Potential FTB	3,500	3,040	87.0
Other undergraduate	590	580	96.8
Graduate/first-professional	260	240	94.9

NOTE: Excludes 245 cases determined to be ineligible for the study. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

4.4.2 Interview Response Rates

The NPSAS:12 interview was completed by 2,720 cases, approximately 63 percent of the eligible sample (table 12). The response rate ranged from 52 percent for public less-than-2-year institutions to 76 percent for private nonprofit 4-year doctorate-granting institutions. Potential FTBs

were less likely to respond than other undergraduates (57 percent compared with 88 percent) ($\chi^2 = 201.0550, p < .0001$). Graduate and professional students (77 percent) completed at a higher rate than undergraduate students (62 percent) ($\chi^2 = 24.7043, p < .0001$).

Table 12. Student interview completion rates, by institution characteristics and student type: 2011

Institution characteristics and student type	Eligible sample	Total respondents	
		Number	Unweighted percent
Total	4,350	2,720	62.6
Institution level			
Less-than-2-year	190	100	54.2
2-year	2,080	1,200	57.7
4-year non-doctorate-granting	1,260	810	64.0
4-year doctorate-granting	810	610	75.2
Institution control			
Public	2,610	1,660	63.6
Private nonprofit	560	420	75.8
Private for-profit	1,180	640	54.2
Institution type			
Public			
Less-than-2-year	30	10	51.9
2-year	1,750	1,030	58.9
4-year non-doctorate-granting	260	190	71.4
4-year doctorate-granting	570	430	74.9
Private nonprofit			
Less-than-4-year	50	40	70.0
4-year non-doctorate-granting	270	210	77.0
4-year doctorate-granting	240	180	75.8
Private for-profit			
Less-than-2-year	170	90	54.5
2-year	280	130	47.9
4-year	740	420	56.6
Student type			
Total undergraduate	4,090	2,530	61.7
Potential FTB	3,500	2,000	57.3
Other undergraduate	590	520	87.9
Graduate/first-professional	260	200	77.3

NOTE: Eligible students who met the criteria for qualification as a student interview respondent, which required completing at least a partial interview. Excludes 245 cases determined to be ineligible for the study. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

Completion by phase. As described in section 4.2.1, NPSAS:12 student interview was initiated in two phases: the early response phase and the production phase. Of the 2,720 cases that completed the interview, 42 percent (1,160 cases) completed in the early response phase and 58 percent (1,570 cases) completed in the production phase.

Fifty-three percent of respondents at private nonprofit institutions completed the interview in the early response period, while only 41 percent of respondents at public and private for-profit institutions completed in the early response period; students at these schools were more likely to complete in the production phase ($\chi^2 = 15.7218, p < .0001$) (table 13).

Table 13. Student interview completion rates, by data collection phase and institution characteristics and student type: 2011

Institution characteristics and student type	Eligible sample	Total respondents		Data collection phase			
		Number	Unweighted percent of eligible	Early response		Production	
				Number	Unweighted percent of respondents	Number	Unweighted percent of respondents
Total	4,350	2,720	62.6	1,160	42.4	1,570	57.6
Institution level							
Less-than-2-year	190	100	54.2	40	34.6	70	65.4
2-year	2,080	1,200	57.7	440	36.9	760	63.1
4-year non-doctorate-granting	1,260	810	64.0	370	46.0	440	54.0
4-year doctorate-granting	810	610	75.2	310	49.8	310	50.2
Institution control							
Public	2,610	1,660	63.6	670	40.5	990	59.5
Private nonprofit	560	420	75.8	220	52.8	200	47.2
Private for-profit	1,180	640	54.2	260	40.5	380	59.5
Institution type							
Public							
Less-than-2-year	30	10	51.9	#	21.4	10	78.6
2-year	1,750	1,030	58.9	380	36.4	650	63.6
4-year non-doctorate-granting	260	190	71.4	90	47.6	100	52.4
4-year doctorate-granting	570	430	74.9	210	47.9	220	52.1
Private nonprofit							
Less-than-4-year	50	40	70.0	20	45.7	20	54.3
4-year non-doctorate-granting	270	210	77.0	110	52.7	100	47.3
4-year doctorate-granting	240	180	75.8	100	54.4	80	45.6
Private for-profit							
Less-than-2-year	170	90	54.5	30	36.7	60	63.3
2-year	280	130	47.9	50	38.1	80	61.9
4-year	740	420	56.6	180	42.1	240	57.9
Student type							
Total undergraduate	4,090	2,530	61.7	1,070	42.4	1,460	57.6
Potential FTB	3,500	2,000	57.3	860	43.0	1,140	57.0
Other undergraduate	590	520	87.9	210	39.8	310	60.2
Graduate/first-professional	260	200	77.3	90	43.1	110	56.9

Rounds to zero.

NOTE: Eligible students who met the criteria for qualification as a student interview respondent, which required completing at least a partial interview. Excludes 245 cases determined to be ineligible for the study. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

Completion by mode As described in section 4.2, sample members were offered two modes to complete NPSAS:12 survey: online using the Web survey or over the telephone with a telephone interviewer. Telephone prompting began 3 weeks after the start of data collection, during which time the Web survey was available. Sample members were eligible to receive the same incentive amount (\$15, \$30, or \$45) for completing the survey through either mode. The majority of respondents (2,090 cases, or 79 percent) completed the Web survey, and the remaining 570

respondents (22 percent of completions) completed the interview by telephone (table 14). Of web respondents, 1,150 (55 percent) completed without telephone contact, and 940 cases (45 percent) completed the Web survey after contact with a telephone interviewer

Graduate and professional students were more likely to complete the Web survey than undergraduate students ($\chi^2 = 19.2248, p < .0001$). Potential first-time beginners were more likely to complete the Web survey than other undergraduates ($\chi^2 = 10.8840, p < .0001$).

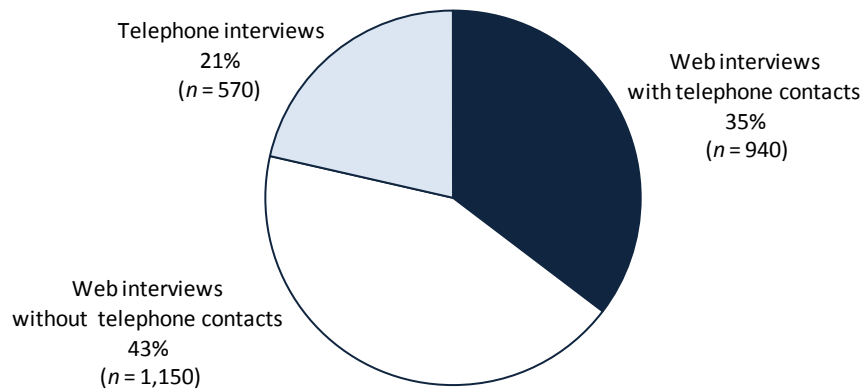
Table 14. Student interview completion rates, by mode of administration and institution characteristics and student type: 2011

Institution characteristics and student type	Eligible sample	Total completes		Mode of administration			
		Number	Unweighted percent of eligible	Web		Telephone	
				Number	Percent of total completes	Number	Percent of total completes
Total	4,350	2,660	61.2	2,090	78.5	570	21.5
Institution level							
Less-than-2-year	190	100	52.6	60	56.4	40	43.6
2-year	2,080	1,170	56.2	860	73.5	310	26.5
4-year non-doctorate-granting	1,260	790	62.5	640	81.2	150	18.8
4-year doctorate-granting	810	600	73.8	530	88.4	70	11.6
Institution control							
Public	2,610	1,620	62.2	1,270	78.3	350	21.7
Private nonprofit	560	420	75.7	390	91.3	40	8.7
Private for-profit	1,180	610	52.0	430	70.2	180	29.8
Institution type							
Public							
Less-than-2-year	30	10	51.9	10	50.0	10	50.0
2-year	1,750	1,000	57.5	750	74.4	260	25.6
4-year non-doctorate-granting	260	180	71.0	160	85.3	30	14.7
4-year doctorate-granting	570	420	73.0	360	85.7	60	14.3
Private nonprofit							
Less-than-4-year	50	40	70.0	30	82.9	10	17.1
4-year non-doctorate-granting	270	210	76.6	190	89.8	20	10.2
4-year doctorate-granting	240	180	75.8	170	94.5	10	5.5
Private for-profit							
Less-than-2-year	170	90	52.7	50	57.5	40	42.5
2-year	280	130	45.7	80	64.1	50	35.9
4-year	740	400	54.3	300	74.9	100	25.1
Student type							
Total undergraduate	4,090	2,460	60.2	1,910	77.5	550	22.5
Potential FTB	3,500	1,940	55.6	1,540	79.0	410	21.0
Other undergraduate	590	520	87.0	370	72.1	140	27.9
Graduate/first-professional	260	200	77.3	180	90.9	20	9.1

NOTE: Count excludes the 64 partial interviews because mode of completion is not determined until the full interview is completed. Excludes 245 cases determined to be ineligible for the study. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

The overall distribution of completed interviews by mode is shown in figure 2. Telephone interviews comprised 21 percent of all completed interviews while web interviews with telephone contact were 35 percent of all interviews completed. Web interviews without telephone contacts represented 43 percent of completed interviews.

Figure 2. Distribution of completed interviews, by mode of administration: 2011

NOTE: 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) field test.

4.4.3 Interview Timing Burden

To ensure that the burden associated with completing NPSAS:12 interview was minimal, the time required for each student respondent to complete the field test interview was collected and analyzed. Special attention was paid to differences by mode, items with consistently high administration times, and the time required to navigate particular interview paths.

To calculate the time required to complete the interview, whether administered online or by telephone, a time stamp was embedded on each web screen, or form, of the interview. A start timer recorded the clock time on a respondent's or interviewer's computer when a form was first loaded, and an end timer recorded the clock time when the Next button was clicked. For each form administered, time was calculated by subtracting the start time from the end time. Total instrument time was calculated by summing across the times recorded for each form. Only cases that completed the entire field test interview in one session were included in the analyses, except for the analysis of individual forms (table 17) in which forms completed during partial interviews were included. Outliers, defined at the interview and form levels as exceeding two standard deviations, were also excluded.

Overall, NPSAS:12 field test interview averaged 36.2 minutes to complete, with web interviews averaging 34.5 minutes and telephone interviews taking significantly longer at 41.7 minutes ($t(2,050) = 10.7, p < .0001$). This difference is attributed to the time required for interviewers to read questions and other text aloud to respondents.

Average section completion times are shown in table 15 together with the average times to complete each section by mode. For all sections, administering the interview by telephone required more time than online; all differences were significant—enrollment ($t(990) = 6.71, p < .0001$); education experiences ($t(2,050) = 5.07, p < .0001$); Financial Aid ($t(1,220) = 6.63, p < .0001$); Current Employment ($t(730) = 8.32, p < .0001$); Income and Expenses ($t(980) = 8.86, p < .0001$); Background ($t(1,370) = 11.35, p < .0001$); and Locating ($t(1,450) = 11.07, p < .0001$).

Table 15. Average time, in minutes, to complete NPSAS:12 interview, by mode of administration and interview section: 2011

Interview section	Mode of administration					
	All respondents		Web		Telephone	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	2,050	36.2	1,570	34.5	480	41.7
Enrollment	2,050	6.3	1,570	6.1	480	6.9
Education Experiences	2,050	10.6	1,570	10.2	480	11.6
Financial Aid	2,050	3.7	1,570	3.6	480	4.2
Current Employment	2,050	3.8	1,570	3.6	480	4.7
Income and Expenses	2,050	4.2	1,570	4.0	480	4.8
Background	2,050	3.1	1,570	3.1	480	3.8
Locating	1,450	4.4	1,110	4.1	340	5.6

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. 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) Field Test.

Average times to administer each form were compared across all forms in the instrument, except those in the Locating section which can, unavoidably, require long administration times. Among the five highest overall form times were the coders for occupation (N12EXOCC), major (N12MAJ1), and high school attended (N12HSCDR). The coder for expected occupation after degree completion (N12EXOCC) had the longest average form time at almost 79 seconds (table 16).

The 10 forms with the highest average administration times, excluding the coders and the Locating section, are listed in table 17. The form asking respondents in which months of the 2010–11 academic year they attended NPSAS institution (N12NENRL) had the longest average form time at 39 seconds. There was no pattern observed such that one type of form required more time to administer than another type. The items that showed the longest administration times in the field test tended to contain complex wording or formats.

Table 16. Average coder form interview times, in seconds, by form, section, and coder type: 2011

Form	Section	Coder type	Number of cases	Mean
N12EXOCC	Education Experiences	Occupation	1,500	78.9
N12MAJ1	Education Experiences	Major	1,960	61.4
N12HSCDR	Education Experiences	High school	1,280	53.8
N12POCC	Current Employment	Occupation	1,440	53.9
N12SCH01	Enrollment	Postsecondary school	140	45.3
N12MAJ2	Education Experiences	Major	50	35.8

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. Detail may not sum to totals because of rounding. For individual form time calculations, forms in the locating section were excluded.

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

Table 17. Forms with the highest average interview times, in seconds, excluding coders, by form, section, and item type: 2011

Form	Section	Item type	Number of cases	Mean
N12NENRL	Enrollment	Check all	2,140	38.6
N12AP3B	Education Experiences	Custom	210	38.1
N12DCLWHY	Financial Aid	Radio	70	37.6
N12SRVMATRX	Education Experiences	Custom	1,370	35.1
N12GRLNPSYR	Financial Aid	Textbox	80	34.7
N12ALTWAGE2	Current Employment	Textbox/unit	600	34.4
N12FAMHLPORD	Income and Expenses	Ordinal table	940	33.3
N12ENRNEXTB	Enrollment	Slider	1,930	33.0
N12CHNGWAYS	Current Employment	Check all	1,390	31.8
N12TRNLIKEB	Enrollment	Slider	140	31.7

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews were excluded. For individual form time calculations, forms in the locating section were excluded. Detail may not sum to totals because of rounding. For individual form time calculations, forms in the locating section were excluded.

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

Each question will be reviewed in developing the full-scale interview to try to achieve quicker administration times. The items that showed the longest administration times in the field test tended to contain complex wording or formats. For example, N12DCLWHY required a respondent to pick the one best choice from among several lengthy statements describing why they were concerned about repaying student loans. N12SRVMATRX was a two-part question asking for the frequency with which a respondent used several institution services and how important the service was in their decision to remain at NPSAS institution. However, some items necessitate complex formats so administration times will be weighed against the value of the information collected.

The time required to complete NPSAS:12 interview varied by the student's status as a FTB, other undergraduate, or graduate student. Table 18 shows the average interview time for FTBs both overall and for each section, by mode of administration. FTBs had a much longer path through the interview, requiring, on average, 42.1 minutes to complete the interview across modes. Interview time for the telephone interview (48.0 minutes) was significantly longer than the online interview (38.89 minutes; $t(690) = 15.41, p < .0001$). All sections of the FTB interview were significantly longer for the telephone interview compared to the online interview: enrollment ($t(760) = 6.1, p < .0001$), education experiences section ($t(820) = 9.61, p < .0001$), financial aid section ($t(830) = 7.3, p < .0001$), current employment ($t(630) = 12.59, p < .0001$); income and expenses ($t(760) = 9.6, p < .0001$); background ($t(960) = 11.83, p < .0001$), and locating ($t(1,450) = 11.07, p < .0001$). The majority of questions specific to FTBs were in the education experiences section.

Table 18. Average time, in minutes, for first time beginning (FTB) students to complete the interview, by interview section and mode of administration: 2011

Interview section	First-time beginners		Mode of administration			
			Web		Telephone	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	1,450	41.0	1,110	38.9	340	48.0
Enrollment	1,450	6.1	1,110	5.9	340	6.7
Education Experiences	1,450	13.0	1,110	12.5	340	14.5
Financial Aid	1,450	3.8	1,110	3.7	340	4.4
Current Employment	1,450	4.6	1,110	4.2	340	5.9
Income and Expenses	1,450	4.6	1,110	4.4	340	5.4
Background	1,450	3.3	1,110	3.1	340	3.9
Locating	1,450	4.4	1,110	4.1	340	5.6

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. 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) Field Test.

Other undergraduate students were administered an interview with considerably fewer questions than FTBs, and were not asked any of the questions in the locating section. They averaged 26.1 minutes to complete NPSAS:12 field test interview. Table 19 shows the average interview times for other undergraduate students overall and for each section, by mode of administration. Comparing across modes, the education experiences section was longer in the online mode than in the telephone mode ($t(390) = 2.21, p = .0274$), the only section longer in online mode than in telephone. The background section was significantly longer for the telephone interview when compared to the online interview ($t(350) = 3.28, p < .01$).

Table 19. Average time, in minutes, for other undergraduates to complete NPSAS:12 field test interview, overall and by mode of administration: 2011

Interview section	Other undergraduates		Mode of administration			
			Web		Telephone	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	440	26.1	310	25.7	130	27.1
Enrollment	440	7.2	310	7.0	130	7.4
Education Experiences	440	5.4	310	5.5	130	5.0
Financial Aid	440	3.4	310	3.3	130	3.7
Current Employment	440	1.9	310	1.9	130	1.8
Income and Expenses	440	3.3	310	3.3	130	3.5
Background	440	3.3	310	3.2	130	3.6
Locating	#	†	#	†	#	†

† Not applicable.

Rounds to zero.

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. 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) Field Test.

Graduate students, like other undergraduates, were administered fewer questions than FTBs and were not asked the questions in the locating section. They averaged 20.0 minutes to complete the interview overall. Compared across modes, there were no significant differences in completion times by section. Table 20 shows the average interview time for graduate students overall and for each section, by mode of administration.

Table 20. Average time, in minutes, for graduate students to complete interview, by interview section and mode of administration: 2011

Interview section	Graduate students		Mode of administration			
			Web		Telephone	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	160	20.0	150	19.9	20	21.2
Enrollment	160	4.9	150	4.9	20	5.7
Education Experiences	160	3.0	150	3.0	20	2.5
Financial Aid	160	3.6	150	3.6	20	3.5
Current Employment	160	2.1	150	2.0	20	2.6
Income and Expenses	160	2.1	150	2.1	20	2.1
Background	160	2.9	150	2.9	20	2.7
Locating	#	†	#	†	#	†

† Not applicable.

Rounds to zero.

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. 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) Field Test.

The NPSAS:12 field test reliability reinterview was completed by a random sample of 340 FTBs at least 3 weeks following completion of the main NPSAS:12 interview. The reinterview included about 70 items from the original interview (see section 4.5.3 Student Reinterview Analysis for further description of the reliability reinterview). Overall, it required an average of 9.3 minutes to administer with the telephone reinterview requiring significantly more time (10.0 minutes) than the online reinterview (8.4 minutes; $t(100) = 4.06, p < .0001$). Table 21 provides the reinterview average times overall and by mode of administration.

Table 21. Average time, in minutes, to complete NPSAS:12 reinterview, by mode of administration: 2011

Mode of administration	Number of cases	Average time
Total	150	9.3
Web	70	8.4
Telephone	90	10.0

NOTE: The timing analysis included only cases that completed the interview in one session; partial interviews and outliers were excluded. 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) Field Test.

4.4.4 Number of Calls to Sample Members

On average, nine calls were made per sample member during the interview period, excluding the early response phase where no outbound calls were made. Average call counts for completed

cases varied by mode of administration. The average number of telephone calls by institution characteristics and student type are shown in table 22.

Table 22. Average number of calls to sample members, by institution characteristics and student type: 2011

Institution characteristics and student type	Eligible cases	Number of calls	Average number of calls
Total	4,350	36,820	8.5
Institution level			
Less-than-2-year	190	1,640	8.6
2-year	2,080	20,190	9.7
4-year non-doctorate-granting	1,260	9,240	7.3
4-year doctorate-granting	810	5,750	7.1
Institution control			
Public	2,610	24,100	9.3
Private nonprofit	560	3,670	6.6
Private for-profit	1,180	9,050	7.7
Institution type			
Public			
Less-than-2-year	30	310	11.3
2-year	1,750	17,380	10.0
4-year non-doctorate-granting	260	2,100	8.1
4-year doctorate-granting	570	4,310	7.5
Private nonprofit			
Less-than-4-year	50	310	6.1
4-year non-doctorate-granting	270	1,930	7.2
4-year doctorate-granting	240	1,430	6.0
Private for-profit			
Less-than-2-year	170	1,340	8.1
2-year	280	2,500	8.9
4-year	740	5,210	7.1
Student type			
Total undergraduate	4,090	35,150	8.6
Potential FTB	3,500	31,580	9.0
Other undergraduate	590	3,570	6.0
Graduate/first-professional	260	1,670	6.6

NOTE: Detail may not sum to totals because of rounding. FTB = first-time beginner. Eligible students who met the criteria for qualification as a student interview respondent, which required completing at least a partial interview. Excludes 245 cases determined to be ineligible for the study.

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

Respondents who completed the interview over the telephone with a telephone interviewer required fewer calls (six) than cases that completed the interview over the Web with telephone contact (nine) ($t(4,350) = -8.23, p < .0001$). Web interview respondents who completed the interview during the early response phase did not receive any calls. Table 23 shows the call counts by response status and mode of administration.

Table 23. Call counts, by response status and mode of administration: 2011

Response status and mode of administration	Eligible cases	Number of calls	Average number of calls
Total	4,350	36,820	8.5
Response status			
Full interview	2,660	12,450	4.7
Partial interview	60	1,100	17.1
Nonrespondent or exclusion	1,620	23,280	14.3
Mode of administration			
Web interviews	2,090	8,840	4.2
Web, with telephone contact	940	8,840	9.4
Telephone	570	3,610	6.3

NOTE: Detail may not sum to totals because of rounding. Count for mode of administration excludes the 64 partial interviews because mode is not determined until the full interview is completed. Excludes 245 cases determined to be ineligible for the study.

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

4.4.5 Refusal Conversion

Refusal aversion techniques were integrated into telephone interviewer training and were reinforced throughout data collection in Quality Circle meetings. Interviewers were encouraged to share their experiences gaining sample member cooperation and seek guidance from the group. Sample members who refused to complete the interview were placed in a separate queue and worked by a subset of interviewers selected for additional refusal conversion training. Overall, 14 percent of eligible cases ever refused; of these, about 26 percent of cases subsequently completed the interview (table 24).

Table 24. Refusal and refusal conversion rates, by institution characteristics and student type: 2011

Institution characteristics and student type	Eligible sample	Ever refused interview		Interviewed, given refusal		
		Number	Percent of total	Number	Percent of refused	Percent of total
Total	4,350	620	14.2	160	25.4	3.6
Institution level						
Less-than-2-year	190	20	7.8	10	33.3	2.6
2-year	2,080	340	16.3	80	22.4	3.7
4-year non-doctorate-granting	1,260	150	11.8	40	28.2	3.3
4-year doctorate-granting	810	110	14.0	30	29.8	4.2
Institution control						
Public	2,610	410	15.7	100	24.1	3.8
Private nonprofit	560	90	16.5	30	28.3	4.7
Private for-profit	1,180	120	9.7	30	27.8	2.7
Institution type						
Public						
Less-than-2-year	30	10	22.2	#	0.0	0.0
2-year	1,750	300	17.4	70	22.4	3.9
4-year non-doctorate-granting	260	30	10.8	10	25.0	2.7
4-year doctorate-granting	570	70	12.7	20	32.9	4.2
Private nonprofit						
Less-than-4-year	50	10	18.0	#	22.2	4.0
4-year non-doctorate-granting	270	40	15.6	10	33.3	5.2
4-year doctorate-granting	240	40	17.1	10	24.4	4.2
Private for-profit						
Less-than-2-year	170	10	5.5	10	55.6	3.0
2-year	280	30	9.6	10	22.2	2.1
4-year	740	80	10.7	20	26.6	2.9
Student type						
Total undergraduate	4,090	590	14.3	150	25.3	3.6
Potential FTB	3,500	520	15.0	110	21.2	3.2
Other undergraduate	590	60	10.4	40	59.7	6.2
Graduate/first-professional	260	30	12.2	10	29.0	3.5

Rounds to zero.

NOTE: Eligible students who met the criteria for qualification as a student interview respondent, which required completing at least a partial interview. Excludes 245 cases determined to be ineligible for the study. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

4.4.6 Potential FTB Identification

When asked to identify FTBs, institutions have had difficulty differentiating FTBs who are simply new to the institution from true FTBs, that is, those enrolling in postsecondary education for the first time since completing high school. As described in section 2.3, although presampling matching was conducted to help identify true FTBs, there were still some students identified by the institutions as FTBs who were determined during the interviews not to be (false positives). Likewise, some sample students were identified as FTBs during the interview who were not identified as such by their institutions (false negatives).

Table 25 shows that, of the 2,440 students who were sampled as potential FTBs and completed an interview, about 440 were not FTBs for a false positive rate of 18 percent unweighted

(15 percent weighted). Conversely, of the 280 students who were sampled as other undergraduate or graduate students and completed an interview, about 10 were FTBs, for a false negative rate of 3 percent unweighted (2 percent weighted). With the help of the presampling matching, the false positive rate observed in the field test was much reduced from the rate of over 50 percent observed in NPSAS:04.

Table 25. First time beginner status determination, by sample student type: 2011

Student Type	Students interviewed	Confirmed FTB		
		Number	Unweighted percent	Weighted percent
Total	2,720	2,000	73.6	65.1
FTB	2,440	2,000	81.8	84.6
Other undergraduate and graduate	280	10	2.8	2.1

NOTE: Students interviewed includes all eligible sample members who completed the interview. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

4.5 Evaluation of the Student Interview

Evaluation of NPSAS:12 student interview included analyses of the data collected in the instrument coders, help text access rates, success rates for conversion text, item nonresponse, and the reinterview.

4.5.1 Instrument Coders

Recoding. Twenty-five percent of the major and occupation codes chosen in the student interviews were randomly selected for recoding. Recoding of postsecondary institution and high school codes selected in these coders was not done because text strings provided by respondents would presumably have directly matched school name codes chosen. In the major and occupation coders, text strings provided by respondents and standardized names of codes in the database were often not direct matches.

The expert coding staff assessed the accuracy of major and occupation codes chosen in the interview based on the text string provided by the respondent. Across modes of administration and across coders, expert coding staff generally agreed with the codes chosen for text strings in the interview. Overall, expert coding staff agreed with major and occupation codes chosen in the interview 95 percent of the time, recoded responses to a new code about 4 percent of the time, and were unable to choose a code due to vague text strings about 1 percent of the time.

Only the major coder showed significant differences in recode rates between modes of administration. Expert coders recoded major codes chosen by web respondents 3 percent of the time and recoded those chosen by telephone interviewers 0 percent of the time ($\chi = 1.99, p < .05$). Table 26 shows the rate of recoded values—same as original code, recoded to different value, or text string too vague to code—chosen by the expert coding staff for the major and occupation coders in the interview.

Table 26. Summary of recoding results, by coder type and mode of administration: 2011

Coding type	Percent of recoded values					
	Recoded same as original		Recoded to a different value		Text string too vague to code	
	Web	Telephone	Web	Telephone	Web	Telephone
Major	94.5	98.4	3.1	#	2.3	1.6
Occupation	94.4	94.8	4.9	5.2	0.7	#

Rounds to zero.

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

Upcoding. Upcoding is a process by which project staff try to identify an appropriate code for interview responses that were not coded during the interview. Text strings from web interviews generally required more upcoding than text strings from telephone interviews because interviewers received special training on coders and were therefore more skilled at identifying appropriate codes than sample members.

The high school, major, and occupation coders showed significant differences in upcoding rates between modes of administration. For the high school coder, the upcoding rate among web interviews (33 percent) was higher than for telephone interviews (6 percent) ($\chi^2 = 9.54, p < .001$). For the major coder, 24 percent of web interviews required upcoding, compared to 3 percent of telephone interviews ($\chi^2 = 10.86, p < .001$). Similarly, the upcoding rate on the occupation coder was higher for web interviews (19 percent) than for telephone interviews (1 percent) ($\chi^2 = 11.68, p < .001$). Results of the upcoding process are shown in table 27.

Table 27. Summary of upcoding results, by coding system and administration mode: 2011

Coding system	Percent of text strings upcoded		
	Overall	Web	Telephone
IPEDS institutions	25.7	29.0	11.5
High school	27.4	32.6	5.8
Major	19.5	24.4	3.3
Occupation	14.7	19.1	1.3

NOTE: IPEDS = Integrated Postsecondary Education Data System.

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

4.5.2 Help Text

Respondents or interviewers were able to click on a help button provided on each NPSAS:12 interview screen for both general instrument and question-specific help. The general instrument help provided answers to FAQs about web browser settings and response types (i.e., how to respond using a check box, dropdown box, or radio button). The question-specific help provided definitions of key terms and phrases used in question wording and response options and provided any other explanations thought to help clarify and standardize the meaning of questions for respondents.

The number of times that respondents or interviewers clicked the help button on each screen relative to the number of respondents who were administered the question determined the rate of help text access for that screen. The screen-level rate of help text access was analyzed overall and by mode of interview administration to identify screens that may have been problematic for

users. For forms administered to at least 25 respondents, the overall mean rate of help text hits per screen was less than 1 percent. Help text was accessed approximately 1 percent of the time during interviews by telephone interviewers, compared with less than 1 percent of the time by web respondents ($\chi = 3.73, p < .001$).

The interview question asking the number of times the respondent formally changed majors, *frequency of major change* (N12CHGNUM), had the highest overall rate of help text access, at 4 percent with no significant mode difference.

Table 28 shows the interview questions administered to at least 25 respondents and for which help text was accessed at a rate of at least 2 percent.

Table 28. Interview questions with highest rates of help text access, by mode of administration: 2011

Question	Question description	Mode of administration					
		Overall		Web		Telephone	
		Number administered to	Percent of help text access	Number administered to	Percent of help text access	Number administered to	Percent of help text access
N12ASSOC	Type of associate's degree	1,010	2.5	760	0.3	250	9.1
N12CHGNUM	Frequency of major change	50	4.3	20	5.6	30	3.4
N12CLKNUM	Instruction completed at NPSAS	230	2.2	150	#	80	6.2
N12COLCOST	Amount contributed to college costs for children	40	2.7	30	#	10	14.3
N12DEGELSE	Intent to complete bachelor's degree within 1 year	30	3.7	20	4.8	10	#
N12DRP	Date left NPSAS	250	2.8	150	0.7	100	6.0
N12HSCMP	Currently completing high school requirements	40	2.7	20	#	20	6.3
N12RAC1	Race	2,660	3.2	2,090	2.0	570	7.7
N12RMCRD	Taken only remedial courses during NPSAS year	150	2.6	130	0.8	20	14.3
N12SCHJOB	Had undergraduate school job in NPSAS year	2,210	3.0	1,720	0.4	490	12.3
N12SEARNS	Number of terms/months/weeks/hours worked	1,320	2.2	1,020	0.4	300	8.3
N12WAERNS	Terms/months/weeks worked at work-study job	190	2.1	150	0.7	50	6.5
N12WSEMP	Work-study job for NPSAS or another organization	200	2.6	150	#	50	10.2

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Table is based on the rates of help text access for interviewer screens administered to a minimum of 25 respondents and in which help text was accessed at an overall rate of at least 2 percent.

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

4.5.3 Student Reinterview Analysis

Reliability of self-reported responses to interview questions, a measure of how constant responses remain over time, was evaluated using a reinterview containing 70 items selected from the main interview. Items were selected for the reinterview because they were assumed to be unlikely to change over time and most were newly-designed and/or critical main interview items.

A random sample of 340 FTBs who had completed a full main interview was selected for reinterview. Only FTBs were selected because the large majority of newly-designed items in the main interview were administered only to FTBs. An effort was made to select equal numbers of cases in the high and low propensity incentive groups. The reinterview sample was contacted beginning 3

weeks after completion of the main interview and asked to complete a 10 minute reinterview. The reinterview was completed by 180 respondents (response rate of 54 percent) and took an average of 9.3 minutes to complete. About 57 percent of the low propensity sample completed the reinterview while 50 percent of the high propensity sample completed. No significant difference in likelihood to participate was found between the low and high propensity incentive groups.

Sample members selected for reinterview were allowed to complete the reinterview either online or by telephone, in whichever mode was more convenient. Of the 180 respondents who completed the reinterview, 48 percent completed online and 52 percent completed by telephone. Respondents who completed the initial interview via telephone tended to complete the reinterview by telephone (94 percent). However, of those who completed the initial interview online, approximately one-third switched modes and completed the reinterview by telephone. Response rates are shown overall, by main interview, and by reinterview completion mode in table 29.

Table 29. Reinterview response rates, by main interview and reinterview completion modes: 2011

Reinterview completion mode	Total		Main interview completion mode			
			Web		Telephone	
	Number	Percent	Number	Percent	Number	Percent
Total selected for reinterview	340	100.0	220	64.5	120	35.5
Completed reinterviews	180	54.1	130	59.2	50	45
Web	90	48.1	90	65.9	#	5.6
Telephone	100	51.9	40	34.1	50	94.4

Rounds to zero.

NOTE: 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) Field Test.

Table 30 shows reliability estimates for the items included in the reinterview, by main interview section. For each item, the number of cases, percent agreement between the interview and reinterview, and relational statistic are shown. For discrete items, percent agreement was based on the extent to which responses to the initial interview matched exactly to the reinterview responses. For continuous items, responses were considered in agreement if the initial interview responses were within one standard deviation of the reinterview responses. Items using sliders to capture responses were treated as continuous due to the number of possible response values. For example, a slider using a scale from 0 to 10 with midpoints allows for 21 possible response values. Analyses were conducted only for respondents with responses on both the interview and the reinterview; not all questions were applicable to all respondents.

The relational statistics quantified the strength of association between the pairs of items being compared; for each statistic, 1.00 was indicative of a perfect correlation (i.e., an exact match between the item on the initial interview and the same item on the reinterview for all respondents). The relational statistic, Cramer's V , was used for items with discrete, unordered response categories (e.g., yes/no). Kendall's tau-b (τ_b) estimated the relationship between items with ordered categories (e.g., excellent, fair, poor). Lastly, the Pearson product-moment correlation coefficient (r) was used for items yielding interval responses and for items using sliders (e.g., salary and likelihood of degree completion).

Table 30. Reliability estimates for items included in the reinterview, by interview section and item: 2011

Section and item	Item label	Number of cases	Percent agreement	Relational statistic
Enrollment				
N12DGUND	NPSAS degree: undergraduate, no degree program	180	86.7	0.30
N12DGCE	NPSAS degree: undergraduate certificate/diploma	180	86.7	0.57
N12DGAS	NPSAS degree: associate's degree	180	85.6	0.72
N12DGBA	NPSAS degree: bachelor's degree	180	92.3	0.84
N12DGPB	NPSAS degree: postbaccalaureate certificate	180	100.0	†
N12DGMA	NPSAS degree: master's degree	180	100.0	†
N12DGPM	NPSAS degree: post-master's certificate	180	100.0	†
N12DGGNG	NPSAS degree: graduate, no degree program	180	99.5	†
N12DGDRPP	NPSAS degree: doctoral degree, professional practice	180	100.0	†
N12DGD RR	NPSAS degree: doctoral degree, research/scholarship	180	100.0	†
N12ASSOC	Type of associate's degree	70	50.7	0.49
N12NFST	NPSAS was first school attended after high school	180	97.3	†
N12DGBMM	Date first began NPSAS ever: month	180	90.1	0.83
N12DGBYY	Date first began NPSAS ever: year	180	96.7	0.88
N12EXNCONF B	Likelihood of completing degree by expected date	120	82.4	0.25 ¹
N12EXNCONF2B	Likelihood of completing degree at all	80	81.3	0.11 ¹
N12REASON	Reason for enrolling in postsecondary education	180	70.0	0.40
Education Experiences				
N12HSTYP	Type of high school attended	160	98.1	0.78
N12HSGPES	Estimate of high school GPA	140	69.2	0.61
N12MATHBUS	High school math: business math	160	90.2	0.50
N12MATHPRE	High school math: pre-algebra	160	74.4	0.49
N12MATHALG	High school math: algebra I	160	82.3	0.51
N12MATHGEO	High school math: geometry	160	92.1	0.73
N12MATHALG2	High school math: algebra II	160	84.2	0.62
N12MATHTRIG	High school math: trigonometry	160	92.1	0.81
N12MATHALG3	High school math: algebra III	160	87.8	0.50
N12MATHANL	High school math: analytic geometry	160	96.3	0.42
N12MATHSTAT	High school math: statistics	160	92.1	0.72
N12MATHPCAL	High school math: pre-calculus	160	91.5	0.82
N12MATHCALC	High school math: calculus	160	95.1	0.86
N12MATHOT	High school math: other	160	90.9	0.44
N12AP1	Took Advanced Placement course or exam	170	92.1	0.83
N12COLLCR	Earned college credit during high school	170	90.9	0.78
N12PARSUP	Parents supportive of postsecondary education	160	88.9	0.67 ¹
N12PARDED	Parents supportive of postsecondary education: parents deceased	160	100.0	†
N12CROWD1	Unable to take any required classes because full or not offered	170	85.8	0.60
N12GPATYP	GPA measured on 4.00 scale	180	79.6	0.44
N12REMEVER	Ever taken remedial courses	180	83.6	0.59
N12OCCWGP	Expected yearly salary	160	91.7	0.52 ¹
Financial Aid				
N12VETBEN	Received veteran's education benefits	180	97.8	0.70
N12EMPGRNT	Received employer grants or scholarships	180	94.4	0.59
N12PRVGRNT	Received private organization grants or scholarships	180	88.8	0.54
N12RCVLN	Took out student loans in NPSAS year	180	95.0	0.89

See notes at end of table.

Table 30. Reliability estimates for items included in the reinterview, by interview section and item: 2011—Continued

Section and item	Item label	Number of cases	Percent agreement	Relational statistic
Financial Aid—Continued				
N12FEDLN	Received federal loans	60	85.3	0.65
N12PRVLN	Received private loan	60	85.0	0.38
N12UGLNNPSYR	Amount borrowed in undergraduate loans for NPSAS year	50	90.7	0.76 ¹
N12APPAID	Applied for financial aid	80	95.2	0.90
N12NODEBT	Reason for not applying: debt	40	81.6	0.57
N12NONEED	Reason for not applying: no need	40	68.4	0.40
N12THKEL	Reason for not applying: thought ineligible	40	81.6	0.63
N12HSAPP	Reason for not applying: no information how to apply	40	86.8	0.62
N12FMCON	Reason for not applying: forms too much work	40	89.5	0.44
N12APOTH	Reason for not applying: other	40	86.8	0.22
Current Employment				
N12WRKPAY	Work for pay if had not attended college	180	90.1	0.55
N12FLNUSETUI	Used federal loans for tuition and fees	40	82.1	0.12
N12FLNUSELIV	Used federal loans for living expenses	40	72.5	0.45
N12FLNUSEEXP	Used federal loans for other expenses	40	80.0	0.60
N12FLNUSEOTH	Used federal loans for expenses of others	40	89.2	0.30
N12PLNUSETUI	Used private loans for tuition and fees	#	66.7	†
N12PLNUSELIV	Used private loans for living expenses	#	100.0	1.00
N12PLNUSEEXP	Used private loans for other expenses	#	100.0	1.00
N12PLNUSEOTH	Used private loans for expenses of others	#	100.0	1.00
N12DISCOUNTA	Discount rate: \$750 in 1 month or \$1,500 in 1 year	100	74.2	0.40 ¹
N12DISCOUNTB	Discount rate: minimum amount for 1 year wait	40	68.3	0.29 ¹
N12DISCOUNTC	Discount rate: \$750 in 1 month or \$1,125 in 6 months	80	78.6	0.57 ¹
N12DISCOUNTD	Discount rate: minimum amount for 6 month wait	40	72.2	0.39 ¹
Background				
N12STATE	State of legal residence	180	96.7	0.98
N12DISTNC	Permanent address zip code	180	93.8	1.00
N12NOZIP	Permanent address zip code: outside the U.S.	180	98.9	0.49
N12FLANG	First language learned to speak	180	95.0	0.74
N12GUARDREL1	Parent or guardian 1: relationship	180	74.9	0.20
N12GUARDHED1	Parent or guardian 1: highest level of education	180	67.2	0.60
N12GUARDREL2	Parent or guardian 2: relationship	160	69.0	0.77
N12GUARDHED2	Parent or guardian 2: highest level of education	160	68.6	0.63
N12GUARDNO	Parent or guardian: only identify one parent or guardian	180	93.4	0.42
N12PHYSH	Physical health	180	45.6	0.40 ²
N12MENTH	Mental health	180	52.8	0.37 ²

† Not available. Statistics were not computed because the reinterview responses had less than two nonmissing levels.

Rounds to zero.

¹ Pearson's product-moment correlation coefficient r was used.

² The relational statistic presented is Kendall's tau b .

NOTE: The relational statistic presented is Cramer's V , unless otherwise footnoted. 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) Field Test.

Percent agreement was consistently high for the set of items regarding expenses that were paid for using private student loans. Three of these items (*Used private loans for living expenses*, *Used private loans for other expenses*, and *Used private loans for expenses of others*) yielded 100 percent agreement

and a relational statistic of 1.00. It should be noted that these items were administered to a small number of respondents.

The reinterview included questions about the respondent's legal residence. Reliability results for *State of legal residence* showed 97 percent agreement and a relational statistic of 0.98. The item *Permanent address zip code* had 94 percent agreement with a relational statistic of 1.00. The respondent was also able to indicate a permanent address outside the U.S. on the item *Permanent address zip code: outside the U.S.* Though the item had a high percentage of agreement (99 percent), it had a relatively low relational statistic (0.49)—a result that can occur given a small change between initial interview and reinterview responses, especially when there's little variation in the initial interview responses.

Respondents with an associate's degree were asked to categorize their degree on *Type of associate's degree*. Reliability for this item was low with a percentage of agreement of 51 percent and a relational statistic of 0.49. Low consistency on the item might stem from response option wording that was unfamiliar to the respondent. Providing examples of specific associate degrees beside each type of associate's degree may help clarify the response options for the full-scale interview.

At the end of the interview, respondents were asked to rate their physical and mental health, using response options ranging from excellent to poor. These items, *Physical health and Mental health*, showed low rates of agreement (46 percent and 53 percent, respectively) and low relational statistics (0.40 and 0.37, respectively). Vague item wording could have been the source of the discrepancies, as respondents may have rated their health on a particular day as opposed to their health overall. For the full-scale interview, clarification can be added to item wording to improve reliability.

Overall, results of the reinterview analysis indicate the survey yields data of high quality, with consistently reliable results. The majority of items (49 out of 70) have a percentage agreement of 80 percent or higher.

4.5.4 Item Nonresponse

Rate of nonresponse was a data quality measure used to identify troublesome interview items and better understand the experiences of sample members in completing the interview. Total nonresponse rates were calculated for items with missing data (including *don't know* responses) that were administered to at least 100 respondents. Overall, the item-level nonresponse analysis yielded 10 out of 450 interview items with more than 15 percent missing data.⁵

The item with the highest rate of nonresponse was *amount of veteran's education benefits* (N12VETBENAMT). Of the 140 respondents who received this item, approximately 51 percent did not provide an amount for their veteran's education benefits. *Amount of employer grants or scholarships* (N12EMPGRRTAMT) also had a high nonresponse rate, with 22 percent of respondents failing to provide an amount for their employer grants.

Questions about the number of Advanced Placement (AP) exams used for placement and credit at NPSAS institution returned relatively high rates of nonresponse. One-third of respondents did not provide a number for the AP exams used for placement on N12APNMHLCRS, and about 29 percent did not provide a number for the AP exams rejected for placement and credit on N12APNOTHING. Questions about the number of remedial courses taken since high school also produced high nonresponse rates. Approximately 15, 18, and another 18 percent of respondents did

⁵ Partial interview completions, missing data for interview nonrespondents, and items not available for public review (e.g., respondent contact information) were excluded from this analysis. For the interview item, N12STS01, Other school 1: enrollment intensity, which had possible multiple loops, this analysis evaluated the first loop only..

not provide the number of remedial courses taken in English (N12REMENGL), in reading (N12REMREAD), and in writing (N12REMWRITE), respectively.

The item *interactions with students are more positive than negative: right* (N12SOCPEERRT), had a nonresponse rate of 18 percent and was a right-start slider, which typically yielded higher nonresponse when compared to the left- and center-start sliders (see section 5.1 Slider Experiment for a discussion of instrument sliders with different start points). The two remaining items with nonresponse rates greater than 15 percent were text strings that specified an ‘other’ response. Approximately 27 percent of respondents did not enter a text string on *reason not attending NPSAS institution: other specify* (N12NOATTSP) and 20 percent did not enter a text string on *type of associate's degree: other specify* (N12ASSOCSP).

Item-level nonresponse rates were also examined by mode of administration. There were significant differences in nonresponse rates between web and telephone modes for eight of the 10 interview items with more than 15 percent of data missing; only *amount of employer grants or scholarships* (N12EMPGRTAMT) and *type of associate's degree: other specify* (N12ASSOCSP) did not show a significant mode difference. All eight items had a higher rate of nonresponse among web interviews.

Table 31 summarizes the item-level nonresponse for items administered to at least 100 respondents with a rate of more than 15 percent missing data.

Table 31. Item nonresponse for items with more than 15 percent of data missing, by mode of administration: 2011

Item	Item label	Mode of administration					
		Overall		Web		Telephone	
		Number administered to	Percent missing	Number administered to	Percent missing	Number administered to	Percent missing
N12APNMHLCRS	Number of Advanced Placement exams used for placement only	250	33.3	220	37.0	30	9.1
N12APNOTHING	Number of Advanced Placement exams rejected for placement and credit	250	29.0	220	31.5	30	12.1
N12REMENGL	Number of remedial courses in English in NPSAS year	520	15.1	400	18.8	120	2.5
N12REMREAD	Number of remedial courses in reading in NPSAS year	520	18.0	400	22.5	120	2.5
N12REMWRITE	Number of remedial courses in writing in NPSAS year	520	17.6	400	21.8	120	3.4
N12SOCPEERRT	Interactions with students are more positive than negative: Right	660	17.9	520	21.8	140	2.9
N12VETBENAMT	Amount of veteran's education benefits	140	51.4	110	58.7	30	25.8
N12EMPGRTAMT	Amount of employer grants or scholarships	250	22.2	230	22.9	20	11.8
N12NOATTSP	Reason not attending NPSAS: other specify	180	27.2	100	41.6	80	9.6
N12ASSOCSP	Type of associate's degree: other specify	180	19.9	100	24.0	80	15.0

NOTE: This table only includes those items that were administered to at least 100 respondents. 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) Field Test.

4.6 Student Interview Conclusions

NPSAS:12 FT interviews were conducted from March 29, 2011, to June 30, 2011. Of the 4,590 eligible sample members in NPSAS:12 sample, 3,860, or 89 percent, were successfully located. Successful locating methods included batch searches, such as CPS and Phone Append, and address update information provided by both sample members and their parents. Overall, 460 cases, or 11 percent of the eligible sample, required intensive tracing, and 66 percent of these cases were located.

Locating methods attempted during NPSAS:12 data collection included text message reminders and frequent e-mail contacts.

Of the 4,590 sample members in NPSAS:12 sample, 2,720, or 63 percent, completed an interview. Forty-two percent (1,160 cases) completed in the early response phase and 58 percent (1,570 cases) completed in the production phase. Seventy-nine percent of interviews were completed on the Web, and 21 percent of interviews were completed by telephone. Of web respondents, 1,150 (55 percent) completed without telephone contact, and 940 cases (45 percent) completed the web survey after contact with a telephone interviewer. Sample members who completed the interview received \$15, \$30, or \$45 based on their predicted propensity to participate.

The NPSAS:12 field test student interview was based in part on core data elements used in previous NPSAS student interviews, and in part on a human capital framework redesign primarily used to create new base year questions for BPS follow-up study. The interview was tested prior to data collection in focus groups and through cognitive interviewing, and consisted of seven sections. On average, NPSAS:12 interview took 36.2 minutes to complete. Overall, web interviews were significantly shorter at 34.5 minutes than telephone interviews were at 41.7 minutes. The time required to complete the interview varied by student's status as an FTB, *other undergraduate*, or graduate student. FTBs had a much longer path through the interview, requiring, on average, 42.1 minutes to complete the interview. The *other undergraduate* group took an average of 26.1 minutes to complete the interview, and graduate students took an average of 20 minutes to complete the interview. On average, the reinterview administered to a random sample of FTBs, took 9.3 minutes.

An evaluation of the quality of the data provided by NPSAS:12 student interview showed that methodological features built into the instrument such as the design of assisted coding systems, as well as training and supervision of interviewing staff, aided in the successful administration of the interview. Overall, expert coding staff agreed with major and occupation codes chosen in the interview 95 percent of the time, recoded codes chosen on these coders to a new value about 4 percent of the time, and were unable to choose a code based on too vague a text string about 1 percent of the time. Text strings from web interviews on the instrument coders generally required more upcoding by expert coding staff than did text strings from telephone interviewers. The appearance of conversion text in the instrument appeared to improve question response. Seventy percent of the cases where conversion text was triggered in the interview were converted to a response after the conversion text was displayed. Help text on individual interview screens was accessed less than 1 percent of the time. The item-level nonresponse analysis yielded just 10 out of 450 interview items with more than 15 percent missing data. Results from the reinterview showed that the majority of reinterview items (49 out of 70) had 80 percent or higher agreement with responses chosen in the main interview.

Debriefing of interviewers at the end of data collection indicated that frequent monitoring of telephone interviewers and quality circle training and feedback meetings were useful as data collection QC procedures. Most interviewers indicated that they felt they had all the tools necessary to successfully administer NPSAS:12 student interview and provided recommendations for future training topics, particularly focusing on gaining sample member cooperation to complete interviews.

Chapter 5. Field Test Experiments

Several experiments were performed during the NPSAS:12 field test. Two experiments tested features of the instrument: use of a visual analog scale to capture responses to scalar questions and inclusion of questions designed to establish discount rates among first-time beginners (FTBs). Another two experiments tested aspects of the data collection methodology: a propensity design approach to increase sample member participation and an informational video to communicate study information.

5.1 Visual Analog Scale “Slider” Experiment

Web surveys have expanded upon traditional survey tools by introducing visual, interactive features such as the “visual analog scale” (VAS) in place of the traditional discrete Likert scale layout using radio buttons. In an online survey, movement of a “slider” across the scale indicates a respondent’s chosen value. In NPSAS:12 field test, the VAS layout offered respondents a 1 to 5-point scale with 0.5 midpoints (9 total possible values), anchored at the left with a 1, “strongly disagree” and, at the right, with a 5, “strongly agree.” Although quite simple for respondents to use, the concern was that the starting position of the slider could bias responses, leading to a significantly greater percentage of extreme low or high and mid-value responses depending on whether the slider started at the left, right, or center on the VAS.

Starting position of the slider was tested in three questions in NPSAS:12 field test online interview:⁶

- N12SOCPEER: My interactions with other [prefill name of NPSAS institution] students are more positive than negative
- N12SENSBEL: I feel that I am a part of [prefill name of NPSAS institution]
- N12SOCSAT: I’m satisfied with my social experience at [prefill name of NPSAS institution]

Respondents were presented the same slider starting position for each of the three questions in the order: N12SOCPEER, N12SENSBEL, N12SOCSAT. The questions with starting slider positions are shown in figure 3. The distributions of responses at each starting position were compared to determine (1) if there was a greater rate of nonresponse at a particular starting position, and (2) if the distributions of responses were comparable irrespective of starting position. Nonresponse was indicated when the slider was not clicked; most likely, respondents believed the position of the slider was already indicative of their response choice.

⁶ The experiment was limited to those sample members completing the online survey since start position would not be apparent to a telephone respondent.

Figure 3. Slider start position examples: 2011

Figure 3 displays three examples of slider start positions for a survey question: "My interactions with other students were more positive than negative." Each example shows a horizontal slider bar with a value input field above it. The slider bar is labeled "The value you have chosen:" and has a small square handle. The scale ranges from 1 (Strongly disagree) to 5 (Strongly agree). The three examples show the slider starting at different positions: the first starts at 1, the second starts at approximately 1.5, and the third starts at 5. Each example includes a "Help" button and a "Next" button at the bottom.

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

5.1.1 Slider Experiment Results

In examining the rate of nonresponse across starting positions, questions with the slider starting at the right were significantly more likely to have nonresponse when compared to left and center start items (table 32). For N12SOCPEER, the right start position had significantly higher nonresponse than both the center ($\chi^2 = 9.7469, p < .0001$) and left start sliders ($\chi^2 = 9.8215, p < .0001$). Similar results were found for N12SENBEL where right start sliders were significantly different than center ($\chi^2 = 6.7815, p < .0001$) and left start sliders ($\chi^2 = 6.4867, p < .0001$). Right start sliders were also significantly different from center ($\chi^2 = 5.9804, p < .0001$) and left ($\chi^2 = 5.2391, p < .0001$) start slider positions for the third item, N12SOCSAT. No statistically significant differences were observed when the other starting positions were compared. The results suggest that respondents were more likely to accept a right start “strongly agree” response as their own, assuming that the slider need not be moved to register that value as their response.

Table 32. Experimental item nonresponse, by slider start position: 2011

Experimental item and scale point	Slider start position					
	Center		Left		Right	
	Number	Percent	Number	Percent	Number	Percent
N12SOCPEER—My interactions with other [institution] students are more positive than negative						
Total	510	100.0	500	100.0	520	100.0
No response indicated	10	2.1	10	1.8	110	21.8
N12SENBEL—I feel that I am part of [institution]						
Total	520	100.0	500	100.0	530	100.0
No response indicated	20	2.9	20	3.2	80	14.9
N12SOCSAT—I'm satisfied with my social experience at [institution]						
Total	510	100.0	500	100.0	520	100.0
No response indicated	10	2.7	20	3.6	70	12.6

NOTE: Data include first-time beginners (FTBs) and web respondents only. Detail may not sum to total because of rounding.

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

Setting aside those items for which no response was indicated, the distributions of responses to each question were then compared. Overall, as shown in table 33, the right start slider position resulted in a significantly higher percentage of “5-very satisfied” responses on all three questions compared to the center start position, but not when compared to the left start position. For N12SOCPEER, the right start position had a significantly higher number of “very satisfied” (5) responses than the center start position ($\chi = 2.1916, p < .05$). Similarly, the results for “very satisfied” on N12SENBEL were also significantly higher on right start sliders than center ($\chi = 2.4481, p < .01$). Likewise the responses to N12SOCSAT were significantly higher for right start sliders compared to center start sliders ($\chi = 2.1038, p < .05$) for the “very satisfied” (5) response. No other significant differences in response distributions were found for the other starting positions.

Taken together, these results suggest that the starting position of a VAS slider can influence the distribution of responses obtained in an interview. A greater percentage of nonresponse was observed when the slider position started at the highest rating, suggesting that sample members assume it is unnecessary to move the slider to register a 5, “strongly agree” response. Right start sliders also showed a higher concentration of extreme positive values compared to left and center start sliders. For the full-scale study, only four questions will use the VAS layout, with a scale from 0, “No chance at all,” to 10, “Absolutely likely” and a center start position. Each of the questions asks respondents to speculate as to the likelihood that they will complete their chosen degree and work in their desired occupation after postsecondary education.

Table 33. Experimental item response distribution, by slider start position: 2011

Experimental item and scale points	Slider start position					
	Center		Left		Right	
	Number	Percent	Number	Percent	Number	Percent
N12SOCPEER—My interactions with other [institution] students are more positive than negative						
Total	520	100.0	510	100.0	408	100.0
1 (very dissatisfied)	10	1.4	10	1.2	4	1.0
1.5	10	1.0	#	0.4	3	0.7
2	10	1.2	10	1.0	#	#
2.5	10	1.2	10	2.7	2	0.5
3	40	7.4	40	7.1	17	4.2
3.5	30	6.8	30	6.1	14	3.4
4	80	15.1	80	15.5	67	16.4
4.5	100	20.1	90	17.3	84	20.6
5 (very satisfied)	230	45.9	240	48.6	217	53.2
N12SENBEL—I feel that I am part of [institution]						
Total	500	100.0	490	100.0	450	100.0
1 (very dissatisfied)	20	3.6	20	4.3	10	2.0
1.5	10	2.0	10	2.1	#	0.9
2	20	4.2	20	3.1	10	1.8
2.5	20	3.8	20	3.3	20	3.6
3	50	10.4	50	11.0	30	7.7
3.5	50	9.6	30	5.2	30	6.5
4	70	14.4	70	14.1	60	13.7
4.5	60	11.2	60	12.8	70	14.6
5 (very satisfied)	200	40.7	210	44.1	220	49.1
N12SOCSAT—I'm satisfied with my social experience at [institution]						
Total	510	100.0	490	100.0	450	100.0
1 (very dissatisfied)	20	4.0	20	3.7	10	2.0
1.5	10	2.0	20	3.1	10	1.5
2	20	3.8	20	3.1	10	2.9
2.5	30	5.2	20	3.5	20	4.2
3	40	7.2	50	10.4	30	6.8
3.5	50	9.6	30	7.1	40	8.8
4	80	16.8	60	13.1	70	16.0
4.5	70	13.6	70	13.5	60	13.4
5 (very satisfied)	190	37.8	200	42.4	200	44.5

Rounds to zero.

NOTE: Data include first-time beginners (FTBs) and web respondents only. 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) Field Test.

5.2 Discount Rate Experiment

Questions based on the economic theory of discount rate, which estimates the present value of future monies, were tested in NPSAS:12 field test interview in an effort to better understand the relative value students place on a postsecondary education when the benefits of that education are not immediately known. Since individual discount rates reflect subjective time preferences, they are difficult to estimate, but could provide insight on differences in college attendance decisions, such as by institution level if longer enrollment periods indicate a willingness to wait for higher income later.

The NPSAS:12 field test was the first time discount rate questions have been used in a NPSAS interview. When used in other surveys, discount rate questions typically comprised a lengthy series of questions in which respondents were to choose between an immediate and a delayed cash gift. To keep the burden of NPSAS:12 field test to a minimum, two versions of a single set of discount rate questions were used, with respondents receiving only one of the versions.

FTBs were randomly assigned to one of the two discount rate question sets, summarized as follows:

- Version 1
 - Whether they would prefer \$750 in 1 month or \$1,500 in 1 year from today?
 - Respondents who preferred \$1,500, were then asked, starting with \$750, what is the least amount they would be willing to wait a year for?
- Version 2
 - Whether they would prefer \$750 in 1 month or \$1,125 in 6 months from today?
 - Respondents who preferred \$1,125, were then asked, starting with \$750, what is the least amount they would be willing to wait 6 months for?

The two versions differed in the comparison amounts (i.e., \$1,500 or \$1,125) and the time frame in which the higher cash amount would be paid (i.e., 1 year or 6 months). Item wording for both versions is shown in figure 4. Preferences were compared overall and by selected institution, student, and student aid characteristics.

Figure 4. Experimental discount rate items: 2011



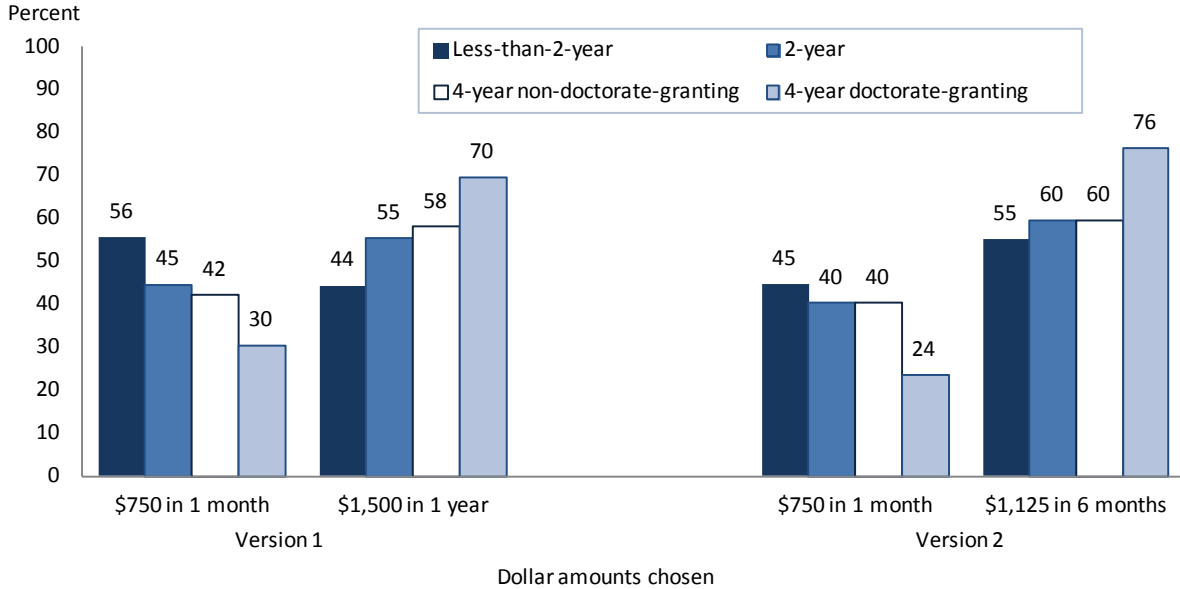
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12) Field Test.

5.2.1 Discount Rate Experiment Results

More respondents preferred to wait for either of the larger payouts, rather than take the offer of \$750 in 1 month. Among those offered \$1,500 or \$750, 59 percent preferred to wait ($\chi^2 = 5.5461, p < 0.001$); 63 percent preferred to wait when offered a choice of \$1,125 or \$750 ($\chi^2 = 7.9545, p < 0.001$). However, as shown in figure 5, this was not universal across institution levels. Respondents attending 4-year, doctorate-granting institutions were significantly more likely to choose to wait to receive a larger payout than respondents from less-than 2-year (\$1,500: $\chi^2 = 3.0020, p < .01$; \$1,125: $\chi^2 = 2.6852, p < .01$), 2-year (\$1,500: $\chi^2 = 3.5312, p < .001$; \$1,125: $\chi^2 = 4.1080, p < .0001$), or 4-year non-doctorate granting (\$1,500: $\chi^2 = 2.6985, p < .01$; \$1,125: $\chi^2 = 3.8033, p < .0001$) institutions. No other differences among the institution levels were found. Students enrolled in private, nonprofit institutions were more likely to wait for the higher amount (77 percent) than were students enrolled in public institutions (62 percent; $\chi^2 = 24.1946, p < .0001$) or in private, for-profit institutions (47 percent; $\chi^2 = 63.8859, p < .0001$). Likewise, students in public

institutions were more likely to wait for the higher amount than were students enrolled in private, for-profit institutions ($\chi^2=28.1595, p < .0001$).

Figure 5. Dollar amounts chosen, by institution level: 2011



NOTE: Data include first-time beginners only. 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) Field Test.

Willingness to wait for the higher dollar amounts was also evaluated for a number of student and student aid characteristics. As shown in table 34 students who reported using the financial aid services offered by their NPSAS institution ($\chi^2 = 16.8895, p < .0001$), received student loans for the 2010–11 academic year ($\chi^2 = 9.3420, p < .0022$), had no private grants or scholarships ($\chi^2 = 14.1200, p < .0002$), did not turn down any loans offered them ($\chi^2 = 6.2692, p < .0123$), and took fewer classes to avoid having to take out more loans ($\chi^2 = 13.5037, p < .0002$) were less likely to wait for the higher dollar amounts. No other differences tested were statistically significant, including gender, whether or not the sample member applied for financial aid, importance of financial aid services to decision to remain at NPSAS institution, selection of less expensive institution to avoid loans, receipt of federal or private loans during the academic year, and receipt of the maximum amount of federal loans.

Table 34. First-time beginners (FTB's) willingness to wait to receive a larger dollar amount, by selected student aid characteristics: 2011

Selected student aid characteristics	Total	Willing to wait		Not willing to wait	
		Number	Percent	Number	Percent
Used financial aid services at NPSAS institution	1,910	1,160	60.9	750	39.1
Yes	1,400	820	58.1	590	41.9
No	510	350	68.5	160	31.5
Received student loans during the 2010–11 academic year	1,920	1,170	60.8	750	39.2
Yes	870	500	57.0	380	43.0
No	1,040	670	63.9	380	36.1
Received private grants or scholarships during the 2010–11 academic year	1,890	1,160	61.3	730	38.7
Yes	340	240	70.3	100	29.7
No	1,550	920	59.3	630	40.7
Turned down federal loans offered during the 2010–11 academic year	1,680	1,010	60.3	670	39.7
Yes	430	280	65.4	150	34.6
No	1,250	730	58.6	520	41.4
Took fewer classes to avoid taking out additional loans	1,920	1,170	60.9	750	39.1
Yes	180	90	48.4	100	51.6
No	1,740	1,080	62.3	660	37.7

NOTE: 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) Field Test.

FTBs who preferred waiting to receive the higher cash gift were routed to a follow-up question asking the minimum amount they would be willing to wait the 6 months or 1 year period to receive. The distribution of their responses is shown in table 35. Students tended to respond with either the highest or lowest values in the range, or to a response choice with a round number, specifically \$1,000.

Table 35. Least amount of money respondent willing to wait for, by time frame: 2011

Least amount of money willing to wait 1 year for?	Number of respondents	Percent	Least amount of money willing to wait 6 months for?	Number of respondents	Percent
Total	510	100.0	Total	525	100.0
\$750	155	29.9	\$750	190	36.3
\$775 to \$975	70	13.3	\$775 to \$975	120	22.7
\$1,000	135	26.6	\$1,000	110	20.6
\$1,025 to \$1,475	65	12.9	\$1,025 to \$1,100	15	2.7
\$1,500	90	17.4	\$1,125	95	17.8

NOTE: Data include first-time beginners (FTBs) only. Does not include FTBs who chose to accept \$750 in 1 month. 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) Field Test.

5.3 Response Propensity Modeling Experiment

A third experiment was included in NPSAS:12 field test to test an approach that used incentives strategically to increase participation among low responding groups rather than to simply increase response rates overall. Survey nonresponse can result in bias that produces inaccurate

estimates and compromised data quality, and nonresponse bias is sometimes addressed by attempting to increase the overall survey participation rate by pursuing cases most likely to be interviewed. However, bias could be inadvertently increased by adding more cases that are similar to those who have already responded (Merkle and Edelman 2009). If, instead, low responding cases are brought into the response pool, they could potentially increase the weighted response rate resulting in less biased survey estimates.

The response propensity experiment was designed to answer three research questions:

- Can a response propensity model be developed to predict a sample member's propensity to participate in NPSAS:12 interview?
- Can the strategic use of incentives change the likelihood that a sample member will participate?
- Can bias be reduced by increasing the proportion of low propensity cases in the response pool?

The first step of the response propensity approach was to use information known prior to data collection (e.g., frame variables) to develop a predictive model of a given sample member's likelihood to respond. The methodology proceeded as follows:

- Step 1 – Using prior administrations of NPSAS, identify variables which predict propensity to respond.
- Step 2 – Prior to the start of data collection, estimate a NPSAS:12 case's propensity to respond to the interview.
- Step 3 – Offer different incentive amounts to high and low propensity cases and evaluate their effect on interview participation.
- Step 4 – Evaluate the predictive ability of the response propensity model and determine if bias is reduced in experimental cases.

Developing a response propensity model. The propensity model was built using data from the 100,110 eligible cases in NPSAS:04 full-scale data collection. The variables determined to be predictive of a sample member's response propensity are listed in table 36 (higher odds ratios indicated a stronger influence in predicting response propensity).

Table 36. Odds ratios obtained from NPSAS:04 propensity modeling using logistic regression: 2011

Variable	Odds ratio	95 percent odds ratio confidence interval	
Student attends a 4-year institution	1.61	1.57	1.67
Student attends a less-than 2-year institution	0.79	0.74	0.83
Student attends a public school	1.09	1.05	1.13
Student attends a private-for-profit school	0.76	0.71	0.80
Student is a first-time-beginner	1.00	0.98	1.03
Student is in a doctoral program	1.73	1.59	1.90
Student is an undergraduate	0.83	0.78	0.88
Student is in school full-time	1.05	1.00	1.10
Mother is a college graduate	1.07	1.03	1.12
Father is a college graduate	1.13	1.08	1.18
Student has missing CPS data	0.63	0.59	0.66

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

Before the start of field test data collection, the cutoff between high and low propensity cases was determined using NPSAS:04 data. The median response propensity (61) in NPSAS:04 was set as the division between high and low propensity cases. When applied to NPSAS:12 field test, 3,190 cases were designated as high propensity and 1,400 cases as low propensity.

Applying targeted incentives. Field test sample members determined to have a low response propensity were sorted at random into either a control group, which was offered a \$30 incentive for participation (the standard incentive for NPSAS interviews), or an experimental group, which was offered \$45. The high response propensity sample members were sorted at random into a control group, also offered \$30, or an experimental group that was offered \$15.

5.3.1 Response Propensity Modeling Experiment Results

Results of the response propensity experiment are provided according to the research question they address.

Can a response propensity model be developed to predict a sample member's propensity to participate in NPSAS:12 interview? To evaluate the effectiveness of the model, participation rate was used, rather than response rate, since the purpose of an incentive is to get sample members to participate irrespective of eligibility; response rate, which takes into account study eligibility, excludes sample members who proceeded through the interview far enough to be determined ineligible. The response propensity model developed using NPSAS:04 data successfully predicted the likelihood that individual sample members would participate in NPSAS:12 field test. Overall, the unweighted participation rate among high propensity cases was 68 percent and the unweighted participation rate among low propensity cases was 59 percent ($\chi^2 = 37.9556, p < .0001$). Institution type participation rates are shown in table 37.

Table 37. Institution participation rates, by low and high propensity: 2011

Institution type	Low propensity		High propensity	
	Number of cases	Participation rate	Number of cases	Participation rate
Public				
Less-than-2-year	30	57.6	#	†
2-year	570	58.1	1,270	63.1
4-year non-doctorate-granting	#	†	270	72.1
4-year doctorate-granting	20	72.2	570	76.6
Private nonprofit				
Less-than-4-year	30	67.7	20	72.2
4-year non-doctorate-granting	40	81.1	240	77.5
4-year doctorate-granting	50	72.9	200	77.7
Private for-profit				
Less-than-2-year	170	58.1	#	†
2-year	290	51.2	#	†
4-year	200	61.7	640	62.4

† Not applicable.

Rounds to zero.

NOTE: 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) Field Test.

Can the strategic use of incentives change the likelihood that a sample member will participate? Table 38 shows the unweighted participation rates by experimental group. High propensity cases offered the \$15 incentive participated at a significantly lower rate than those offered \$30 ($\chi^2 = 18.2244, p < .0001$). There was no difference in participation rates among the low propensity groups ($\chi^2 = 1.3373, p = .2475$). Although not providing support for paying a higher incentive for low responding groups, these results do confirm that the standard \$30 incentive offered for NPSAS interview is effective in encouraging student participation.

Table 38. Unweighted participation rate results of incentive experiments, by propensity: 2011

Propensity	Unweighted participation rate
High propensity	
Control	71.6
Treatment	64.6
Low propensity	
Control	57.2
Treatment	60.2

NOTE: 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) Field Test.

Can bias be reduced by increasing the proportion of low propensity cases in the response pool? Because the higher incentive did not result in a greater participation rate among low propensity cases, a reduction in bias was unlikely. Several variables were examined and shown to have similar estimates, indicating that bias was not improved. For example, NPSAS respondents were asked what type, if any, grant aid they received. Table 39 shows the estimates across the

different propensity groups for the grant aid variables and are illustrative of the results across all key variables examined. The weighted estimate in both the low propensity control and treatment groups was not statistically different.

Table 39. Estimates of selected variables, by low and high propensity: 2011

Variables	Low propensity		High propensity	
	Control	Treatment	Control	Treatment
Percent receiving an employer grant	8.4	7.9	9.3	6.8
Percent receiving a private grant	22.4	22.8	23.4	21.7
Percent receiving any grant	26.4	26.4	27.4	25.4

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

Examining nonresponse bias for variables known for respondents and nonrespondents is another method by which to determine whether or not the response propensity approach reduced nonresponse bias. Methods to estimate bias, and the variables used, are similar to those described in section 7.2 except that, for this propensity analysis, results after weighting were not analyzed because the effect of data collection on bias was being examined rather than the effect of weight adjustments. Nonresponse bias was computed for high and low propensity cases, low propensity cases who received \$30 (control group) and who received \$45 (experimental group), and high propensity cases combined with low propensity cases who received \$30 and with those who received \$45. Table 40 shows the results of the comparisons. None was statistically significant.

Table 40. Summary of student nonresponse bias analysis, by propensity group: 2011

Group	Mean relative bias	Median relative bias	Percent significant bias
Overall			
High propensity	10.82	7.56	2.7
Low propensity	24.64	17.55	2.5
Low propensity only			
\$30 incentive group (control)	27.45	23.79	5.4
\$45 incentive group (treatment)	26.53	14.97	5.0
High propensity with:			
Low propensity \$30	14.62	8.57	7.5
Low propensity \$45	11.84	7.94	5.0

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

5.4 Informational Video

Initial contacts with sample members at the start of a data collection have traditionally been made using letters, e-mails, and sometimes telephone calls, with each form of communication including similar information about the study. These communications are designed to inform the sample member about the study, how to complete the survey, and what incentives would be associated with participation. In NPSAS:12 field test, an experiment was conducted to test the effectiveness of an online video as a method to also communicate study information. It was expected that the video would be an effective method of communicating information to, and

engaging, sample members and, therefore, would result in higher participation rates among those who viewed the video than those who did not view the video.

To test this, half of the field test sample was randomly assigned to a control group, receiving the usual data collection notification materials in their traditional form, postal mail and email. The other half of the field test sample received the same notification materials, but also received an invitation to view an informational video about the study. The video was posted to YouTube and a URL was included in the letter. E-mails sent to sample members subsequent to the initial letter also included hyperlinks to the video on YouTube. The participation rate of this experimental group was then compared to the control group.

In the first follow-up with the FTBs, the 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14), this base year exposure to the informational video will again be tested. The expectation is that displaying recognizable characters and themes from the video would improve recognition of, and willingness to participate in, the follow-up survey. Such “branding” would be particularly beneficial for longitudinal studies, like BPS, which require one or more follow-up interviews beyond the base year. In BPS:12/14 field test, characters from NPSAS:12 field test video will be used in communications with those sample members initially offered the video during NPSAS:12 field test. Treatment group participation rates for panel maintenance and interviewing will be compared to the control group to evaluate the effectiveness of the branding.

5.4.1 Informational Video Results

No overall difference in participation rates was observed between cases that were informed about the video in the letter and those that were not. Response rates between the control and treatment groups were identical; 50 percent of those who got the information about the video responded and 50 percent of those who did not receive information about the video responded. There were also no differences across the various institution sectors, as shown in table 41. Due to limitations of YouTube, where the video was posted, it was impossible to know whether or not those who received a link to the video actually viewed the video.

Table 41. Receipt of informational video participation rates, by institution characteristics: 2011

Institution characteristics	Receipt of informational video					
	Total		Did not receive		Received	
	Number	Percent	Number	Percent	Number	Percent
Total	3,000	65.3	1,500	65.6	1,500	65.0
Institution control						
Public	1,790	65.7	890	66.5	900	65.0
Private, nonprofit	430	76.7	230	74.8	210	78.8
Private for-profit	770	59.2	380	59.2	390	59.3
Institution level						
Less-than-2-year	120	58.0	60	61.5	60	54.4
2-year	1,320	60.3	650	61.5	660	59.3
4-year non-doctorate granting	930	67.3	450	66.8	480	67.9
4-year doctorate granting	630	76.6	330	74.4	310	79.0
Institution type						
Public						
Less-than-2-year	20	57.6	10	64.7	10	50.0
2-year	1,130	61.5	560	62.8	570	60.4
4-year, nondoctorate-granting	190	72.2	100	75.8	100	69.0
4-year, doctorate-granting	450	76.5	230	73.8	220	79.4
Private nonprofit						
4-year	40	69.2	20	66.7	20	71.4
4-year nondoctorate	210	78.0	110	75.2	110	81.1
4-year doctorate-granting	190	76.8	100	75.9	80	77.9
Private for-profit						
Less-than-2-year	100	58.0	50	60.9	50	55.2
2-year	150	51.2	80	52.8	70	49.7
4-year	520	62.3	250	61.1	270	63.4

NOTE: 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) Field Test.

Chapter 6.

Administrative Records Matching Overview and Outcomes

A portion of the student data for NPSAS:12 field test was obtained from two administrative ED databases: the Central Processing System (CPS) and the National Student Loan Data System (NSLDS). These additional data sources were useful in several ways. First, they provided information that could not be collected from institutions or students. Second, they enabled the project staff to obtain certain data items that were usually obtained from institution record abstraction or the student interview but were missing for individual sample members (e.g., demographics). A third administrative data source, the National Student Clearinghouse (NSC), was also used in NPSAS:12 field test. However, NSC matching was only performed presampling and is therefore described in section 2.3 where the first time beginner (FTB) sample is described.

6.1 Administrative Records Matching

Central Processing System. To reduce institution and student burden, information related to student applications for federal financial aid was obtained from the CPS. Students enter financial status information about themselves and their family on ED's Free Application for Federal Student Aid (FAFSA) form. The information is then analyzed and provided to requesting institutions and other approved parties

The match for NPSAS field test was against the CPS data for the 2010–11 financial aid year.

National Student Loan Data System. Student-level data on the nature and amount of Pell Grants and federal student loans received were obtained from the NSLDS database. This electronic data interchange with NSLDS was performed once during the data collection period to submit the most up-to-date data possible for matching.

6.2 Administrative Records Matching Outcomes

Central Processing System (CPS). Table 42 summarizes the results of matching and downloading student data from the CPS overall and by institution and student characteristics. The overall matching rate for the 2010–11 academic year was about 81 percent. Match rates varied by type of institution, ranging from 63 percent for private nonprofit less-than-4-year institutions to almost 99 percent at private for-profit less-than-2-year institutions.

Table 42. Central Processing System (CPS) matching results, by institution characteristics and student type: 2011

Institution and student characteristics	Eligible students	Sent to CPS		Matched to CPS	
		Number	Percent of eligible students	Number	Percent sent to CPS
All students	4,350	3,980	91.6	3,210	80.7
Institution level					
Less than 2-year	190	190	98.4	180	96.8
2-year	2,080	1,930	93.0	1,470	76.1
4-year non-doctorate granting	1,260	1,130	89.1	1,000	88.7
4-year doctorate granting	810	740	90.3	560	76.3
Institution control					
Public	2,610	2,400	92.1	1,870	78.0
Private nonprofit	560	520	92.3	410	79.3
Private for-profit	1,180	1,060	90.0	930	87.4
Institution type					
Public					
Less-than-2-year	30	20	88.9	20	83.3
2-year	1,750	1,620	92.7	1,260	77.5
4-year nondoctorate-granting	260	240	91.1	200	82.6
4-year doctorate-granting	570	520	90.9	400	77.2
Private nonprofit					
Less than 4-year	50	50	98.0	30	63.3
4-year nondoctorate-granting	270	250	94.4	220	86.6
4-year doctorate-granting	240	210	88.8	160	74.2
Private for-profit					
Less-than-2-year	170	170	100.0	160	98.8
2-year	280	260	93.6	180	69.5
4-year	740	640	86.4	580	91.8
Student type					
Undergraduates	4,090	3,750	91.8	3,080	82.0
Interview confirmed FTB	2,000	1,880	93.7	1,610	85.9
Potential FTB	1,490	1,340	89.8	1,060	78.9
Other	590	540	90.4	410	76.0
Graduate/first professional	260	230	88.2	130	58.7

NOTE: 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) Field Test.

National Student Loan Data System. Successful matching to NSLDS can occur only for sample members who have received federal loans and/or Pell Grants. NSLDS files are historical; thus, information about receipt of such loans and grants was available not only for NPSAS field test study year, but also for prior years (where applicable). Table 43 shows historical match rates for eligible sample members, which does not necessarily mean that the match was for the current NPSAS year.

In total, 46 percent of eligible sample members were matched to the NSLDS historical loan database. NSLDS Pell Grant matches were obtained for 50 percent of the eligible sample members.

Table 43. National Student Loan Data System (NSLDS) matching results, by institution characteristics and student type: 2011

Institution characteristics and student type	Eligible students	Matched to NSLDS loan		Matched to NSLDS Pell Grant	
		Number	Percent	Number	Percent
All students	4,350	2,010	46.2	2,180	50.2
Institution level					
Less than 2-year	190	150	79.7	160	84.9
2-year	2,080	550	26.4	1,070	51.3
4-year non-doctorate granting	1,260	860	67.9	710	56.3
4-year doctorate granting	810	450	55.4	240	29.5
Institution control					
Public	2,610	780	30.0	1,190	45.5
Private nonprofit	560	330	59.7	180	31.3
Private for-profit	1,180	892	75.6	820	69.3
Institution type					
Public					
Less-than-2-year	30	#	3.7	20	70.4
2-year	1,750	350	20.0	880	50.2
4-year nondoctorate-granting	260	120	47.9	110	43.2
4-year doctorate-granting	570	310	53.8	180	31.4
Private nonprofit					
Less than 4-year	50	20	48.0	20	34.0
4-year nondoctorate-granting	270	170	62.5	100	36.4
4-year doctorate-granting	240	140	59.2	60	25.0
Private for-profit					
Less-than-2-year	170	150	92.1	140	87.3
2-year	280	180	62.5	170	61.8
4-year	740	570	76.9	500	68.2
Student type					
Undergraduates	4,090	1,840	44.9	2,090	51.1
Interview confirmed FTB	2,000	930	46.5	1,020	50.8
Potential FTB	1,490	620	41.4	760	50.6
Other	590	290	48.5	320	53.0
Graduate/first professional	260	170	67.5	90	36.1

Rounds to zero.

NOTE: All eligible students were sent to NSLDS for file matching. Matching was completed on historical files. Detail may not sum to totals because of rounding. FTB = first-time beginner.

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

Chapter 7.

Postdata Collection Data File Processing and Preparation

This chapter describes the weighting, nonresponse bias analysis, and variance estimation for the NPSAS:12 field test. For NPSAS:12, the field test institution sample was selected using statistical procedures rather than purposively as had been done in past NPSAS cycles. This provided more control to ensure that the field test and the full-scale institution samples have similar characteristics. It also allowed inferences to be made to the target population, supporting the analytic needs of the field test experiments and instrument. NPSAS:12 field test data files are not publically available; they were prepared as a test of methods and systems only.

7.1 Weighting

Statistical analysis weights were computed for interview respondents so that these respondents would represent the target population described in section 2.1. The statistical analysis weights compensated for the unequal probability of selection of institutions and students in the field test sample. The weights were also adjusted for multiplicity, nonresponse, and poststratification at the institution and student levels. The institution weight was computed and then used as a component of the student weight. The student analysis weight was computed for interview respondents as the product of the following nine weight components:

- institution sampling weight (WT1);
- institution subsampling adjustment (WT2);
- institution multiplicity adjustment (WT3);
- institution nonresponse adjustment (WT4);
- institution poststratification adjustment (WT5);
- student sampling weight (WT6);
- student multiplicity adjustment (WT7);
- student nonresponse adjustment (WT8); and
- student poststratification adjustment (WT9).

Each weight component, described below, represents either a probability of selection or a weight adjustment. All nonresponse and poststratification adjustments were modeled using RTI's proprietary generalized exponential models (GEM) (Folsom and Singh 2000), which are similar to logistic models using bounds for adjustment factors and bounds on variance inflation. SUDAAN software (RTI International 2008) was used to run GEM. Weighting procedures were consistent with previous administrations of NPSAS.

7.1.1 Initial Institution Weight Components

There were three initial institution weight components.

Institution sampling weight (WT1). The sampling weight for each sample institution was the reciprocal of its probability of selection. The probability of selection for institution i was

$$\pi_r(i) = \begin{cases} \frac{n_r S_r(i)}{S_r(+)} & \text{for noncertainty} \\ 1 & \text{for certainty selections,} \end{cases}$$

where

n_r = the sample size in stratum r ,

$S_r(i)$ = the measure of size for the i th school in stratum r ,

and

$S_r(+)$ = the total measure of size of all schools in stratum r ,

Therefore, the institution sampling weight was assigned as follows: $WT1 = 1/\pi_r(i)$.

Institution subsampling adjustment (WT2). The subsampling weight for each sample institution was the reciprocal of its probability of selection for the field test subsample (see section 2.2.1). The probability of selection for institution i was

$$\pi_r(i) = \begin{cases} \frac{n_{r|ft}}{n_{r|fs}} \end{cases}$$

where

$n_{r|ft}$ = the field-test sample size in stratum r

and

$n_{r|fs}$ = the full-sample sample size in stratum r .

Therefore, the institution subsampling weight was assigned as follows: $WT2 = 1/\pi_r(i)$.

Institution multiplicity adjustment (WT3). Each institution on the sampling frame initially had one chance of selection and an associated probability of selection. However, during institution recruitment and student list sampling, two institutions were identified that had two or more records listed on the IPEDS frame. In one case, the institution recently changed which campuses they report to IPEDS, and the other institution sent one student list covering multiple campuses. In both cases the campuses were merged for sampling purposes.

These institutions were treated as having multiple chances of being selected into the sample because each institution had an initial probability of selection, but the additional institutions represented on the list also had probabilities of selection. Therefore, the weight of the sample institution, which is based on the initial probability of selection, needed to be adjusted to account for the actual probability of selection for the group of institutions represented by the list. The number of chances of the institution's being selected was based on the number of institutions that were represented on the enrollment list.

Both institutions had several chances of selection, so the multiplicity adjustment was performed by first estimating the probability that any record could be selected:

$$p(A \text{ or } B \text{ or } C \text{ or } D \dots) \approx 1 - (1 - p(A)) * (1 - p(B)) * (1 - p(C)) * (1 - p(D)) * \dots$$

Then, the new sampling weight was calculated as the reciprocal of this probability:

$$\text{NEW_WT} = 1/p(A \text{ or } B \text{ or } C \text{ or } D \dots).$$

Finally, the multiplicity adjustment factor was derived by dividing the new sampling weight by the old sampling weight, $\text{WT3} = \text{NEW_WT}/(\text{WT1}*\text{WT2})$, for the two institutions with positive multiplicity, and by setting it to unity (1.00) for all other institutions. Consequently, the product of WT1 , WT2 and WT3 equals NEW_WT for the two institutions with positive multiplicity, and it equals $\text{WT1}*\text{WT2}$ for all other institutions.

7.1.2 Adjusting Institution Weights

There were two additional institution weight components – a nonresponse weight adjustment and a poststratification weight adjustment.

Institution nonresponse adjustment (WT4). A weighting adjustment using GEM was performed to compensate for nonresponding institutions. The nonresponse adjustments were designed to significantly reduce or eliminate nonresponse bias for variables included in the models. Predictor variables were chosen that were nonmissing for most respondents and nonrespondents.

The following variables based on IPEDS were included in the model as main effects:

- institution type (sector10);
- Carnegie classification (collapsed categories);
- Office of Business Economics region;
- total undergraduate enrollment;
- total graduate enrollment;
- urbanicity;
- Historically Black College or University indicator; and
- Hispanic Serving Institution indicator.

Table 44 shows the response rates and the resulting adjustment factors, by the model variables. The institution nonresponse weight adjustment factors from GEM met the following constraints:

- minimum: 1.00;
- median: 1.94; and
- maximum: 6.79.

Table 44. Weight adjustment factors for institution nonresponse adjustment, by model predictor variable: 2011

Model predictor variable	Number of respondents	Weighted response rate ¹	Average weight adjustment factor (WT4) ²
Total	150	50.1	2.16
Institution type			
Public			
Less-than-2-year	#	39.1	2.16
2-year	40	51.4	1.87
4-year non-doctorate-granting	10	58.6	1.67
4-year doctorate-granting	20	54.4	1.81
Private nonprofit			
Less-than-4-year	#	67.6	1.51
4-year non-doctorate-granting	20	37.0	2.62
4-year doctorate-granting	20	51.3	1.75
Private for-profit			
Less-than-2-year	#	48.7	2.06
2-year	10	43.0	2.32
4-year	20	28.4	3.34
Carnegie classification code			
Associate's	50	49.6	2.14
Research and doctoral	20	48.9	2.01
Master's	40	55.3	2.01
Baccalaureate	20	50.2	2.37
Special focus and other	10	35.7	2.18
Unavailable or unknown	20	47.6	2.51
Bureau of Economic Analysis Code (Office of Business Economics) region ³			
New England	10	52.0	2.06
Mideast	30	53.0	2.02
Great Lakes	20	56.6	1.78
Plains	10	49.8	2.18
Southeast	40	55.5	2.10
Southwest	10	48.1	2.02
Rocky Mountains	10	35.7	2.99
Far West	30	40.0	2.68
Total undergraduate enrollment			
50 percent or less	80	59.5	2.12
More than 50 percent	70	47.3	2.21
Total graduate enrollment			
50 percent or less	40	52.9	2.25
More than 50 percent	40	49.3	2.10
Unavailable or unknown	80	49.7	2.15

See notes at end of table.

Table 44. Weight adjustment factors for institution nonresponse adjustment, by model predictor variable: 2011—Continued

Model predictor variable	Number of respondents	Weighted response rate ¹	Average weight adjustment factor (WT4) ²
Urbanicity			
City	80	48.8	2.19
Suburb	30	44.6	2.58
Urban Area	20	53.0	1.88
Rural Area	20	61.4	1.78
Historically Black College or University			
Yes	#	69.1	1.57
No	150	49.8	2.17
Hispanic-serving institution			
Yes	10	48.5	2.09
No	140	50.2	2.17

Rounds to zero.

¹ The response rate is expressed as a percentage.

² The average weight adjustment factor is expressed as a number.

³ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

NOTE: Detail may not sum to totals because of rounding. Categories were formed from continuous variables based on quartiles.

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

Institution poststratification adjustment (WT5). To ensure population coverage, the product of the institution weight after nonresponse adjustment and the student frame counts was adjusted, with the use of GEM, to control totals for enrollment. Control totals were established for 12-month enrollment by institution type (sector10). Initially sector10 was crossed with enrollment size (small versus large) as the control total variables but the small field test institution sample size did not allow for this refined categorization. The enrollment control totals were calculated using the sampling frame based on the 2009 IPEDS Enrollment file.

The poststratification was conducted using enrollment counts rather than institution counts because all NPSAS analyses will be at the student-level and not at the institution-level. Additionally, the institutions were selected with probability proportional to size (pps) with the size measured as counts of students. This method of sampling does not yield an accurate estimate of institutions.

Table 45 presents the variables associated with the control totals and the average weight adjustment factors, by these variables. The institution poststratification weight adjustment factors from GEM met the following constraints:

- minimum: 0.85;
- median: 1.10; and
- maximum: 1.60.

Table 45. Weight adjustment factors for institution poststratification, by model predictor variable: 2011

Model predictor variable	Control total ¹	Average weight adjustment factor (WT5)
Total	27,343,379	1.11
Public		
Less-than-2-year	112,198	1.00
2-year	10,468,071	1.10
4-year non-doctorate-granting	2,843,073	1.11
4-year doctorate-granting	6,177,603	1.10
Private nonprofit		
Less-than-4-year	81,901	1.00
4-year non-doctorate-granting	1,855,730	0.85
4-year doctorate-granting	2,627,122	1.08
Private for-profit		
Less-than-2-year	417,861	0.97
2-year	671,694	0.98
4-year	2,088,126	1.60

¹ Control totals are the sum of enrollment across institutions based on 2008–09 IPEDS enrollment data. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12) Field Test.

7.1.3 Initial Student Weight Components

There were two initial student weight components.

Student sampling weight (WT6). The overall student sampling strata were defined by crossing the institution sampling strata with the student strata within institutions. The sample students were systematically selected from the enrollment lists at institution-specific rates that were inversely proportional to the institution’s probability of selection. Specifically, the institution-specific sampling rate was the overall student sampling rate divided by the institution’s probability of selection, or

$$f_{s|i} = \frac{f_s}{\pi_r(i)},$$

where f_s = the overall student sampling rate and $\pi_r(i)$ = the institution’s probability of selection.

The student sampling weight was calculated as the reciprocal of the institution-specific student sampling rates, or

$$\text{WT6} = 1/f_{s|i}.$$

Student multiplicity adjustment (WT7). Students who attended more than one eligible institution during the 2010–11 academic year had multiple chances of being selected. That is, they could have been selected from any of the institutions they attended. Therefore, these students had a higher probability of being selected than was represented in their sampling weight. This multiplicity was adjusted by dividing their sampling weight by the number of institutions attended that were eligible for sample selection.

This multiplicity was adjusted by dividing their sampling weight by the number of institutions attended that were eligible for sample selection. Specifically, the student multiplicity weight adjustment factor was defined as

$$WT7 = 1/M,$$

where M is the multiplicity, or number of eligible institutions attended. The multiplicity was determined only from the student interview and not from the Pell Grant payment file and the National Student Loan Data System due to time constraints. Unless there was evidence to the contrary, the student multiplicity was presumed to be unity (1.00).

The student multiplicity weight adjustment factors met the following constraints:

- minimum: 0.33;
- median: 1.00; and
- maximum: 1.00.

7.1.4 Adjusting Student Weights

There were two additional student weight components – a nonresponse adjustment factor and a poststratification adjustment factor.

Student nonresponse adjustment (WT8). The adjustment for student interview nonresponse was performed in one step, rather than in two or three steps as is typically done for full-scale studies. The weight adjustment factor was computed with the use of GEM. The following variables were thought to be predictive of response status and are known for most respondents and nonrespondents, and were used as the main effects in the model.⁷

- institution type (sector10);
- region;
- institution total enrollment from IPEDS (categorical);
- student type (sampled);
- first-time beginner (FTB) status (sampled);
- Social Security number indicator;
- CPS record indicator;
- Pell Grant status;
- Pell Grant amount (categorical);
- Stafford Loan status;
- Stafford Loan amount (categorical);
- telephone number count;

⁷ For the continuous variables, categories were formed based on medians or logical breaks.

- e-mail address count; and
- mailing address count.

In anticipation of potential convergence problems due to the small field test student sample size, fewer variables were included in the field test model than for the full-scale study. The possibility of including an age group variable in the model was considered but the percent missing was too large. Interaction terms were not identified and therefore not included in the model.

Pell Grant status and Stafford Loan status were dropped from the adjustment model because of singularity, which prevents the model from running properly. Singularity occurs when a combination of variables can be used to determine the values of another variable. In the nonresponse adjustment model, the students who did not receive a Pell Grant were the same students who had Pell Grant amount equal to zero dollars; this was also the case for the Stafford Loan status variable.

Table 46 shows the final predictor variables used in GEM to adjust the weights and the average weight adjustment factors resulting from these variables. The weight adjustment factors met the following constraints:

- minimum: 1.00;
- median: 1.18; and
- maximum: 4.50.

Table 46. Weight adjustment factors for field test student nonresponse adjustment, by model predictor variables: 2011

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor (WT8)
Total	2,720	61.9	1.72
Institution type			
Public			
Less-than-2-year	10	13.0	3.70
2-year	1,030	48.8	2.26
4-year non-doctorate-granting	190	63.1	1.30
4-year doctorate-granting	430	72.6	1.17
Private nonprofit			
Less-than-4-year	40	79.8	1.07
4-year non-doctorate-granting	210	74.9	1.13
4-year doctorate-granting	180	75.6	1.15
Private for-profit			
Less-than-2-year	90	48.5	1.68
2-year	130	56.5	1.27
4-year	420	58.2	1.84
Region ¹			
New England	110	51.5	1.98
Mideast	440	53.3	1.67
Great Lakes	430	58.9	2.03
Plains	260	77.3	1.09
Southeast	690	64.0	1.60
Southwest	280	50.7	2.39
Rocky Mountains	70	92.8	1.05
Far West	440	61.1	1.67
Institution enrollment size			
6,273 or less	1,290	57.8	1.67
6,274 or more	1,430	63.6	1.77
Student type (based on data collection)			
Undergraduate	2,560	60.3	1.75
Graduate, master's, doctorate	140	71.6	1.38
First-professional	20	86.5	1.17
First-time beginner student (FTB)			
Yes	2,440	65.1	1.75
No	280	61.4	1.50
Preloaded Social Security number			
Yes	2,530	62.2	1.65
No	190	58.9	2.76
In Central Processing System (CPS)			
Yes	2,080	63.3	1.65
No	640	59.6	1.97

See notes at end of table.

Table 46. Weight adjustment factors for field test student nonresponse adjustment, by model predictor variables: 2011—Continued

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor (WT8)
Pell Grant amount received			
\$0	1,440	65.1	1.51
\$1 to \$3,699	580	49.1	2.28
\$3,700 or more	700	58.1	1.69
Stafford Loan amount received			
\$0	1,500	59.9	1.79
\$1 to \$5,499	450	60.0	2.03
\$5,500 or more	770	67.4	1.41
Count of telephone numbers			
One or none	810	60.2	1.98
Two	1,020	59.3	1.76
More than two	900	68.1	1.45
Count of e-mail addresses			
One or none	760	51.1	2.33
Two	1,550	71.8	1.32
More than two	410	48.6	2.10
Count of mailing addresses			
One or none	1,220	54.6	1.95
Two	1,000	61.2	1.64
More than two	500	86.2	1.34

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

NOTE: Detail may not sum to totals because of rounding. Categories were formed from continuous variables based on medians.

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

Student poststratification adjustment (WT9). To ensure population coverage, the student weights were further adjusted, with the use of GEM, to known population control totals (control totals) for key variables. Control totals were established for 12-month undergraduate and graduate student enrollment, by institution type (sector10). Control totals for financial aid receipt and amounts were not necessary because the goal of the field test analyses is not to produce financial aid-related estimates.

Control totals were established for the following:

- Undergraduate 12-month enrollment by institution type
 - public less than 4-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; and
- private for-profit 4-year.
- Graduate/first-professional 12-month enrollment by institution type
 - public 4-year and
 - private 4-year (nonprofit and for-profit combined).

Data for extreme (outlier) weights were reviewed and weights were trimmed and smoothed if necessary. Extreme weights were defined as being larger or smaller than the median weight plus or minus three times the interquartile range. The extreme weights were poststratified to the control totals, truncated, and smoothed in the same step by GEM, while the other weights were poststratified to the control totals.

Table 47 presents the variables associated with the control totals and the average weight adjustment factors by these variables. The weight adjustment factors from GEM are summarized below and met the following constraints:

- minimum: 0.04;
- median: 6.83; and
- maximum: 15.65.

After this last weight adjustment was performed, the final student weight was computed as the product of the nine weight components which include the initial weights and the weight adjustment factors.

Table 47. Weight adjustment factors for field test student poststratification, model predictor variables, by model predictor variables: 2011

Model predictor variables	Control total	Average poststratification weight adjustment factor (WT9)
Total	27,343,379	5.96
Undergraduate 12-month enrollment by institution type		
Public		
Less than 4-year	10,580,269	6.83
4-year non-doctorate-granting	2,543,182	9.28
4-year doctorate-granting	4,664,819	6.45
Private nonprofit		
Less-than-4-year	81,901	6.54
4-year non-doctorate-granting	1,533,616	5.61
4-year doctorate-granting	1,425,334	3.09
Private for-profit		
Less-than-2-year	417,861	4.07
2-year	671,694	5.64
4-year	1,702,330	5.39
Graduate 12-month enrollment by institution sector		
Public 4-year	1,812,675	1.10
Private 4-year (nonprofit and for-profit combined)	1,909,698	1.52

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

7.1.5 Weighting Adjustment Performance

Table 48 summarizes the institution weight distributions and the variance inflation due to unequal weight effects (UWE), by type of institution. The median institution weight ranges from 13 for public 4-year doctorate-granting institutions to 102 for private for-profit less-than-2-year institutions. The mean institution weight ranges from 13 for public 4-year doctorate-granting institutions to 250 for private for-profit less-than-2-year institutions. The UWE is 6.25 overall and ranges from 1.0 for public 4-year doctorate-granting institutions to 3.9 for students in private for-profit 2-year institutions.

Table 48. Institution weight distribution and unequal weighting effects, by institution type: 2011

Institution type	Minimum	First quartile	Median	Third quartile	Maximum	Mean	Unequal weighting effect ¹
Total	7.37	15.52	23.28	45.61	1167.55	49.21	6.25
Public							
Less-than-2-year	15.13	15.13	17.21	104.15	104.15	45.49	1.83
2-year	13.67	16.39	33.92	41.24	79.06	31.81	1.22
4-year non-doctorate-granting	13.86	17.27	20.46	22.70	60.19	24.04	1.26
4-year doctorate-granting	9.52	11.10	13.01	14.76	21.96	13.48	1.05
Private nonprofit							
Less-than-4-year	12.70	17.82	44.27	85.75	105.91	51.79	1.51
4-year non-doctorate-granting	16.03	25.78	38.64	75.72	192.83	51.41	1.57
4-year doctorate-granting	7.37	11.33	15.11	19.42	24.39	15.79	1.10
Private for-profit							
Less-than-2-year	43.35	60.51	102.31	439.21	751.48	249.86	2.36
2-year	26.48	61.07	96.31	122.10	1167.55	200.83	3.93
4-year	15.52	26.18	48.51	74.56	247.90	57.99	1.74

¹ Unequal weighting effect calculated as follows: $\text{sample size} \times (\text{sum of the weights}^2) / (\text{sum of the weights})^2$.

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

Table 49 summarizes the student weight distributions and the variance inflation due to UWE, by student type and type of institution. The median student weight ranges from 2,333 for students in private, nonprofit less-than-4-year institutions to 18,160 for graduate, masters, and doctoral-research/scholarship/other students. The mean student weight ranges from 2,340 for students in private nonprofit less-than-4-year institutions to 24,079 for graduate, masters, and doctoral-research/scholarship/other students. The UWE is 1.9 overall and ranges from 1.0 for students in private nonprofit less-than-4-year institutions to 2.8 for students in private nonprofit 4-year nondoctorate-granting institutions.

Table 49. Student weight distribution and unequal weighting effects, by student type and institution type: 2011

Student type and institution type	Minimum	First quartile	Median	Third quartile	Maximum	Mean	Unequal weighting effect ¹
Total	52.70	4,098.95	7,655.56	12,418.95	117,701.08	10,045.33	1.89
Student type							
Undergraduate	307.11	4,070.56	7,470.40	12,238.00	34,297.31	9,223.35	1.58
Master's, doctoral-research/ scholarship/other	52.70	6,315.40	18,160.01	35,077.09	117,701.08	24,079.37	2.00
Doctoral-professional practice	795.78	3,042.31	9,458.04	24,035.59	52,693.24	17,060.96	2.15
Institution type							
Public							
Less-than-2-year	1,519.16	4,379.67	5,383.70	5,867.14	34,297.31	7,514.69	2.10
2-year	1,441.90	4,570.88	7,602.33	13,510.38	34,297.31	10,179.85	1.57
4-year non-doctorate-granting	112.94	11,491.13	12,636.44	18,867.59	62,880.92	15,738.55	1.31
4-year doctorate-granting	477.63	10,008.02	12,204.53	16,085.69	75,576.57	14,207.08	1.41
Private nonprofit							
Less-than-4-year	1,603.11	2,215.84	2,332.64	2,459.02	3,062.17	2,340.03	1.03
4-year non-doctorate-granting	1,410.80	5,666.71	7,538.64	9,999.92	117,701.08	9,965.96	2.82
4-year doctorate-granting	52.70	3,795.59	9,867.68	18,580.86	117,701.08	14,485.97	2.15
Private for-profit							
Less-than-2-year	1,806.07	2,923.90	3,403.50	5,578.39	11,366.97	4,642.90	1.28
2-year	2,120.64	4,240.96	4,916.32	5,374.77	8,317.75	5,012.64	1.10
4-year	307.11	1,781.94	3,213.20	4,764.19	81,895.23	4,498.98	2.50

¹ Unequal weighting effect calculated as follows: sample size \times (sum of the weights²)/(sum of the weights)².

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

7.2 Nonresponse Bias Analysis

The bias in an estimated mean based on respondents, \bar{y}_R , is the difference between this mean and the target parameter, π (i.e., the mean that would be estimated if a complete census of the target population was conducted and everyone responded). This bias can be expressed as follows:

$$B(\bar{y}_R) = \bar{y}_R - \pi.$$

The estimated mean based on nonrespondents, \bar{y}_{NR} , can be computed if data for the particular variable are available for most of the nonrespondents. The true target parameter, π , can be estimated for these variables as follows:

$$\hat{\pi} = (1 - \eta)\bar{y}_R + \eta\bar{y}_{NR},$$

where η is the weighted unit (or item) nonresponse rate. For the variables that are from the frame, rather than from the sample, π can be estimated without sampling error. The bias can then be estimated as follows:

$$\hat{B}(\bar{y}_R) = \bar{y}_R - \hat{\pi}$$

or, equivalently,

$$\hat{B}(\bar{y}_R) = \eta(\bar{y}_R - \bar{y}_{NR}).$$

This formula shows that the estimate of the nonresponse bias is the difference between the mean for respondents and nonrespondents multiplied by the weighted nonresponse rate.

Nonresponse bias analysis was conducted for institutions and students. The nonresponse bias was estimated for variables known—that is, nonmissing—for most respondents and nonrespondents. While extensive data are available for all institutions from IPEDS, given the use of the field test data, only variables used in the institution nonresponse weight adjustments described in section 7.1 were used for bias analysis.

First, for the institution-level variables, the nonresponse bias was estimated and tested to determine if the bias is significant at the 5 percent level. Second, nonresponse adjustments were computed, and the variables listed were included in the nonresponse model. The nonresponse adjustments were designed to significantly reduce nonresponse bias for variables included in the model. Third, after the final weights were computed, any remaining bias was estimated for the same set of variables, and statistical tests were performed to check the remaining significant nonresponse bias.

As shown in table 50, the percent significant bias was reduced after weighting adjustments for the variables included in the bias analysis. For detailed results of the institution nonresponse bias analysis, see tables 52–59.

Table 50. Summary of institution nonresponse bias analysis, by weight adjustments: 2011

Weight adjustments	Mean relative bias	Median relative bias	Percent significant bias
Before weight adjustments	15.36	10.24	8.1
After weight adjustments	21.76	12.02	5.4

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

Of the 4,350 eligible students, the response rate was about 63 percent. The student nonresponse bias was estimated for variables known—that is, nonmissing—for most respondents and nonrespondents. Variables used in the student nonresponse weight adjustments were used for bias analysis, except for the paradata. The following variables were used to assess student-level nonresponse bias:

- institution type (sector10);
- region;
- institution total enrollment from IPEDS (categorical);
- student type (sampled);
- FTB status (sampled);
- CPS record indicator;
- Pell Grant status;
- Pell Grant amount (categorical);
- Stafford Loan status;
- Stafford Loan amount (categorical);

The same set of three steps described above for the institution nonresponse bias were conducted using the variables listed above.

As shown in table 51, the student weighting adjustments increased the percent significant bias. Measurable bias was reduced after the nonresponse weighting adjustments for the variables included in the bias analysis. However, the poststratification adjustment to IPEDS enrollment totals resulted in an increase in the measurable bias. The poststratification was necessary to match the enrollment counts with known population totals.

Table 51. Summary of student nonresponse bias analysis, by weight adjustments: 2011

Weighting adjustments	Mean relative bias	Median relative bias	Percent significant bias
Before weight adjustments	11.89	7.91	10.0
After weight adjustments	30.01	11.56	20.0

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

Table 52. Institution nonresponse bias analysis before and after weight adjustments for selected variables, overall: 2011

Variable	Before nonresponse adjustment						After nonresponse adjustment			
	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias	Overall mean, before adjustments	Overall mean, after adjustments	Estimated bias	Relative bias
Institution sector										
Public										
Less-than-2-year	#	#	3.43	3.23	0.09	2.60	3.34	1.81	1.53	45.73
2-year	40	30	18.67	16.23	1.07	6.07	17.60	14.79	2.81	15.97
4-year non-doctorate-granting	10	10	5.69	4.48	0.53	10.24	5.16	4.15	1.01	19.53
4-year doctorate-granting	20	20	4.34	4.79	-0.20	-4.36	4.53	4.12	0.42	9.21
Private nonprofit										
Less-than-4-year	#	#	4.31	1.06	1.42	49.34	2.88	2.75	0.13	4.57
4-year non-doctorate-granting	20	20	15.21	13.65	0.69	4.74	14.53	15.70	-1.18	-8.11
4-year doctorate-granting	20	20	4.99	13.82	-3.87	-43.66*	8.86	3.99	4.88	55.04*
Private for-profit										
Less-than-2-year	#	10	16.07	22.41	-2.78	-14.76	18.85	13.27	5.58	29.59
2-year	10	10	21.34	9.22	5.32	33.17	16.03	24.01	-7.98	-49.78
4-year	20	20	5.95	11.10	-2.26	-27.52	8.21	15.41	-7.19	-87.61
Carnegie classification code										
Associate's	50	50	26.78	23.53	1.43	5.62	25.35	25.79	-0.44	-1.73
Research and doctoral	20	20	4.59	4.45	0.06	1.37	4.53	4.56	-0.03	-0.72
Master's	40	20	10.47	7.93	1.12	11.94	9.36	10.48	-1.12	-12.02
Baccalaureate	20	10	11.76	6.60	2.26	23.84	9.50	12.74	-3.24	-34.10
Special focus and other	10	20	4.33	15.81	-5.03	-53.74*	9.37	4.14	5.23	55.80*
Non-degree-granting or unknown	20	20	42.06	41.68	0.16	0.39	41.89	42.29	-0.39	-0.94
Institution region ¹										
New England	10	10	16.39	10.30	2.67	19.48	13.72	14.34	-0.62	-4.55
Mideast	30	20	12.00	12.44	-0.19	-1.55	12.19	9.59	2.60	21.33
Great Lakes	20	30	12.60	12.75	-0.07	-0.53	12.66	9.96	2.70	21.34
Plains	10	10	3.62	4.11	-0.22	-5.62	3.84	3.59	0.24	6.32
Southeast	40	40	21.35	26.90	-2.43	-10.22	23.78	22.18	1.61	6.76
Southwest	10	20	8.08	19.98	-5.22	-39.24	13.30	6.85	6.45	48.51
Rocky Mountains	10	10	1.63	2.41	-0.34	-17.23	1.97	3.49	-1.52	-76.95
Far West	30	30	24.32	11.13	5.79	31.23	18.54	30.00	-11.46	-61.83

See notes at end of table.

Table 52. Institution nonresponse bias analysis before and after weight adjustments for selected variables, overall: 2011—Continued

Variable	Before nonresponse adjustment						After nonresponse adjustment				
	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias	Overall mean, before adjustments	Overall mean, after adjustments	Estimated bias	Relative bias	
Total undergraduate enrollment ²											
4,629 or less	80	70	81.74	75.32	2.82	3.57	78.92	79.61	-0.68	-0.87	
4,630 or more	70	70	18.26	24.68	-2.82	-13.37	21.08	20.39	0.68	3.24	
Total graduate enrollment ²											
0	80	80	75.18	69.22	2.61	3.60	72.56	71.36	1.21	1.66	
1–1,690	40	30	17.18	22.60	-2.38	-12.16	19.56	20.60	-1.05	-5.35	
1,691 or more	40	30	7.65	8.18	-0.24	-2.99	7.88	8.04	-0.16	-2.02	
Degree of urbanization											
City	80	80	43.21	56.68	-5.91	-12.02	49.12	45.25	3.86	7.86	
Suburb	30	40	16.03	25.70	-4.24	-20.92	20.27	16.43	3.84	18.95	
Town	20	20	9.13	9.89	-0.33	-3.53	9.46	8.12	1.34	14.16	
Rural	20	10	31.63	7.73	10.48	49.56*	21.15	30.19	-9.04	-42.77	
Historically Black College or University											
Yes	#	#	1.27	1.06	0.10	8.13	1.18	0.97	0.21	17.86	
No	150	150	98.73	98.94	-0.10	-0.10	98.82	99.03	-0.21	-0.21	
Hispanic-serving institution											
Yes	10	10	6.47	4.14	1.02	18.80	5.45	6.08	-0.63	-11.53	
No	140	140	93.53	95.86	-1.02	-1.08	94.55	93.92	0.63	0.66	

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Total undergraduate enrollment and total graduate/first-professional enrollment categories were defined by medians.

NOTE: 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) Field Test.

Table 53. Student nonresponse bias analysis before and after weight adjustments for selected variables, overall: 2011

Variable	Before nonresponse adjustment						After nonresponse adjustment			
	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias	Overall mean, before adjustments	Overall mean, after adjustments	Estimated bias	Relative bias
Institution sector										
Public										
Less-than-2-year	10	10	0.03	0.37	-0.12	-79.52	0.15	0.38	-0.23	-148.71
2-year	1,030	720	27.54	45.24	-6.46	-18.99*	34.00	38.31	-4.31	-12.69
4-year non-doctorate-granting	190	70	9.85	8.87	0.36	3.79	9.49	10.65	-1.16	-12.19
4-year doctorate-granting	430	140	28.64	17.72	3.98	16.16	24.66	22.34	2.31	9.38
Private nonprofit										
Less-than-4-year	40	20	0.39	0.17	0.08	25.88*	0.31	0.30	0.01	2.49
4-year non-doctorate-granting	210	60	8.59	4.77	1.39	19.36	7.20	7.54	-0.35	-4.86
4-year doctorate-granting	180	60	12.82	7.11	2.08	19.39	10.74	9.64	1.09	10.19
Private for-profit										
Less-than-2-year	90	70	1.19	2.19	-0.37	-23.54	1.56	1.53	0.03	1.80
2-year	130	150	2.21	2.84	-0.23	-9.41	2.44	2.46	-0.02	-0.63
4-year	420	320	8.74	10.73	-0.72	-7.65	9.47	6.84	2.62	27.69*
Institution region ¹										
New England	110	70	3.51	5.74	-0.81	-18.79	4.33	4.43	-0.10	-2.39
Mideast	440	290	12.61	16.95	-1.58	-11.16	14.19	16.21	-2.01	-14.18
Great Lakes	430	220	14.86	16.03	-0.43	-2.79	15.29	18.52	-3.23	-21.11
Plains	260	130	12.15	6.00	2.25	22.66	9.91	7.65	2.26	22.84
Southeast	690	370	25.18	23.77	0.52	2.09	24.67	23.04	1.63	6.61
Southwest	280	210	7.50	11.31	-1.39	-15.61	8.89	12.94	-4.05	-45.57
Rocky Mountains	70	30	5.48	0.74	1.73	46.13	3.75	3.34	0.42	11.06
Far West	440	310	18.69	19.46	-0.28	-1.48	18.97	13.89	5.09	26.81*
Institution total enrollment ²										
1,779 or less	640	470	12.69	16.92	-1.54	-10.84	14.23	12.89	1.34	9.41
1,780–6,273	660	420	13.77	14.53	-0.28	-1.97	14.05	15.56	-1.51	-10.74
6,274 –16,461	780	370	36.14	32.13	1.46	4.21	34.68	37.97	-3.29	-9.50
16,462 or more	650	370	37.40	36.42	0.36	0.96	37.04	33.58	3.46	9.35
Student type indicator										
Undergraduate	2,560	1,560	85.17	90.81	-2.06	-2.36*	87.23	86.39	0.84	0.97
Graduate	160	60	14.83	9.19	2.06	16.12*	12.77	13.61	-0.84	-6.60
First-time beginner indicator										
Yes	2,440	1,490	14.35	13.06	0.47	3.39	13.88	76.42	-62.53	-450.43*
No	280	130	85.65	86.94	-0.47	-0.55	86.12	23.58	62.53	72.61*

See notes at end of table.

Table 53. Student nonresponse bias analysis before and after weight adjustments for selected variables, overall: 2011—Continued

Variable	Before nonresponse adjustment						After nonresponse adjustment			
	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias	Overall mean, before adjustments	Overall mean, after adjustments	Estimated bias	Relative bias
CPS record available										
Yes	2,080	1,130	66.28	61.27	1.83	2.84	64.45	70.70	-6.25	-9.69*
No	640	490	33.72	38.73	-1.83	-5.14	35.55	29.30	6.25	17.57*
Pell Grant status										
Received	1,280	780	27.12	35.09	-2.91	-9.69	30.03	40.15	-10.13	-33.72*
Did not receive	1,440	840	72.88	64.91	2.91	4.16	69.97	59.85	10.13	14.47*
Total Pell Grant amount received ²										
\$2,600 or less	1,730	1,080	78.37	71.31	2.58	3.40	75.80	69.81	5.99	7.90
\$2,601–\$3,700	320	220	6.38	9.79	-1.24	-16.29	7.63	10.50	-2.88	-37.71
\$3,701–\$5,500	230	110	4.01	5.30	-0.47	-10.45	4.48	6.20	-1.71	-38.27
\$5,501 or more	450	220	11.23	13.61	-0.87	-7.16	12.10	13.49	-1.39	-11.53
Stafford Loan status										
Received	1,230	650	39.10	33.96	1.87	5.03	37.22	41.53	-4.31	-11.59
Did not receive	1,500	970	60.90	66.04	-1.87	-2.98	62.78	58.47	4.31	6.87
Total Stafford Loan amount received ²										
\$3,597.50 or less	1,770	1,170	65.91	71.61	-2.08	-3.06	67.99	67.96	0.03	0.04
\$3,597.51–\$5,500	180	130	4.46	4.95	-0.18	-3.89	4.64	5.90	-1.27	-27.34
\$5,501–\$7,500	440	190	13.89	11.02	1.05	8.16	12.84	14.52	-1.68	-13.07
\$7,501 or more	330	130	15.75	12.43	1.21	8.34	14.54	11.62	2.91	20.05

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 54. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity: 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	#	#	†	†	†	†
2-year	740	480	15.87	32.42	-5.72	-26.48
4-year non-doctorate-granting	180	70	14.54	15.30	-0.26	-1.79
4-year doctorate-granting	420	140	32.14	19.48	4.37	15.73
Private nonprofit						
Less-than-4-year	10	10	0.10	0.03	0.02	31.63
4-year non-doctorate-granting	180	50	12.59	7.23	1.85	17.23
4-year doctorate-granting	150	40	12.78	9.05	1.29	11.21
Private for-profit						
Less-than-2-year	#	#	†	†	†	†
2-year	#	#	†	†	†	†
4-year	340	240	11.99	16.48	-1.55	-11.44
Institution region¹						
New England	90	50	4.03	9.08	-1.74	-30.21
Mideast	360	220	14.59	25.63	-3.81	-20.72
Great Lakes	340	160	17.54	7.42	3.50	24.88*
Plains	230	100	12.05	9.64	0.83	7.43
Southeast	560	240	28.89	23.15	1.98	7.36
Southwest	160	90	9.15	4.85	1.48	19.37
Rocky Mountains	60	30	5.13	1.27	1.34	35.14
Far West	230	150	8.61	18.96	-3.57	-29.32
Institution total enrollment²						
2,655 or less	490	300	18.00	23.17	-1.78	-9.01
2,656–7,999	500	240	18.11	13.93	1.44	8.65
8,000–16,461	540	240	32.28	32.74	-0.16	-0.49
16,462 or more	500	250	31.61	30.16	0.50	1.61
Student type indicator						
Undergraduate student	1,870	980	76.66	84.23	-2.61	-3.30
Graduate student	160	60	23.34	15.77	2.61	12.61
First-time beginner indicator						
Yes	1,800	940	18.06	15.53	0.87	5.09
No	230	90	81.94	84.47	-0.87	-1.06
CPS record available						
Yes	1,840	930	86.45	85.01	0.50	0.58
No	190	100	13.55	14.99	-0.50	-3.54
Pell Grant status						
Received	1,010	570	34.06	40.35	-2.17	-6.00
Did not receive	1,020	470	65.94	59.65	2.17	3.41
Total Pell Grant amount received²						
\$2,400 or less	1,240	650	73.23	67.10	2.12	2.98
\$2,401–\$3,700	250	150	6.30	9.30	-1.03	-14.10
\$3,701–\$5,500	190	90	4.14	5.13	-0.34	-7.56
\$5,501 or more	340	150	16.32	18.48	-0.75	-4.37
Stafford Loan status						
Received	1,000	470	54.32	52.22	0.73	1.35
Did not receive	1,030	560	45.68	47.78	-0.73	-1.56

See notes at end of table.

Table 54. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity: 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$3,500 or less	1,250	710	53.12	55.85	-0.94	-1.75
\$3,501–\$5,500	120	70	5.90	7.41	-0.52	-8.12
\$5,501–\$7,334	400	150	12.33	8.13	1.45	13.32
\$7,335 or more	260	110	28.65	28.61	0.02	0.05

† Not applicable.

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 55. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity: 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	10	10	0.09	0.88	-0.31	-78.48
2-year	290	240	47.49	62.89	-6.09	-11.37
4-year non-doctorate-granting	#	#	1.84	0.00	0.73	65.45
4-year doctorate-granting	10	10	22.67	15.28	2.92	14.79
Private nonprofit						
Less-than-4-year	20	10	0.88	0.36	0.20	30.44
4-year non-doctorate-granting	30	10	1.75	1.38	0.15	9.15
4-year doctorate-granting	30	10	12.89	4.44	3.34	34.99
Private for-profit						
Less-than-2-year	90	70	3.22	5.22	-0.79	-19.64
2-year	130	150	5.99	6.75	-0.30	-4.79
4-year	70	80	3.18	2.80	0.15	4.99
Institution region ¹						
New England	20	20	2.64	1.15	0.59	28.73
Mideast	80	70	9.23	5.00	1.67	22.14
Great Lakes	90	60	10.28	27.89	-6.97	-40.40
Plains	30	30	12.33	0.99	4.49	57.21
Southeast	130	140	18.85	24.62	-2.28	-10.81
Southwest	120	120	4.68	20.20	-6.14	-56.74*
Rocky Mountains	10	0	6.08	0.01	2.40	65.29
Far West	210	160	35.92	20.14	6.24	21.03
Institution total enrollment ²						
830 or less	180	180	5.00	7.31	-0.91	-15.47
831–2,655	160	130	8.25	8.90	-0.26	-3.04
2,656–13,771	180	140	29.74	38.58	-3.50	-10.52
13,772 or more	180	140	57.01	45.20	4.67	8.92
Student type indicator						
Undergraduate student	700	590	99.72	99.88	-0.06	-0.06
Graduate student	#	#	0.28	0.12	0.06	29.98
First-time beginner indicator						
Yes	640	560	8.02	9.67	-0.65	-7.52
No	60	40	91.98	90.33	0.65	0.71
CPS record available						
Yes	240	200	31.80	28.56	1.28	4.19
No	460	390	68.20	71.44	-1.28	-1.84
Pell Grant status						
Received	270	210	15.25	27.85	-4.98	-24.64
Did not receive	430	380	84.75	72.15	4.98	6.25
Total Pell Grant amount received ²						
\$2,775 or less	540	500	92.84	77.97	5.88	6.76
\$2,776–\$3,392	10	0	0.06	0.79	-0.29	-83.93
\$3,393–\$5,500	40	20	4.57	14.35	-3.87	-45.81
\$5,501 or more	110	70	2.53	6.90	-1.73	-40.51
Stafford Loan status						
Received	230	180	13.07	8.81	1.69	14.81
Did not receive	470	410	86.93	91.19	-1.69	-1.90

See notes at end of table.

Table 55. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity: 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$3,945 or less	520	470	87.78	93.34	-2.20	-2.45
\$3,946–\$4,750	10	20	0.51	0.24	0.11	26.68
\$4,751–\$8,750	100	80	9.43	1.94	2.96	45.78
\$8,751 or more	70	30	2.29	4.48	-0.87	-27.50

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 56. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity - \$30 incentive group (control): 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	10	#	0.11	2.16	-0.68	-86.04
2-year	140	130	37.09	56.29	-6.33	-14.58
4-year non-doctorate-granting	#	#	†	†	†	†
4-year doctorate-granting	10	0	30.57	20.85	3.20	11.71
Private nonprofit						
Less-than-4-year	10	10	1.57	0.15	0.47	42.44
4-year non-doctorate-granting	10	10	1.88	0.39	0.49	35.32
4-year doctorate-granting	20	10	13.91	2.58	3.74	36.70
Private for-profit						
Less-than-2-year	40	40	1.07	12.02	-3.61	-77.14*
2-year	60	80	8.58	4.36	1.39	19.36
4-year	40	40	5.22	1.19	1.33	34.14
Institution region ¹						
New England	10	10	2.33	3.04	-0.23	-9.14
Mideast	40	40	7.75	3.09	1.54	24.72
Great Lakes	50	30	22.01	1.18	6.87	45.37
Plains	20	10	26.45	0.78	8.46	47.06
Southeast	60	60	15.08	35.05	-6.59	-30.40
Southwest	50	60	1.24	42.51	-13.61	-91.62*
Rocky Mountains	#	#	0.50	0.03	0.16	45.44
Far West	100	90	24.64	14.33	3.40	16.01
Institution total enrollment ²						
830 or less	80	100	4.73	10.62	-1.94	-29.10
831–2,763	80	70	12.26	7.28	1.64	15.49
2,764–15,866	90	70	34.26	56.45	-7.32	-17.60
15,867 or more	90	70	48.75	25.65	7.62	18.51
Student type indicator						
Undergraduate student	330	310	100.00	100.00	0.00	0.00
Graduate student	#	#	†	†	†	†
First-time beginner indicator						
Yes	300	300	8.40	16.36	-2.62	-23.79
No	30	10	91.60	83.64	2.62	2.95
CPS record available						
Yes	110	100	20.71	15.02	1.88	9.96
No	220	210	79.29	84.98	-1.88	-2.31
Pell Grant status						
Received	140	120	7.65	15.21	-2.50	-24.61
Did not receive	200	190	92.35	84.79	2.50	2.78
Total Pell Grant amount received ²						
\$2,774 or less	260	260	96.65	89.89	2.23	2.36
\$2,775	#	#	†	†	†	†
\$2,776–\$5,500	20	10	2.05	4.23	-0.72	-25.97
\$5,501 or more	50	40	1.30	5.88	-1.51	-53.74
Stafford Loan status						
Received	110	100	20.40	12.55	2.59	14.53
Did not receive	230	210	79.60	87.45	-2.59	-3.15

See notes at end of table.

Table 56. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity - \$30 incentive group (control): 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford amount received ²						
\$3,500 or less	240	250	80.93	92.88	-3.94	-4.64
\$3,501–\$4,750	10	10	0.13	0.62	-0.16	-56.27
\$4,751–\$8,750	50	40	15.59	3.91	3.85	32.80
\$8,751 or more	40	10	3.35	2.59	0.25	8.09

† Not applicable.

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 57. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity - \$45 incentive group (experimental): 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	10	10	0.07	0.23	-0.07	-52.52
2-year	150	120	55.79	66.19	-4.57	-7.57
4-year non-doctorate-granting	#	#	3.31	0.00	1.46	78.41
4-year doctorate-granting	10	#	16.36	12.49	1.70	11.60
Private nonprofit						
Less-than-4-year	10	#	0.32	0.46	-0.06	-16.53
4-year non-doctorate-granting	20	#	1.66	1.88	-0.10	-5.53
4-year doctorate-granting	20	10	12.07	5.37	2.94	32.25
Private for-profit						
Less-than-2-year	50	30	4.94	1.81	1.38	38.55
2-year	70	70	3.93	7.95	-1.77	-31.04
4-year	40	40	1.55	3.60	-0.90	-36.70
Institution region¹						
New England	10	#	2.88	0.20	1.18	69.03
Mideast	40	30	10.41	5.96	1.96	23.16
Great Lakes	40	40	0.92	41.27	-17.73	-95.06*
Plains	20	10	1.07	1.09	-0.01	-0.90
Southeast	70	70	21.86	19.40	1.08	5.19
Southwest	70	50	7.42	9.03	-0.71	-8.72
Rocky Mountains	10	#	10.53	0.00	4.63	78.41
Far West	110	70	44.91	23.05	9.61	27.21
Institution total enrollment²						
830 or less	100	80	5.21	5.66	-0.19	-3.60
831–2,627	80	60	6.28	9.79	-1.55	-19.75
2,628–12,095	100	70	29.52	21.57	3.49	13.42
12,096 or more	90	70	58.99	62.98	-1.75	-2.88
Student type indicator						
Undergraduate student	360	280	99.50	99.82	-0.14	-0.15
Graduate student	#	#	0.50	0.18	0.14	40.16
First-time beginner indicator						
Yes	340	260	7.72	6.32	0.61	8.64
No	30	20	92.28	93.68	-0.61	-0.66
CPS record available						
Yes	130	90	40.63	35.34	2.33	6.08
No	240	190	59.37	64.66	-2.33	-3.77
Pell Grant status						
Received	140	100	21.31	34.17	-5.65	-20.96
Did not receive	230	190	78.69	65.83	5.65	7.74
Total Pell Grant amount received²						
\$2,775 or less	290	230	89.80	72.01	7.82	9.54
\$2,776–\$3,900	10	#	0.19	12.42	-5.37	-96.60
\$3,901–\$5,500	10	10	6.49	8.17	-0.74	-10.17
\$5,501 or more	60	30	3.52	7.41	-1.71	-32.69
Stafford Loan status						
Received	120	80	7.23	6.94	0.13	1.81
Did not receive	240	200	92.77	93.06	-0.13	-0.14

See notes at end of table.

Table 57. Student nonresponse bias analysis before weight adjustments for selected variables, low propensity - \$45 incentive group (experimental): 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$4,315 or less	270	220	93.26	93.55	-0.13	-0.14
\$4,316–\$4,837	30	20	2.94	0.43	1.10	59.92*
\$4,838–\$8,925	30	20	2.36	0.59	0.78	49.10
\$8,926 or more	30	20	1.43	5.42	-1.75	-55.02

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 58. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity with low propensity - \$30 incentive group (control): 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	10	#	0.02	0.42	-0.14	-85.77
2-year	880	600	20.24	37.08	-5.76	-22.15*
4-year non-doctorate-granting	180	70	11.54	12.32	-0.27	-2.26
4-year doctorate-granting	430	140	31.81	19.75	4.13	14.90
Private nonprofit						
Less-than-4-year	20	10	0.40	0.05	0.12	42.08
4-year non-doctorate-granting	190	60	10.38	5.89	1.53	17.34
4-year doctorate-granting	160	50	13.01	7.79	1.79	15.92
Private for-profit						
Less-than-2-year	40	40	0.22	2.34	-0.73	-76.71*
2-year	60	80	1.77	0.85	0.31	21.60
4-year	380	280	10.60	13.50	-0.99	-8.57
Institution region¹						
New England	100	70	3.68	7.90	-1.45	-28.21
Mideast	400	250	13.18	21.24	-2.76	-17.30
Great Lakes	390	190	18.46	6.20	4.19	29.40*
Plains	240	110	15.02	7.91	2.43	19.32
Southeast	620	300	26.04	25.47	0.20	0.76
Southwest	210	160	7.52	12.19	-1.60	-17.52
Rocky Mountains	60	30	4.18	1.03	1.08	34.81
Far West	330	240	11.92	18.06	-2.10	-14.99
Institution total enrollment²						
1,917 or less	550	380	15.04	19.16	-1.41	-8.57
1,918–6,797	590	350	14.76	19.88	-1.75	-10.60
6,798–16,461	650	300	36.00	31.73	1.46	4.23
16,462 or more	570	310	34.20	29.24	1.70	5.23
Student type indicator						
Undergraduate student	2,200	1,280	81.47	87.30	-2.00	-2.39
Graduate student	160	60	18.53	12.70	2.00	12.07
First-time beginner indicator						
Yes	2,100	1,230	16.07	15.69	0.13	0.81
No	250	110	83.93	84.31	-0.13	-0.15
CPS record available						
Yes	1,950	1,040	72.90	71.37	0.53	0.73
No	410	300	27.10	28.63	-0.53	-1.90
Pell Grant status						
Received	1,150	680	28.62	35.45	-2.34	-7.56
Did not receive	1,210	660	71.38	64.55	2.34	3.39
Total Pell Grant amount received²						
\$2,432 or less	1,460	870	77.28	71.14	2.10	2.79
\$2,433–\$3,672	270	190	5.42	8.61	-1.09	-16.71
\$3,673–\$5,500	240	100	4.07	4.23	-0.05	-1.33
\$5,501 or more	390	180	13.22	16.02	-0.96	-6.75
Stafford Loan status						
Received	1,110	570	47.33	44.48	0.97	2.10
Did not receive	1,250	770	52.67	55.52	-0.97	-1.81

See notes at end of table.

Table 58. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity with low propensity - \$30 incentive group (control): 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$3,500 or less	1,500	950	58.85	63.07	-1.44	-2.39
\$3,501–\$5,500	150	110	4.81	6.67	-0.64	-11.67
\$5,501–\$7,500	430	170	17.13	15.12	0.69	4.18
\$7,501 or more	290	110	19.21	15.14	1.39	7.81

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

Table 59. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity with low propensity - \$45 incentive group (experimental): 2011

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Institution sector						
Public						
Less-than-2-year	10	10	0.02	0.08	-0.02	-57.68
2-year	890	590	25.67	43.43	-6.59	-20.44
4-year non-doctorate-granting	190	70	11.78	10.31	0.54	4.85
4-year doctorate-granting	420	140	28.26	17.20	4.10	16.99
Private nonprofit						
Less-than-4-year	30	10	0.15	0.17	-0.01	-3.95
4-year non-doctorate-granting	200	60	9.90	5.48	1.64	19.85
4-year doctorate-granting	170	50	12.60	7.85	1.76	16.28
Private for-profit						
Less-than-2-year	50	30	1.21	0.59	0.23	23.51
2-year	70	70	0.96	2.59	-0.60	-38.53
4-year	380	280	9.43	12.28	-1.06	-10.09
Institution region¹						
New England	100	60	3.75	6.19	-0.91	-19.46
Mideast	400	250	13.56	19.21	-2.10	-13.40
Great Lakes	380	200	13.46	18.45	-1.85	-12.10
Plains	250	110	9.35	6.85	0.93	11.04
Southeast	630	310	27.16	21.93	1.94	7.70
Southwest	230	140	8.73	6.21	0.93	11.97
Rocky Mountains	70	30	6.46	0.85	2.08	47.52
Far West	330	220	17.52	20.30	-1.03	-5.55
Institution total enrollment²						
1,917 or less	570	370	14.29	18.55	-1.58	-9.96
1,918–6,634	590	330	14.17	14.01	0.06	0.42
6,635–16,461	670	310	35.46	29.22	2.32	6.99
16,462 or more	570	310	36.07	38.21	-0.79	-2.15
Student type indicator						
Undergraduate student	2,230	1,260	82.27	89.31	-2.62	-3.08*
Graduate student	160	60	17.73	10.69	2.62	17.31*
First-time beginner indicator						
Yes	2,140	1,200	15.52	12.52	1.11	7.72
No	260	120	84.48	87.48	-1.11	-1.30
CPS record available						
Yes	1,970	1,030	75.20	68.81	2.37	3.26
No	420	290	24.80	31.19	-2.37	-8.73
Pell Grant status						
Received	1,150	660	30.93	38.34	-2.75	-8.17
Did not receive	1,250	650	69.07	61.66	2.75	4.15
Total Pell Grant amount received²						
\$2,500 or less	1,490	860	75.44	68.58	2.55	3.49
\$2,501–\$3,700	290	170	6.64	10.43	-1.41	-17.48
\$3,701–\$5,500	210	100	4.74	6.12	-0.51	-9.77
\$5,501 or more	400	180	13.18	14.87	-0.63	-4.55
Stafford Loan status						
Received	1,120	550	42.76	37.45	1.97	4.83
Did not receive	1,270	760	57.24	62.55	-1.97	-3.33

See notes at end of table.

Table 59. Student nonresponse bias analysis before weight adjustments for selected variables, high propensity with low propensity - \$45 incentive group (experimental): 2011—Continued

Variable	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Nonrespondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$3,598 or less	1,530	930	62.97	68.14	-1.92	-2.96
\$3,599–\$5,500	150	100	5.20	5.17	0.01	0.26
\$5,501–\$7,500	430	170	14.96	12.69	0.84	5.95
\$7,501 or more	290	120	16.87	14.00	1.07	6.74

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington.

² Enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: 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) Field Test.

7.3 Variance Estimation

For probability-based sample surveys, most estimates are nonlinear statistics. For example, a mean or proportion, which is expressed as $\Sigma ny / \Sigma n$, is nonlinear because the denominator is a survey estimate of the (unknown) population total. In this situation, the variances of the estimates cannot be expressed in closed form. There are multiple procedures for estimating variances of survey statistics, and the Taylor-series linearization procedure⁸ was used for field test analyses.

The Taylor-series variance estimation procedure is a well-known technique used to estimate the variances of nonlinear statistics. The procedure takes the first-order Taylor-series approximation of the nonlinear statistic and then substitutes the linear representation into the variance formula appropriate for the sample design. Woodruff (1971) presented the mathematical formulation of this procedure.

For stratified multistage surveys, the Taylor-series procedure requires analysis strata and analysis primary sampling units (PSUs), also called *replicates*, as defined from the sampling strata and PSUs used in the first stage of sampling. The first step was to identify the PSUs used at the first stage of sample selection. The PSUs are the 150 participating institutions. The next step was to sort the PSUs by the 10 institution strata, then by certainty versus noncertainty, and then by the selection order for the noncertainty institutions and by IPEDS ID for the certainty institutions. Two PSUs needed to be collapsed together because one PSU had no responding students. Analysis PSUs were then paired to form analysis strata.⁹ This process resulted in 72 analysis strata

⁸ The Taylor series procedure was implemented without adjusting for the finite population correction (fpc) at the institution stage of sampling, so the variance may be overestimated.

⁹ Some analysis strata contain three PSUs instead of two when there is an odd number of institutions in an institution stratum.

Chapter 8.

Recommendations for NPSAS:12 Full-scale Study

The NPSAS:12 field test was conducted to test and evaluate study methods and results prior to implementation of the full-scale study. The following recommendations are based on the field test experience.

8.1 Full-scale Sample

The full-scale student sampling rates will be adjusted upward to account for ineligibility and nonresponse. This adjustment will be based on the eligibility and response rates from NPSAS:04 and NPSAS:08 rather than from NPSAS:12 field test. NPSAS:04 was the last cycle in which first-time beginners (FTBs) were oversampled, that is, the last time that a Beginning Postsecondary Students Longitudinal Study (BPS) cohort was generated from NPSAS sample, and NPSAS:08 study eligibility and response rates serve as a useful reference as the most recently conducted study. The current field test eligibility and response rates will not be used because they may not be representative of what will occur in the full-scale study.

It is critical that the full-scale study achieve a sufficient yield of FTBs for the longitudinal follow-up studies, BPS:12/14 and BPS:12/17. As noted in chapters 2 and 4, institutions can have difficulty identifying FTBs, resulting in false identifications (e.g., false positives and false negatives). Therefore, the presampling matching process (described in chapter 2) will be continued for the full-scale study. However, students will also be sent to Central Processing System (CPS) at the same time they are sent to National Student Loan Data System (NSLDS) in order to reduce delays in sampling and get cases to data collection sooner. Since about 10 percent of those students 18 and under in the field test were found to be false positives, in the full-scale study all students, regardless of age, will be sent to CPS and NSLDS. The cases sent to National Student Clearinghouse (NSC) will need to be targeted as there is a cost involved; students over the age of 18 in public 2-year and for-profit institutions will be targeted, although further targeting might be necessary.

Additionally, the sampling rates for the FTB strata within each institution stratum will be increased in the full-scale study, while the sampling rates for the other undergraduate stratum within each institution stratum will be decreased to account for the false identifications. The modification to the sampling rates will be based on expected presampling matching results, as well as FTB false positive and false negative rates from the field test interview and NPSAS:04 interview, the most recent study that generated a BPS cohort.

There is additional oversampling and undersampling that is planned for the full-scale. First, fields within the graduate sample will be diversified to stabilize relative standard errors by slightly undersampling graduate students in education and business programs and slightly oversampling graduate students in science, technology, engineering, and mathematics (STEM) programs. Second, FTB students enrolled in sub-baccalaureate programs will be oversampled to increase the precision for education and early labor market outcomes for this group. Student strata will be added accordingly to account for different sampling rates for these groups of students.

8.2 Institution Data Collection

Based on feedback from institutions, institution contactors and other project staff, minor changes will be implemented for the full-scale study. References to “Title IV eligibility” will be revised in study materials and additional language will be added to the student list instructions that coordinators need to include students enrolled at any time during NPSAS year, not just the term that includes the end date. The Institution Registration Page (IRP) instruction will be revised so that it is clear which students NPSAS is focused on (those enrolled at any time during NPSAS year) and to include skip logic for schools with distinct academic terms or continuous enrollment. Lastly, the student list variable intended to capture whether the school has an ISIR (Institutional Student Information Record, an electronic record summarizing the results of the student’s Free Application for Federal Student Aid [FAFSA] processing) for each student will be removed because it was not useful.

The Student Records procedures, materials, and system were well-received by institution staff and successful in collecting the data with high participation rates. These will be carried through to the full-scale study. Changes planned include improving the upload error messages by rank ordering them and specifying whether data are missing or invalid, researching what can be done to address the requested reminders to save data (e.g., adding an auto-save feature, changing the timeout criteria, or alerting the user when a timeout is approaching), adding various notes and instructions to the template regarding which fields can or cannot have data pasted into them, expanding or minimizing column or row sizing, and cautioning the user against overwriting the validations and macros programmed into the template.

8.3 Student Interview Data Collection

Field test data collection experience influenced plans for the full-scale study. Based on feedback from interviewing staff, training time for telephone interviewers will be expanded to include additional hours for independent study and for providing additional practice cases. Field test interviewers’ strategies for gaining cooperation will also be incorporated into full-scale training sessions. In terms of tracing and locating sample members, while pleased with the results provided by our tracing vendors, there are plans to continue to examine our suite of tracing services and add any that may provide additional value.

Propensity experiments conducted during the field test revealed that sample members in particular sectors required more computer-assisted telephone interviewing (CATI) efforts than other groups and were more likely to participate via telephone than web. In order to increase participation among sample members in those challenging sectors, cases in sectors that have historically participated via CATI will immediately receive outbound calls during the first weeks of their data collection period, rather than allowing 3 weeks for web participation. This will allow additional CATI time while also allowing us to get an earlier start on tracing activities.

E-mail has proven to be an effective way to communicate with NPSAS sample members, who are busy and have numerous demands on their time, to encourage their participation, since some sample members do not respond well to repeated telephone contacts. For the full-scale study, frequent e-mail messages will be sent to sample members to remind them that they have been selected for the study and encourage their participation. Rather than offering varying incentive amounts to different groups of sample members, it is likely that an incentive amount of \$30 will be offered to all sample members throughout the course of data collection.

Generally, field test data indicated no substantial problems during data collection with NPSAS student interview. However, revisions to specific questions in the field test interview will be made for the full-scale interview based on continued detailed analysis of field test data, including examination of items with high missingness, as well as on feedback from a Technical Review Panel Meeting conducted in August of 2011 and from an additional round of cognitive interviews of approximately 25 FTBs across institution types. The revision process will also include an attempt to reduce the timing burden of the interview by carefully selecting items for removal and continuing refinement of interview questions for overall efficiency and comprehension by respondents. All methodological features of the instrument, including assisted coding systems and help text and conversion text, will continue to be used for the full-scale survey and as always, special attention will be paid to successfully training full-scale interviewers on the use of these instrument features.

8.4 Administrative Records Matching Recommendations

Administrative records matching for the full-scale study will be very similar to procedures conducted in the field test for CPS and NSLDS. A match with the CPS database for FAFSA data will occur for both the 2011–12 and 2012–13 academic years. Each student in the sample will be sent to CPS twice for the 2011–12 application data (once as students are selected for data collection purposes and one final time for deliverable data purposes). Each student will be sent to CPS one time for the 2012–13 data to be used in final data files. Students will likely be matched with the NSLDS database for federal loan and Pell Grant data at three different times during data collection. Two interim matches will be performed in order to have preliminary data with which to work, as well as a one last match for final data.

In addition to matching with CPS and NSLDS, the full-scale study will involve administrative records matches with these additional databases: National Student Clearinghouse (NSC) for enrollment and degree data, ACT (for test scores and related information), and The College Board (for SAT test scores and related information). The match with NSC will be performed once all students have been sampled and will only occur one time towards the end of data collection. The database matches with ACT and The College Board will occur in a similar timeframe and will also be performed only one time for all sampled students.

8.5 Postdata Collection Data File Editing and Preparation Recommendations

Full-scale student interview and student records data will be edited, processed, and prepared for delivery in a very similar manner to the procedures described for the field test in chapter 6. While there are no revisions to the full-scale plans based on the field test experience, procedures will be enhanced to allow data to be analyzed, released for both public and restricted use, and used in reports. Additional steps necessary to prepare and finalize full-scale data include;

- data will be subject to disclosure analysis and avoidance techniques;
- derived variables will be created based on data from all sources;
- weights will be created;
- key variables will be stochastically imputed; and
- nonresponse bias analysis will be conducted.

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