Characteristics of Recent Science and Engineering Graduates: 2003

Detailed Statistical Tables

John Tsapogas, Project Officer

Division of Science Resources Statistics
Directorate for Social, Behavioral, and Economic Sciences



National Science Foundation

Arden L. Bement, Jr. *Director*

Directorate for Social, Behavioral, and Economic Sciences

David W. Lightfoot Assistant Director

Division of Science Resources Statistics

Lynda T. Carlson Mary J. Frase

Division Director Deputy Director

Ronald S. Fecso *Chief Statistician*

Human Resources Statistics Program

Nancy L. Leach *Program Director*

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GENERAL NOTES

This report presents data from the National Survey of Recent College Graduates (NSRCG) on the characteristics of men and women who received a bachelor's or master's degree in a science, engineering, or health field from U.S. academic institutions during the 2000–2001 and 2001–2002 academic years. The data were collected in 2003 and 2004 and reflect the status of individuals as of October 2003. In addition to the demographic characteristics of recent college graduates with science, engineering, and health degrees, the NSRCG data may be used to understand the employment experiences of recent graduates, such as the extent to which recent graduates entered the labor force, whether they were able to find employment, and the attributes of that employment.

Results of the NSRCG survey are presented separately for bachelor's and master's degree recipients. Complementary tables for the two degree levels are numbered sequentially so that odd-numbered tables are for bachelor's degree recipients and even-numbered tables are for master's degree recipients. A complementary set of tables showing the standard errors of the estimates appear in appendix B.

This report contains four sections:

 Detailed tabulations from the survey with the tables grouped by topics, such as demographic characteristics and employment characteristics.

- The technical notes are in appendix A and contain information on survey methodology, coverage, concepts, definitions, and sampling errors.
- Standard error tables are included in appendix B.
- Data were collected using computer-assisted telephone interviewing (CATI), a web instrument, and mail questionnaires. Appendix C contains a copy of the 2003 mail questionnaire.

The Division of Science Resources Statistics also produces reports that present data on degree completions in science and engineering. The data presented in this report measure the number of individuals with recently acquired science, engineering, and health degrees and do not necessarily coincide with the data on degree completions whose source is the Integrated Postsecondary Education Data System (IPEDS). IPEDS is conducted by the U.S. Department of Education, National Center for Education Statistics. The IPEDS completions data file represents a count of degrees awarded, whereas the NSRCG represents graduates (persons). For additional information on IPEDS see "Comparison with IPEDS Data" in appendix A.

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TABLE 1. Primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	_			Not full-tin	ne student		- -
Major field	All recipients	Full-time student	Employed in S&E ^a occupation	Employed in S&E-related ^b occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed ^c
All fields	937,700	222,000	157,700	129,500	358,700	69,800	\$36,000
Sciences	682,200	185,100	89,700	25,200	327,400	54,700	32,000
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	61,400 3,300 56,400 1,700	21,300 S 16,500 3,700	13,900 S 11,600 S	44,400 6,900 32,900 4,600	9,800 S 7,600 S	29,000 29,000 29,000 30,000
Computer and information sciences	84,800	6,400	38,600	S	33,600	5,700	45,000
Mathematics and statistics	25,600	6,000	4,100	S	13,700	1,500	36,000
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	15,500 10,000 1,800 3,600 S	8,500 4,800 2,200 1,300 S	1,000 S S S S	8,800 3,300 2,200 1,800 1,500	1,900 S S S S	35,000 35,000 32,000 40,000 31,000
Psychology	153,000	44,600	S	S	82,700	15,200	28,000
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	51,000 6,300 20,900 13,700 10,100	12,900 4,000 3,100 S S	3,400 S S S S	144,400 28,000 38,700 49,400 28,400	20,600 3,600 5,900 6,300 4,800	30,000 37,000 30,000 29,000 30,000
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	19,100 600 2,700 1,100 5,500 700 S 4,600 3,000	67,500 1,800 6,000 12,500 21,600 3,400 \$ 14,500 6,600	S S S S S S S S S S S S S S S S S S S	17,700 700 1,400 1,900 5,500 2,100 S 4,200 1,900	7,300 S S S 2,800 S S 1,500 S	50,000 48,000 53,000 44,000 53,000 47,000 \$ 50,000 43,000
Health	143,300	17,700	S	103,700	13,600	S	43,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 2. Primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			Primary educ				
	_			_			
Major field	All recipients	Full-time student	Employed in S&E ^a occupation	Employed in S&E-related ^b occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed ^c
All fields	246,700	40,900	75,800	58,900	51,600	19,400	\$52,000
Sciences	117,000	27,900	42,000	2,000	36,200	9,000	45,000
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	16,800 2,900 12,100 1,800	4,500 S 3,600 S	7,300 1,700 4,800 S	1,300 S 1,200 S	2,800 S 1,900 S	S S S	40,000 39,000 40,000 41,000
Computer and information sciences	27,200	4,800	13,600	S	4,900	4,000	60,000
Mathematics and statistics	5,900	1,800	2,700	S	1,000	S	54,000
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	9,600 3,800 2,600 2,700 S	3,100 1,000 S 1,600 S	4,800 2,300 1,700 700 S	\$ \$ \$ \$ \$	1,300 S S S S	S S S S	49,000 53,000 44,000 58,000 S
Psychology	32,000	6,800	9,200	S	14,400	S	38,000
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	25,500 3,900 7,500 5,500 8,700	6,800 1,300 S 2,300 2,200	4,400 900 1,500 S S	\$ \$ \$ \$ \$	11,700 1,300 4,300 2,200 3,900	2,400 S S S S	42,000 49,000 46,000 34,000 40,000
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	47,000 1,100 1,900 6,000 16,100 3,700 1,900 6,000 10,300	10,800 S 700 900 4,400 S S 1,200 2,300	29,900 800 900 4,700 9,900 2,300 \$ 4,000 6,200	S S S S S S S S	3,600 S S S S S S S S	2,600 S S S S S S S	65,000 60,000 63,000 54,000 70,000 71,000 \$ 59,000 65,000
Health	82,700	S	S	56,800	11,800	S	53,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 3. Primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

			Primary educ	cation and emplo	yment status		
	_			Not full-tin			- -
Major field and sex	All recipients	Full-time student	Employed in S&E ^a occupation	Employed in S&E-related ^b occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed ^c
All fields	937,700	222,000	157,700	129,500	358,700	69,800	\$36,000
Sciences	682,200	185,100	89,700	25,200	327,400	54,700	32,000
Male	298,600	79,000	55,400	6,600	137,600	20,100	35,000
Female	383,600	106,100	34,300	18,600	189,900	34,700	30,000
Biological, agricultural, and environmental life sciences	150,700	61,400	21,300	13,900	44,400	9,800	29,000
Male	61,600	27,500	8,900	4,000	18,000	3,200	32,000
Female	89,200	34,000	12,400	9,800	26,400	6,600	29,000
Computer and information sciences	84,800	6,400	38,600	S	33,600	5,700	45,000
Male	60,100	3,900	29,300	S	22,100	4,300	46,000
Female	24,700	S	9,300	S	11,500	S	44,000
Mathematics and statistics	25,600	6,000	4,100	S	13,700	1,500	36,000
Male	13,800	3,900	2,000	S	7,200	S	38,000
Female	11,800	2,100	2,200	S	6,500	S	35,000
Physical and related sciences	35,700	15,500	8,500	1,000	8,800	1,900	35,000
Male	18,900	8,400	4,800	S	4,600	900	36,000
Female	16,800	7,100	3,700	S	4,200	1,000	34,000
Psychology	153,000	44,600	S	S	82,700	15,200	28,000
Male	38,800	12,800	S	S	20,400	S	30,000
Female	114,200	31,800	S	S	62,200	12,700	28,000
Social sciences	232,300	51,000	12,900	3,400	144,400	20,600	30,000
Male	105,300	22,500	8,100	S	65,200	8,600	35,000
Female	126,900	28,600	4,800	2,500	79,200	12,000	29,000
Engineering	112,300	19,100	67,500	S	17,700	7,300	50,000
Male	88,300	15,000	54,200	S	13,700	5,100	50,000
Female	24,000	4,100	13,300	S	4,100	2,200	48,000
Health	143,300	17,700	S	103,700	13,600	S	43,000
Male	20,500	4,300	S	13,100	2,500	S	41,000
Female	122,800	13,500	S	90,500	11,100	S	43,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 4. Primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

	Primary education and employment status								
	_		Not full-time student				_		
Major field and sex	All recipients	Full-time student	Employed in S&E ^a occupation	Employed in S&E-related ^b occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed ^c		
All fields	246,700	40,900	75,800	58,900	51,600	19,400	\$52,000		
Sciences	117,000	27,900	42,000	2,000	36,200	9,000	45,000		
Male	54,200	13,500	23,000	S	14,200	3,100	49,000		
Female	62,800	14,400	18,900	1,600	22,000	5,900	40,000		
Biological, agricultural, and environmental life sciences	16,800	4,500	7,300	1,300	2,800	S	40,000		
Male	7,400	2,200	3,800	S	1,200	S	41,000		
Female	9,400	2,400	3,600	1,200	1,600	S	38,000		
Computer and information sciences Male Female	27,200	4,800	13,600	S	4,900	4,000	60,000		
	17,000	S	9,100	S	3,400	S	66,000		
	10,200	S	4,400	S	1,500	S	56,000		
Mathematics and statistics	5,900	1,800	2,700	S	1,000	S	54,000		
Male	3,600	1,300	1,700	S	S	S	56,000		
Female	2,300	500	1,000	S	500	S	51,000		
Physical and related sciences	9,600	3,100	4,800	S	1,300	S	49,000		
Male	6,200	2,400	3,000	S	S	S	52,000		
Female	3,400	700	1,800	S	600	S	45,000		
Psychology	32,000	6,800	9,200	S	14,400	S	38,000		
Male	8,400	2,300	2,700	S	3,200	S	36,000		
Female	23,500	4,500	6,500	S	11,300	S	38,000		
Social sciences	25,500	6,800	4,400	S	11,700	2,400	42,000		
Male	11,600	2,700	2,700	S	5,200	S	43,000		
Female	14,000	4,100	1,600	S	6,500	1,600	41,000		
Engineering	47,000	10,800	29,900	S	3,600	2,600	65,000		
Male	37,800	8,800	24,700	S	2,800	1,600	65,000		
Female	9,200	2,000	5,200	S	900	1,000	60,000		
Health	82,700	S	S	56,800	11,800	S	53,000		
Male	18,400	S	S	11,300	S	S	55,000		
Female	64,300	S	S	45,500	7,300	S	50,000		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 5. Primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

Primary education and employment status									
	-	Full-time student	-	_					
Major field and race/ethnicity	All recipients		Employed in S&E ^a occupation	Employed in S&E-related ^b occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed ^c		
All science and engineering fields	937,700	222,000	157,700	129,500	358,700	69,800	\$36,000		
Sciences	682,200	185,100	89,700	25,200	327,400	54,700	32,000		
Asian	92,400	25,100	21,700	25,200 S	33,500	8,500	37,000		
Underrepresented minority	111,400	25,000	10,200	4,000	61,800	10,400	31,000		
White, non-Hispanic	457,600	129,900	55,600	16,500	221,600	34,000	31,000		
Other	20,800	5,200	S	S	10,500	S	34,000		
Biological, agricultural, and environmental life sciences	150,700	61,400	21,300	13,900	44,400	9,800	29,000		
Asian	23,500	12,700	S	S	S	S	S		
Underrepresented minority	19,400	6,300	2,700	2,200	6,100	2,100	30,000		
White, non-Hispanic	102,400	40,100	14,500	9,100	32,900	5,800	29,000		
Other	5,400	S	S	S	S	S	S		
Computer and information sciences	84,800	6,400	38,600	S	33,600	5,700	45,000		
Asian	27,500	S	13,700	S	9,800	S	47,000		
Underrepresented minority	11,700	S	4,000	S	5,000	S	38,000		
White, non-Hispanic	43,000	3,300	20,000	S	17,000	S	45,000		
Other	S	S	S	S	S	S	S		
Mathematics and statistics	25,600	6,000	4,100	S	13,700	1,500	36,000		
Asian	4,400	S	S	S	2,200	S	40,000		
Underrepresented minority	2,400	600	S	S	1,400	S	36,000		
White, non-Hispanic	17,800	4,500	2,700	S	9,700	S	35,000		
Other	S	S	S	S	S	S	S		
Physical and related sciences	35,700	15,500	8,500	1,000	8,800	1,900	35,000		
Asian	4,200	2,100	S	S	S	S	S		
Underrepresented minority	3,900	1,500	1,000	S	900	S	33,000		
White, non-Hispanic	26,500	11,200	6,700	S	6,800	1,400	35,000		
Other	1,100	S	S	S	S	S	S		
Psychology	153,000	44,600	S	S	82,700	15,200	28,000		
Asian	S	S	S	S	S	S	S		
Underrepresented minority	31,000	7,000	S	S	20,100	S	29,000		
White, non-Hispanic Other	110,800 S	36,200 S	S S	S S	55,300 S	12,000 S	29,000 S		
Social sciences	232,300	51,000	12,900	3,400	144,400	20,600	30,000		
Asian	25,000	6,800	S	S	11,900	S	36,000		
Underrepresented minority	43,000	8,400	1,200	S	28,300	4,200	30,000		
White, non-Hispanic Other	157,100 7,200	34,600 S	9,000 S	S S	99,800 4,400	11,800 S	30,000 30,000		
Engineering	112,300	19,100	67,500	S	17,700	7,300	50,000		
Asian	23,300	5,400	12,000	S	3,400	7,300 S	52,000		
Underrepresented minority	13,500	2,000	8,000	S	2,600	900	47,000		
White, non-Hispanic	71,400	11,100	45,300	S	10,800	4,000	49,000		
Other	4,100	S	2,200	S	S	S	48,000		

TABLE 5. Primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

			Primary educ	cation and emplo	yment status		
	_			Not full-tim	e student		_
			Employed in	Employed in	Employed		Median salary
	All	Full-time	S&E ^a	S&E-related ^b	in non-S&E	Not	for full-time
Major field and race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed ^c
Health	143,300	17,700	S	103,700	13,600	S	43,000
Asian	S	S	S	S	S	S	S
Underrepresented minority	23,200	S	S	13,800	S	S	42,000
White, non-Hispanic	108,800	11,100	S	81,000	10,800	S	43,000
Other	S	S	S	S	S	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Underrepresented minority race/ethnicity category includes American Indian or Alaska Native, black, and Hispanic. "Other" race/ethnicity includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 6. Primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

	Primary education and employment status									
	-			_						
			Employed in	Employed in	Employed		Median salary			
jor field and race/ethnicity	All recipients	Full-time student	S&E ^a occupation	S&E-related ^b occupation	in non-S&E occupation	Not employed	for full-time			
All science and engineering fields	246,700	40,900	75,800	58,900	51,600	19,400	employed ^c \$52,000			
Sciences	117,000	27,900	42,000	2,000	36,200	9,000	45,000			
Asian	37,100	10,600	16,500	S	5,300	4,500	55,000			
Underrepresented minority	12,900	3,100	3,200	S 1.700	5,600	900	41,000			
White, non-Hispanic	64,200	13,100	21,400	1,700	24,700	3,300	41,000			
Other	2,800	S	S	S	S	S	43,000			
Biological, agricultural, and environmental life sciences	16,800	4,500	7,300	1,300	2,800	S	40,000			
Asian	3,600	S	S	S	S	S	S			
Underrepresented minority	1,300	S	S	S	500	S	40,000			
White, non-Hispanic	11,300	2,500	5,200	1,100	2,100	S	41,000			
Other	S	S	S	S	S	S	S			
Computer and information sciences	27,200	4,800	13,600	S	4,900	4,000	60,000			
Asian	20,600	S	11,200	S	S	3,200	59,000			
Underrepresented minority	1,500	S	S	S	S	S	53,000			
White, non-Hispanic	4,800	S	1,500	S	2,300	S	68,000			
Other	S	S	S	S	S	S	S			
Mathematics and statistics	5,900	1,800	2,700	S	1,000	S	54,000			
Asian	2,900	S	S	S	S	S	55,000			
Underrepresented minority	400	S	S	S	S	S	50,000			
White, non-Hispanic	2,500	700	1,300	S	S	S	50,000			
Other	S	S	S	S	S	S	S			
Physical and related sciences	9,600	3,100	4,800	S	1,300	S	49,000			
Asian	2,900	1,200	S	S	S	S	51,000			
Underrepresented minority	900	300	500	S	S	S	48,000			
White, non-Hispanic	5,400	1,500	2,800	S	900	S	49,000			
Other	S	S	S	S	S	S	S			
Psychology	32,000	6,800	9,200	S	14,400	S	38,000			
Asian	S	S	S	S	S	S	S			
Underrepresented minority	5,100	1,300	1,100	S	2,500	S	38,000			
White, non-Hispanic	23,700	3,900	7,600	S	11,100	S	36,000			
Other	S	S	S	S	S	S	S			
Social sciences	25,500	6,800	4,400	S	11,700	2,400	42,000			
Asian	4,300	S	S	S	S	S S	S			
Underrepresented minority	3,700	1,000	S	S	2,000	S	40,000			
White, non-Hispanic	16,500	3,800	3,100	S	7,900	1,400	42,000			
Other	S	S	S	S	S	S	S			
Engineering	47,000	10,800	29,900	S	3,600	2,600	65,000			
Asian	23,900	7,500	13,600	S	3,000 S	2,000 S	64,000			
Underrepresented minority	2,900	600	1,900	S	S	S	64,000			
White, non-Hispanic	18,900	2,200	13,700	S	2,200	S	65,000			
Other	1,300	S	S	S	S	S	S			

TABLE 6. Primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

			Primary edu	cation and empl	oyment status		
	-			Not full-tim	ne student		_
			Employed in	Employed in	Employed		Median salary
	All	Full-time	S&E ^a	S&E-related ^b	in non-S&E	Not	for full-time
Major field and race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed ^c
Health	82,700	S	S	56,800	11,800	S	53,000
Asian	S	S	S	S	S	S	S
Underrepresented minority	8,200	S	S	S	S	S	43,000
White, non-Hispanic	68,100	S	S	49,900	S	S	52,000
Other	S	S	S	S	S	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Underrepresented minority race/ethnicity category includes American Indian or Alaska Native, black, and Hispanic. "Other" race/ethnicity includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

^a S&E occupations include postsecondary educators. For details, see technical notes.

^b S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^c Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

TABLE 7. Sex and race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

						Race/e	thnicity		
					Under	represented r	minority		
					American	1		='	
					Indian/				
	All	S	ex		Alaska	Black, non-		White, non-	
Major field	recipients	Male	Female	Asian	Native	Hispanic	Hispanic	Hispanic	Other ^a
All fields	937,700	407,400	530,300	121,000	5,900	72,200	70,000	637,800	30,800
Sciences	682,200	298,600	383,600	92,400	3,300	52,600	55,500	457,600	20,800
Biological, agricultural, and environmental life sciences	150,700	61,600	89,200	23,500	S	8,100	10,100	102,400	5,400
Agricultural/food sciences	13,500	5,800	7,700	S	S	S	S	12,100	S
Biological sciences	125,000	49,500	75,500	22,300	S	7,700	9,200	80,100	S
Environmental life sciences	12,200	6,200	6,000	S	S	S	S	10,200	S
Computer and information sciences	84,800	60,100	24,700	27,500	S	6,000	5,400	43,000	S
Mathematics and statistics	25,600	13,800	11,800	4,400	S	1,200	1,200	17,800	S
Physical and related sciences	35,700	18,900	16,800	4,200	S	1,800	1,900	26,500	1,100
Chemistry, except biochemistry	19,800	8,700	11,100	3,300	S	1,300	1,100	13,400	S
Earth/atmospheric/ocean sciences	6,600	4,000	2,600	S	S	S	S	6,100	S
Physics/astronomy	7,000	5,200	1,800	S	S	300	300	5,400	S
Other physical sciences	2,300	S	1,300	S	S	S	S	1,600	S
Psychology	153,000	38,800	114,200	S	S	15,600	14,800	110,800	S
Social and related sciences	232,300	105,300	126,900	25,000	S	19,800	22,100	157,100	7,200
Economics	42,100	27,600	14,400	11,000	S	2,700	2,500	24,600	S
Political and related sciences	69,100	32,900	36,100	S	S	6,500	7,100	49,200	S
Sociology/anthropology	74,000	23,500	50,500	S	S	7,100	7,900	51,300	S
Other social sciences	47,100	21,200	25,900	S	S	3,500	4,600	31,900	S
Engineering	112,300	88,300	24,000	23,300	S	5,100	8,200	71,400	4,100
Aerospace/aeronautical/astronautical engineering	3,100	2,600	600	S	S	S	200	2,300	S
Chemical engineering	10,600	6,900	3,700	2,400	S	500	700	6,700	S
Civil/architectural engineering	16,300	12,200	4,100	2,200	S	600	1,200	11,400	S
Electrical/computer engineering	35,800	30,100	5,700	11,500	S	2,000	2,800	17,700	S
Industrial engineering	6,600	4,200	2,300	S	S	400	900	4,200	S
Materials/metallurgical engineering	2,300	1,600	S	S	S	S	S	1,800	S
Mechanical engineering	24,800	21,700	3,100	3,600	S	900	1,800	17,600	S
Other engineering	12,900	9,100	3,700	S	S	S	500	9,800	S
Health	143,300	20,500	122,800	S	S	14,500	6,300	108,800	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 8. Sex and race/ethnicity of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

•				Race/ethnicity				
		_		' <u>'</u>	Under-			
Maior Gold	All		Sex Famala	Anion	represented	White, non-	ou h	
Major field	recipients	Male	Female	Asian	minority ^a	Hispanic	Other ^b	
All fields	246,700	110,300	136,300	65,100	24,000	151,200	6,400	
Sciences	117,000	54,200	62,800	37,100	12,900	64,200	2,800	
Biological, agricultural, and environmental life sciences	16,800	7,400	9,400	3,600	1,300	11,300	S	
Agricultural/food sciences	2,900	1,700	1,200	S	S	2,200	S	
Biological sciences	12,100	4,600	7,500	2,800	900	7,900	S	
Environmental life sciences	1,800	S	800	S	S	1,200	S	
Computer and information sciences	27,200	17,000	10,200	20,600	1,500	4,800	S	
Mathematics and statistics	5,900	3,600	2,300	2,900	400	2,500	S	
Physical and related sciences	9,600	6,200	3,400	2,900	900	5,400	S	
Chemistry, except biochemistry	3,800	2,600	1,200	S	500	1,500	S	
Earth/atmospheric/ocean sciences	2,600	1,400	1,200	S	S	1,900	S	
Physics/astronomy	2,700	2,000	700	1,000	S	1,500	S	
Other physical sciences	S	S	S	S	S	S	S	
Psychology	32,000	8,400	23,500	S	5,100	23,700	S	
Social and related sciences	25,500	11,600	14,000	4,300	3,700	16,500	S	
Economics	3,900	2,200	1,700	1,300	600	1,800	S	
Political and related sciences	7,500	4,000	3,400	S	900	4,900	S	
Sociology/anthropology	5,500	2,100	3,400	S	1,100	3,600	S	
Other social sciences	8,700	3,300	5,400	S	1,100	6,200	S	
Engineering	47,000	37,800	9,200	23,900	2,900	18,900	1,300	
Aerospace/aeronautical/astronautical engineering	1,100	900	200	S	S	700	S	
Chemical engineering	1,900	1,400	500	1,200	S	600	S	
Civil/architectural engineering	6,000	4,800	1,200	2,200	400	3,000	S	
Electrical/computer engineering	16,100	12,900	3,200	10,800	500	4,500	S	
Industrial engineering	3,700	3,000	700	1,800	S	1,600	S	
Materials/metallurgical engineering	1,900	1,700	S	S	S	S	S	
Mechanical engineering	6,000	5,200	800	2,700	500	2,600	S	
Other engineering	10,300	7,900	2,400	3,500	800	5,600	S	
Health	82,700	18,400	64,300	S	8,200	68,100	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Includes American Indian or Alaska Native, black and Hispanic.

^b Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 9. Race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

					Underrepresented		White,		
	All	As	ian	mino	ority ^a	non-H	ispanic	Oth	ner ^b
Major field	recipients	Male	Female	Male	Female	Male	Female	Male	Female
All fields	937,700	63,400	57,600	54,200	94,000	275,900	361,900	13,900	16,900
Sciences	682,200	45,000	47,400	41,700	69,700	203,100	254,500	8,800	12,000
Biological, agricultural, and environmental life sciences	150,700	9,700	13,800	7,200	12,200	42,600	59,800	S	S
Agricultural/food sciences	13,500	S	S	S	S	5,000	7,100	S	S
Biological sciences	125,000	S	13,300	6,700	11,400	32,100	48,000	S	S
Environmental life sciences	12,200	S	S	S	S	5,500	4,800	S	S
Computer and information sciences	84,800	17,500	10,000	7,600	4,100	33,800	9,100	S	S
Mathematics and statistics	25,600	2,500	1,900	1,300	1,200	9,400	8,400	S	S
Physical and related sciences	35,700	2,300	1,900	1,600	2,300	14,600	11,900	S	S
Chemistry, except biochemistry	19,800	S	S	900	1,500	5,900	7,500	S	S
Earth/atmospheric/ocean sciences	6,600	S	S	S	S	3,800	2,300	S	S
Physics/astronomy	7,000	S	S	400	200	4,000	1,400	S	S
Other physical sciences	2,300	S	S	S	S	S	S	S	S
Psychology	153,000	S	S	7,900	23,100	28,600	82,200	S	S
Social and related sciences	232,300	11,800	13,200	16,200	26,800	74,200	82,900	3,200	4,000
Economics	42,100	7,000	S	3,600	1,700	16,400	8,300	S	S
Political and related sciences	69,100	S	S	4,700	9,100	25,600	23,700	S	S
Sociology/anthropology	74,000	S	S	4,800	10,600	17,400	33,900	S	S
Other social sciences	47,100	S	S	3,100	5,500	14,900	17,100	S	S
Engineering	112,300	18,000	5,300	9,500	4,000	57,900	13,500	2,900	1,200
Aerospace/aeronautical/astronautical engineering	3,100	S	S	200	S	1,800	500	S	S
Chemical engineering	10,600	S	S	600	600	4,700	2,000	S	S
Civil/architectural engineering	16,300	S	S	1,100	700	8,900	2,500	S	S
Electrical/computer engineering	35,800	8,900	S	4,100	900	16,000	1,700	S	S
Industrial engineering	6,600	S	S	700	600	2,900	1,300	S	S
Materials/metallurgical engineering	2,300	S	S	S	S	1,100	S	S	S
Mechanical engineering	24,800	3,300	S	2,200	400	15,400	2,100	S	S
Other engineering	12,900	S	S	S	600	7,000	2,800	S	S
Health	143,300	S	S	S	20,200	14,900	93,900	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Includes American Indian or Alaska Native, black and Hispanic.

^b Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 10. Race/ethnicity of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

				Underrepresented		White,			
	All	As	ian	mino	ority ^a	non-H	ispanic	Oth	ner ^b
Major field	recipients	Male	Female	Male	Female	Male	Female	Male	Female
All fields	246,700	40,300	24,800	10,100	13,900	55,700	99,900	2,100	S
Sciences	117,000	20,600	16,400	5,100	7,800	26,800	39,000	1,200	S
Biological, agricultural, and environmental life sciences	16,800	S	S	500	800	5,300	6,100	S	S
Agricultural/food sciences	2,900	S	S	S	S	1,400	S	S	S
Biological sciences	12,100	S	S	S	400	3,100	4,900	S	S
Environmental life sciences	1,800	S	S	S	S	S	S	S	S
Computer and information sciences	27,200	12,400	8,200	1,000	S	3,300	1,800	S	S
Mathematics and statistics	5,900	2,000	S	200	200	1,300	1,200	S	S
Physical and related sciences	9,600	2,100	S	500	300	3,200	2,500	S	S
Chemistry, except biochemistry	3,800	S	S	S	S	S	S	S	S
Earth/atmospheric/ocean sciences	2,600	S	S	S	S	1,000	1,100	S	S
Physics/astronomy	2,700	S	S	S	S	1,100	400	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S
Psychology	32,000	S	S	S	3,800	6,200	17,700	S	S
Social and related sciences	25,500	1,900	2,500	1,500	2,200	7,600	9,500	S	S
Economics	3,900	S	S	S	S	1,100	700	S	S
Political and related sciences	7,500	S	S	S	S	2,600	2,700	S	S
Sociology/anthropology	5,500	S	S	S	800	1,400	2,300	S	S
Other social sciences	8,700	S	S	S	800	2,500	3,800	S	S
Engineering	47,000	19,300	4,600	2,200	800	15,400	4,300	S	S
Aerospace/aeronautical/astronautical engineering	1,100	S	S	S	S	600	S	S	S
Chemical engineering	1,900	S	S	S	S	S	S	S	S
Civil/architectural engineering	6,000	1,800	S	S	S	2,400	900	S	S
Electrical/computer engineering	16,100	8,500	2,300	S	S	3,800	S	S	S
Industrial engineering	3,700	S	S	S	S	1,300	S	S	S
Materials/metallurgical engineering	1,900	S	S	S	S	S	S	S	S
Mechanical engineering	6,000	2,400	S	S	S	2,200	500	S	S
Other engineering	10,300	2,600	S	S	S	4,500	1,400	S	S
Health	82,700	S	S	S	5,400	13,400	56,600	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Includes American Indian or Alaska Native, black and Hispanic.

^b Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 11. Age of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All	Less than 25	25-29	30-34	35 years
Major field	recipients	years	years	years	or more
All fields	937,700	467,700	307,500	70,400	92,100
Sciences	682,200	368,500	222,800	43,800	47,000
Biological, agricultural, and environmental life sciences	150,700	84,900	53,000	8,000	4,800
Agricultural/food sciences	13,500	6,700	6,100	S	S
Biological sciences	125,000	72,700	42,000	6,700	S
Environmental life sciences	12,200	5,400	4,900	S	S
Computer and information sciences	84,800	32,600	34,300	8,700	9,200
Mathematics and statistics	25,600	14,800	8,300	1,300	1,200
Physical and related sciences	35,700	20,200	10,700	2,300	2,500
Chemistry, except biochemistry	19,800	12,000	5,900	S	1,000
Earth/atmospheric/ocean sciences	6,600	2,800	2,200	900	600
Physics/astronomy	7,000	4,500	2,000	S	S
Other physical sciences	2,300	S	S	S	500
Psychology	153,000	88,600	43,800	8,900	11,800
Social and related sciences	232,300	127,500	72,700	14,600	17,500
Economics	42,100	28,300	10,800	1,700	S
Political and related sciences	69,100	43,200	21,800	1,900	2,100
Sociology/anthropology	74,000	35,500	25,600	5,600	7,300
Other social sciences	47,100	20,500	14,400	5,400	6,800
Engineering	112,300	50,600	48,400	8,100	5,300
Aerospace/aeronautical/astronautical engineering	3,100	1,800	1,100	S	S
Chemical engineering	10,600	5,900	4,000	S	S
Civil/architectural engineering	16,300	5,800	8,400	1,500	S
Electrical/computer engineering	35,800	16,500	13,700	3,100	2,400
Industrial engineering	6,600	2,500	3,500	S	S
Materials/metallurgical engineering	2,300	1,100	S	S	S
Mechanical engineering	24,800	10,300	11,500	1,500	1,400
Other engineering	12,900	6,700	5,200	S	S
Health	143,300	48,500	36,400	18,500	39,800

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 12. Age of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Less than 25	25-29	30-34	35 years
Major field	recipients	years	years	years	or more
All fields	246,700	6,500	107,100	63,200	69,800
Sciences	117,000	2,400	51,700	32,400	30,500
Biological, agricultural, and environmental life sciences	16,800	S	8,800	4,500	3,100
Agricultural/food sciences	2,900	S	1,400	S	S
Biological sciences	12,100	S	6,600	2,800	2,300
Environmental life sciences	1,800	S	S	S	S
Computer and information sciences	27,200	S	11,300	8,400	6,800
Mathematics and statistics	5,900	S	2,800	1,900	1,000
Physical and related sciences	9,600	S	4,300	3,000	2,100
Chemistry, except biochemistry	3,800	S	1,500	1,300	S
Earth/atmospheric/ocean sciences	2,600	S	1,100	800	S
Physics/astronomy	2,700	S	1,500	700	S
Other physical sciences	S	S	S	S	S
Psychology	32,000	S	14,100	7,200	10,500
Social and related sciences	25,500	S	10,500	7,500	7,000
Economics	3,900	S	2,000	900	800
Political and related sciences	7,500	S	3,200	2,200	1,900
Sociology/anthropology	5,500	S	2,500	1,800	1,100
Other social sciences	8,700	S	2,800	2,600	3,200
Engineering	47,000	2,300	25,900	11,600	7,200
Aerospace/aeronautical/astronautical engineering	1,100	S	700	S	S
Chemical engineering	1,900	S	1,200	S	S
Civil/architectural engineering	6,000	S	3,500	1,600	S
Electrical/computer engineering	16,100	S	9,300	3,700	2,000
Industrial engineering	3,700	S	1,900	800	1,000
Materials/metallurgical engineering	1,900	S	S	S	S
Mechanical engineering	6,000	S	4,200	1,200	S
Other engineering	10,300	S	4,100	3,100	2,700
Health	82,700	S	29,500	19,200	32,200

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE 13. Citizenship of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All		U.S. citizen		
Major field	recipients	Total	From birth	Naturalized	Non-U.S. citizen
All fields	937,700	896,600	823,000	73,500	41,200
Sciences	682,200	654,900	596,800	58,100	27,300
Biological, agricultural, and environmental life sciences	150,700	146,100	131,900	14,200	4,700
Agricultural/food sciences	13,500	13,500	13,400	S	S
Biological sciences	125,000	120,400	106,900	13,500	4,600
Environmental life sciences	12,200	12,200	11,600	S	S
Computer and information sciences	84,800	76,000	58,700	17,300	8,800
Mathematics and statistics	25,600	24,100	21,600	2,600	1,500
Physical and related sciences	35,700	34,500	32,400	2,000	1,300
Chemistry, except biochemistry	19,800	19,000	17,400	1,600	S
Earth/atmospheric/ocean sciences	6,600	6,600	6,400	S	S
Physics/astronomy	7,000	6,600	6,400	S	S
Other physical sciences	2,300	2,200	2,200	S	S
Psychology	153,000	148,400	140,300	8,100	S
Social and related sciences	232,300	225,800	211,800	13,900	6,500
Economics	42,100	40,000	36,100	3,900	S
Political and related sciences	69,100	67,500	64,100	3,300	S
Sociology/anthropology	74,000	72,500	67,500	5,000	S
Other social sciences	47,100	45,800	44,100	S	S
Engineering	112,300	102,900	91,400	11,400	9,500
Aerospace/aeronautical/astronautical engineering	3,100	3,100	2,800	200	S
Chemical engineering	10,600	10,100	8,700	1,400	S
Civil/architectural engineering	16,300	15,200	14,300	S	S
Electrical/computer engineering	35,800	30,200	24,100	6,100	5,600
Industrial engineering	6,600	6,100	5,600	S	S
Materials/metallurgical engineering	2,300	1,900	1,700	S	S
Mechanical engineering	24,800	23,900	22,000	1,900	S
Other engineering	12,900	12,500	12,100	S	S
Health	143,300	138,800	134,800	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 14. Citizenship of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All		U.S. citizen		
Major field	recipients	Total	From birth	Naturalized	Non-U.S. citizen
All fields	246,700	188,100	170,100	18,000	58,600
Sciences	117,000	82,100	74,700	7,500	34,800
Biological, agricultural, and environmental life sciences	16,800	14,100	13,200	S	2,700
Agricultural/food sciences	2,900	2,300	2,300	S	S
Biological sciences	12,100	10,200	9,300	S	1,800
Environmental life sciences	1,800	1,600	1,600	S	S
Computer and information sciences	27,200	7,400	5,800	1,600	19,800
Mathematics and statistics	5,900	3,000	2,200	S	2,800
Physical and related sciences	9,600	6,300	5,800	S	3,200
Chemistry, except biochemistry	3,800	2,100	1,800	S	1,700
Earth/atmospheric/ocean sciences	2,600	2,400	2,300	S	S
Physics/astronomy	2,700	1,500	1,300	S	1,200
Other physical sciences	S	S	S	S	S
Psychology	32,000	30,500	28,700	S	S
Social and related sciences	25,500	20,800	19,000	1,800	4,800
Economics	3,900	1,800	1,600	S	2,100
Political and related sciences	7,500	6,500	5,700	S	S
Sociology/anthropology	5,500	5,100	4,700	S	S
Other social sciences	8,700	7,400	7,000	S	S
Engineering	47,000	24,700	20,700	4,000	22,300
Aerospace/aeronautical/astronautical engineering	1,100	800	700	S	S
Chemical engineering	1,900	900	900	S	1,000
Civil/architectural engineering	6,000	3,600	3,100	S	2,400
Electrical/computer engineering	16,100	6,400	4,500	1,900	9,700
Industrial engineering	3,700	2,000	1,700	S	1,800
Materials/metallurgical engineering	1,900	S	S	S	S
Mechanical engineering	6,000	3,100	2,800	S	2,900
Other engineering	10,300	7,300	6,600	S	3,000
Health	82,700	81,200	74,700	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 15. Undergraduate grade point average of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All		Undergraduate GPA				
Major field	recipients	Below 2.75	2.75 to 3.24	3.25 or higher			
All fields	937,700	99,000	308,900	528,700			
Sciences	682,200	76,900	226,000	378,100			
Biological, agricultural, and environmental life sciences	150,700	15,600	47,800	86,600			
Agricultural/food sciences	13,500	1,700	4,900	7,000			
Biological sciences	125,000	12,800	37,700	73,800			
Environmental life sciences	12,200	S	5,300	5,800			
Computer and information sciences	84,800	8,900	35,500	40,300			
Mathematics and statistics	25,600	2,000	7,800	15,800			
Physical and related sciences	35,700	3,600	10,800	21,400			
Chemistry, except biochemistry	19,800	1,700	5,800	12,300			
Earth/atmospheric/ocean sciences	6,600	1,100	2,400	3,200			
Physics/astronomy	7,000	500	2,000	4,600			
Other physical sciences	2,300	S	S	1,300			
Psychology	153,000	16,300	50,000	86,700			
Social and related sciences	232,300	30,500	74,100	127,300			
Economics	42,100	4,900	16,800	20,400			
Political and related sciences	69,100	8,200	22,300	38,300			
Sociology/anthropology	74,000	11,400	23,000	39,600			
Other social sciences	47,100	5,900	12,000	29,000			
Engineering	112,300	14,200	43,700	54,400			
Aerospace/aeronautical/astronautical engineering	3,100	400	1,400	1,400			
Chemical engineering	10,600	800	3,800	6,000			
Civil/architectural engineering	16,300	2,600	6,700	7,000			
Electrical/computer engineering	35,800	3,900	13,900	17,900			
Industrial engineering	6,600	1,000	2,800	2,800			
Materials/metallurgical engineering	2,300	S	S	1,100			
Mechanical engineering	24,800	3,600	9,200	12,000			
Other engineering	12,900	1,400	5,300	6,200			
Health	143,300	7,900	39,200	96,200			

GPA = Grade point average.

NOTES: Detail may not add to total because of rounding and because a small number of graduates reported that their undergraduate courses were ungraded and have been excluded. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 16. Undergraduate grade point average of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Undergraduate GPA			
Major field	recipients	Below 2.75	2.75 to 3.24	3.25 or highe	
All fields	246,700	16,100	58,400	171,300	
Sciences	117,000	7,400	29,400	79,300	
Biological, agricultural, and environmental life sciences	16,800	1,600	5,800	9,400	
Agricultural/food sciences	2,900	S	S	1,500	
Biological sciences	12,100	1,100	4,000	7,000	
Environmental life sciences	1,800	S	S	1,000	
Computer and information sciences	27,200	S	5,800	20,100	
Mathematics and statistics	5,900	S	1,000	4,700	
Physical and related sciences	9,600	S	2,500	6,500	
Chemistry, except biochemistry	3,800	S	S	2,800	
Earth/atmospheric/ocean sciences	2,600	S	1,000	1,400	
Physics/astronomy	2,700	S	600	2,000	
Other physical sciences	S	S	S	S	
Psychology	32,000	2,700	8,800	20,400	
Social and related sciences	25,500	1,500	5,500	18,200	
Economics	3,900	S	600	3,000	
Political and related sciences	7,500	S	1,500	5,500	
Sociology/anthropology	5,500	S	1,400	3,500	
Other social sciences	8,700	S	1,900	6,200	
Engineering	47,000	2,400	11,900	32,500	
Aerospace/aeronautical/astronautical engineering	1,100	S	S	900	
Chemical engineering	1,900	S	500	1,400	
Civil/architectural engineering	6,000	S	1,800	3,800	
Electrical/computer engineering	16,100	S	3,600	11,900	
Industrial engineering	3,700	S	600	2,700	
Materials/metallurgical engineering	1,900	S	S	S	
Mechanical engineering	6,000	S	1,400	4,400	
Other engineering	10,300	S	3,400	6,000	
Health	82,700	S	17,100	59,400	

GPA = Grade point average.

NOTES: Detail may not add to total because of rounding and because a small number of graduates reported that their undergraduate courses were ungraded and have been excluded. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 17. Community college attendance and associate's degree receipt among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All	Attended com	munity college	Earned associate's degree		
Major field	recipients	Number	Percent	Number	Percent	
All fields	937,700	470,100	50	160,100	17	
Sciences	682,200	326,600	48	103,200	15	
Biological, agricultural, and environmental life sciences	150,700	68,100	45	17,800	12	
Agricultural/food sciences	13,500	6,300	46	2,700	20	
Biological sciences	125,000	54,800	44	12,600	10	
Environmental life sciences	12,200	7,000	58	2,500	21	
Computer and information sciences	84,800	43,000	51	16,500	19	
Mathematics and statistics	25,600	10,900	43	3,400	13	
Physical and related sciences	35,700	15,300	43	3,600	10	
Chemistry, except biochemistry	19,800	8,300	42	1,600	8	
Earth/atmospheric/ocean sciences	6,600	3,600	54	1,000	15	
Physics/astronomy	7,000	2,200	31	S	S	
Other physical sciences	2,300	1,200	55	600	24	
Psychology	153,000	78,300	51	28,200	18	
Social and related sciences	232,300	111,100	48	33,800	15	
Economics	42,100	17,000	40	3,000	7	
Political and related sciences	69,100	27,000	39	4,600	7	
Sociology/anthropology	74,000	40,400	55	14,100	19	
Other social sciences	47,100	26,700	57	12,100	26	
Engineering	112,300	47,400	42	10,300	9	
Aerospace/aeronautical/astronautical engineering	3,100	1,100	36	S	S	
Chemical engineering	10,600	4,900	46	700	6	
Civil/architectural engineering	16,300	7,100	44	1,800	11	
Electrical/computer engineering	35,800	15,700	44	3,800	11	
Industrial engineering	6,600	2,600	39	500	8	
Materials/metallurgical engineering	2,300	S	S	S	S	
Mechanical engineering	24,800	10,600	43	2,100	9	
Other engineering	12,900	4,900	38	S	S	
Health	143,300	96,000	67	46,600	33	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 18. Community college attendance and associate's degree receipt among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Attended com	munity college	Earned associate's degree	
Major field	recipients	Number	Percent	Number	Percent
All fields	246,700	110,300	45	37,200	15
Sciences	117,000	42,900	37	13,700	12
Biological, agricultural, and environmental life sciences	16,800	6,100	37	1,400	8
Agricultural/food sciences	2,900	1,300	44	S	S
Biological sciences	12,100	4,200	35	S	S
Environmental life sciences	1,800	S	S	S	S
Computer and information sciences	27,200	7,600	28	2,500	9
Mathematics and statistics	5,900	1,400	24	S	S
Physical and related sciences	9,600	3,500	37	700	7
Chemistry, except biochemistry	3,800	1,100	28	S	S
Earth/atmospheric/ocean sciences	2,600	1,400	53	S	S
Physics/astronomy	2,700	800	31	S	S
Other physical sciences	S	S	S	S	S
Psychology	32,000	14,600	46	5,900	18
Social and related sciences	25,500	9,600	37	2,900	11
Economics	3,900	700	19	S	S
Political and related sciences	7,500	2,800	37	S	S
Sociology/anthropology	5,500	2,400	43	900	17
Other social sciences	8,700	3,600	42	S	S
Engineering	47,000	13,400	28	3,200	7
Aerospace/aeronautical/astronautical engineering	1,100	S	S	S	S
Chemical engineering	1,900	S	S	S	S
Civil/architectural engineering	6,000	1,800	30	S	S
Electrical/computer engineering	16,100	4,200	26	S	S
Industrial engineering	3,700	900	24	S	S
Materials/metallurgical engineering	1,900	S	S	S	S
Mechanical engineering	6,000	1,300	22	S	S
Other engineering	10,300	4,300	42	S	S
Health	82,700	54,000	65	20,300	25

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 19. Sources of financial support for 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

Major field	All recipients	Assistant- ships, work study	Earnings from employment	Employer assistance	Gifts from parents/relatives	Loans from college, bank, govern- ment	Loans from parents/ relatives	Scholar- ships, grants, fellowships	Other sources
All fields	937,700	220,700	535,700	85,000	632,300	565,900	82,100	581,100	23,100
Sciences	682,200	169,900	385,400	47,200	468,100	414,200	60,000	422,000	14,100
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	39,300 2,500 32,900 3,900	88,900 8,300 73,500 7,100	7,000 S 6,000 S	110,200 9,000 93,700 7,500	89,700 7,900 73,500 8,300	13,800 1,400 11,000 S	106,600 9,800 88,500 8,300	S S S
Computer and information sciences	84,800	16,800	45,000	12,300	49,400	49,600	6,700	45,300	S
Mathematics and statistics	25,600	7,200	14,300	1,300	16,700	16,000	2,100	18,600	S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	10,400 5,500 2,100 2,600 S	21,500 11,500 3,900 4,300 1,700	2,800 1,300 700 S S	25,100 14,300 4,300 5,300 1,200	21,300 11,400 4,600 3,800 1,500	2,500 1,200 S 500 S	26,000 15,300 4,400 5,000 1,300	S S S S
Psychology	153,000	37,600	82,600	10,000	106,100	91,100	12,000	87,700	S
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	58,600 8,900 20,200 20,200 9,400	133,200 23,300 38,400 44,500 27,000	13,800 2,300 S 5,700 4,000	160,700 33,100 49,600 48,000 30,100	146,600 22,600 46,100 50,400 27,500	23,000 3,700 6,500 9,200 3,600	137,900 22,000 46,900 44,100 24,900	6,100 S S S S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	24,900 500 2,200 3,000 8,800 1,500 S 5,400 3,200	68,300 1,900 6,300 10,400 20,400 3,600 1,200 15,900 8,500	9,200 S S 1,300 3,300 S S 2,500 S	78,100 2,300 8,000 11,700 23,000 4,800 1,600 16,600 10,200	61,100 2,000 5,400 10,100 18,100 3,400 1,200 13,700 7,100	13,100 300 900 1,900 4,700 1,000 S 2,600 1,400	70,800 2,300 7,900 10,200 20,600 3,900 1,200 16,000 8,800	2,000 S S S S S S S
Health	143,300	25,800	82,000	28,600	86,100	90,600	9,000	88,200	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Numbers for sources of support sum to more than the total because of multiple responses. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S&E = science and engineering.

TABLE 20. Sources of financial support for 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

				, ,	<u> </u>				
Major field	All recipients	Assistant- ships, work study	Earnings from employment	Employer assistance	Gifts from parents/relatives	Loans from college, bank, govern- ment	Loans from parents/ relatives	Scholar- ships, grants, fellowships	Other sources
All fields	246,700	88,400	124,900	59,500	89,700	102,000	11,700	121,800	4,200
Sciences	117,000	51,300	57,500	23,800	45,900	44,600	5,500	61,200	3,100
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	16,800 2,900 12,100 1,800	8,500 1,800 5,700 1,000	7,800 1,600 5,400 S	3,800 S 2,900 S	5,600 S 4,400 S	6,400 S 4,800 S	S S S	9,400 1,800 6,600 1,000	S S S
Computer and information sciences	27,200	10,300	9,800	7,000	14,900	4,000	S	10,100	S
Mathematics and statistics	5,900	3,400	2,100	1,300	1,600	1,100	S	4,100	S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	9,600 3,800 2,600 2,700 S	5,900 2,300 1,400 2,000 S	3,600 1,000 1,600 700 S	2,200 S S 800 S	2,000 S S 500 S	2,100 900 800 S S	S S S S	6,900 2,700 1,700 2,000 S	S S S S
Psychology	32,000	11,300	19,300	4,800	12,300	19,700	S	14,000	S
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	25,500 3,900 7,500 5,500 8,700	11,900 2,100 2,600 3,000 4,200	14,900 1,900 4,400 3,100 5,500	4,700 900 S 1,100 1,600	9,600 1,700 2,800 1,900 3,300	11,300 1,100 4,000 3,100 3,100	1,400 S S S S	16,700 2,600 4,900 3,700 5,500	S S S S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	47,000 1,100 1,900 6,000 16,100 3,700 1,900 6,000 10,300	22,700 600 1,000 3,000 7,600 2,000 \$ 3,500 4,100	19,200 400 400 2,200 6,900 1,300 \$ 2,600 4,900	15,800 S S 1,500 6,000 1,400 S 1,600 4,300	14,200 S S 2,000 5,700 S S 1,700 2,400	8,600 S 300 1,300 2,300 S S 1,200 2,100	2,900 S S S S S S S	25,400 800 1,600 3,600 8,600 1,600 S 3,300 4,700	S S S S S S S
Health	82,700	14,300	48,200	20,000	29,600	48,800	S	35,200	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Numbers for sources of support sum to more than the total because of multiple responses. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

TABLE 21. Amount borrowed for undergraduate education by 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not borrow	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	937,700	324,300	151,200	296,300	165,900
Sciences	682,200	235,500	119,000	216,300	111,300
Biological, agricultural, and environmental life sciences	150,700	54,400	25,700	48,200	22,400
Agricultural/food sciences	13,500	5,200	2,000	4,200	2,100
Biological sciences	125,000	45,700	22,000	38,800	18,500
Environmental life sciences	12,200	3,500	1,700	5,200	1,900
Computer and information sciences	84,800	31,000	14,200	23,700	15,800
Mathematics and statistics	25,600	9,000	4,600	7,700	4,300
Physical and related sciences	35,700	13,000	7,000	9,600	6,100
Chemistry, except biochemistry	19,800	7,600	4,400	4,800	2,900
Earth/atmospheric/ocean sciences	6,600	1,900	1,000	2,300	1,500
Physics/astronomy	7,000	3,100	1,200	1,800	900
Other physical sciences	2,300	S	S	S	S
Psychology	153,000	54,600	26,200	47,400	24,800
Social and related sciences	232,300	73,500	41,300	79,700	37,700
Economics	42,100	17,300	5,800	12,900	6,100
Political and related sciences	69,100	21,700	11,100	24,500	11,900
Sociology/anthropology	74,000	18,400	14,000	28,300	13,300
Other social sciences	47,100	16,200	10,400	13,900	6,500
Engineering	112,300	44,400	17,100	31,600	19,200
Aerospace/aeronautical/astronautical engineering	3,100	1,100	400	1,000	700
Chemical engineering	10,600	4,700	1,700	2,800	1,400
Civil/architectural engineering	16,300	5,400	2,300	5,400	3,200
Electrical/computer engineering	35,800	14,100	5,900	8,900	6,900
Industrial engineering	6,600	2,900	1,200	1,600	900
Materials/metallurgical engineering	2,300	S	S	S	S
Mechanical engineering	24,800	9,800	3,300	8,100	3,600
Other engineering	12,900	5,300	1,900	3,500	2,200
Health	143,300	44,400	15,100	48,400	35,400

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Undergraduate loan amount represents entire amount borrowed during undergraduate education. Detail may not add to total because of rounding. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S&E = science and engineering.

TABLE 22. Amount borrowed for undergraduate and graduate education by 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not borrow	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	246,700	130,300	29,600	37,800	48,900
Sciences	117,000	65,500	15,300	18,500	17,700
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences Computer and information sciences	16,800 2,900 12,100 1,800 27,200	9,600 1,800 6,900 1,000	3,100 S 2,100 S 2,500	1,900 S 1,300 S 3,300	2,200 S 1,800 S
Mathematics and statistics	5,900	4,700	S	S	S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	9,600 3,800 2,600 2,700 S	7,300 2,900 1,700 2,200 S	700 S S S S	900 S S S S	S S S S
Psychology	32,000	10,400	5,600	7,700	8,200
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	25,500 3,900 7,500 5,500 8,700	14,000 2,500 3,700 2,300 5,500	3,100 S S 1,000 S	4,200 S S 1,000 1,800	4,300 S 2,100 1,200 S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	47,000 1,100 1,900 6,000 16,100 3,700 1,900 6,000 10,300	34,000 900 1,500 4,100 12,000 3,000 \$ 4,100 7,300	5,500 S S 1,100 1,900 S S S	5,400 S S S S S S S S	2,100 S S S S S S S
Health	82,700	30,800	8,800	14,000	29,100

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Undergraduate loan amount represents entire amount borrowed during undergraduate education. Detail may not add to total because of rounding. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S&E = science and engineering.

TABLE 23. Amount owed for undergraduate loans by 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not owe	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	937,700	400,400	165,300	255,800	116,300
Sciences	682,200	291,700	122,500	186,900	81,100
Biological, agricultural, and environmental life sciences	150,700	64,000	26,200	40,500	20,100
Agricultural/food sciences	13,500	6,200	2,600	3,500	S
Biological sciences	125,000	53,200	21,900	32,400	17,500
Environmental life sciences	12,200	4,600	1,800	4,700	S
Computer and information sciences	84,800	39,700	14,600	21,700	8,800
Mathematics and statistics	25,600	11,400	4,600	6,500	3,100
Physical and related sciences	35,700	16,100	6,900	8,900	4,000
Chemistry, except biochemistry	19,800	9,600	3,900	4,300	2,100
Earth/atmospheric/ocean sciences	6,600	2,300	1,100	2,200	1,000
Physics/astronomy	7,000	3,400	1,300	1,600	600
Other physical sciences	2,300	S	S	S	S
Psychology	153,000	67,800	25,700	41,100	18,400
Social and related sciences	232,300	92,800	44,500	68,200	26,800
Economics	42,100	20,900	8,100	9,200	3,900
Political and related sciences	69,100	25,400	12,700	21,600	9,300
Sociology/anthropology	74,000	26,200	13,000	24,900	9,900
Other social sciences	47,100	20,300	10,600	12,500	3,700
Engineering	112,300	56,200	18,200	27,300	10,600
Aerospace/aeronautical/astronautical engineering	3,100	1,300	500	800	500
Chemical engineering	10,600	5,800	1,500	2,600	700
Civil/architectural engineering	16,300	7,300	2,800	4,400	1,800
Electrical/computer engineering	35,800	18,700	5,900	7,500	3,600
Industrial engineering	6,600	3,400	1,200	1,400	500
Materials/metallurgical engineering	2,300	1,200	S	S	S
Mechanical engineering	24,800	12,100	3,800	6,700	2,200
Other engineering	12,900	6,400	2,100	3,300	1,100
Health	143,300	52,400	24,700	41,600	24,600

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: The amount owed represents amount of outstanding debt respondent reported on reference date of the survey. Detail may not add to total because of rounding. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

S&E = science and engineering.

TABLE 24. Amount owed for undergraduate and graduate loans by 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

Major field	All recipients	Did not owe	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	246,700	149,500	28,400	29,800	39,100
Sciences	117,000	74,300	13,300	14,900	14,400
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	16,800 2,900 12,100 1,800	11,100 2,100 7,800 1,200	2,200 S 1,600 S	1,700 S 1,200 S	1,900 S 1,500 S
Computer and information sciences	27,200	23,400	S	S	S
Mathematics and statistics	5,900	5,100	S	S	S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	9,600 3,800 2,600 2,700 S	7,600 3,000 1,800 2,300 S	600 S S S S	900 S S S S	\$ \$ \$ \$ \$
Psychology	32,000	11,500	5,700	7,600	7,300
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	25,500 3,900 7,500 5,500 8,700	15,700 2,700 4,200 2,600 6,100	2,800 S S 1,000 S	3,600 S S 900 1,500	3,400 S 1,500 1,000 S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	47,000 1,100 1,900 6,000 16,100 3,700 1,900 6,000 10,300	38,100 900 1,600 4,600 13,800 3,100 S 4,700 7,900	5,100 S S 1,000 1,500 S S S	2,900 S S S S S S S	900 S S S S S S
Health	82,700	37,100	10,000	12,000	23,700

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

NOTES: The amount owed represents amount of outstanding debt respondent reported on reference date of the survey. Detail may not add to total because of rounding. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

TABLE 25. Enrollment in college courses since most recent degree and enrollment status among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

· · ·	All	Taken additional college courses since most recent	Enrollment status October 1, 2003			
Major field	recipients	degree ^a	Full-time student	Part-time student	Not student	
All fields	937,700	418,200	222,000	67,800	648,000	
Sciences	682,200	337,600	185,100	50,900	446,100	
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	92,600 5,100 83,200 4,200	61,400 3,300 56,400 1,700	7,700 S 6,800 S	81,700 10,000 61,700 9,900	
Computer and information sciences	84,800	24,500	6,400	7,600	70,800	
Mathematics and statistics	25,600	12,600	6,000	2,400	17,100	
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	22,300 13,400 3,200 5,000 S	15,500 10,000 1,800 3,600 S	1,900 S S S S	18,300 9,000 4,500 3,200 1,700	
Psychology	153,000	83,700	44,600	15,800	92,600	
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	101,900 14,200 32,900 33,100 21,800	51,000 6,300 20,900 13,700 10,100	15,600 S 4,100 7,000 3,000	165,700 34,300 44,100 53,300 34,000	
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	42,200 1,400 4,700 4,400 14,100 1,800 1,300 9,300 5,200	19,100 600 2,700 1,100 5,500 700 S 4,600 3,000	9,400 400 \$ 1,300 3,700 500 \$ 2,100 \$	83,700 2,100 7,400 14,000 26,500 5,300 1,200 18,000 9,100	
Health	143,300	38,500	17,700	S	118,100	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 26. Enrollment in college courses since most recent degree and enrollment status among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Taken additional college courses since most recent	Enrollr	Enrollment status October 1, 2003			
Major field	recipients	degree ^a	Full-time student	Part-time student	Not student		
All fields	246,700	82,000	40,900	9,000	196,800		
Sciences	117,000	49,400	27,900	6,200	82,900		
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	16,800 2,900 12,100 1,800	7,800 1,100 6,100 S	4,500 S 3,600 S	1,000 S S S	11,300 2,200 7,700 1,400		
Computer and information sciences	27,200	9,500	4,800	S	21,200		
Mathematics and statistics	5,900	2,800	1,800	S	3,700		
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	9,600 3,800 2,600 2,700 S	4,700 1,700 600 2,200 S	3,100 1,000 S 1,600 S	S S S S	6,000 2,700 2,200 900 S		
Psychology	32,000	13,300	6,800	2,100	23,000		
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	25,500 3,900 7,500 5,500 8,700	11,300 1,900 1,800 3,600 4,000	6,800 1,300 S 2,300 2,200	\$ \$ \$ \$ \$	17,700 2,500 6,400 3,000 5,800		
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	47,000 1,100 1,900 6,000 16,100 3,700 1,900 6,000 10,300	19,200 400 900 1,900 7,900 1,200 S 2,000 4,200	10,800 S 700 900 4,400 S S 1,200 2,300	1,600 S S S S S S S	34,700 900 1,100 4,900 11,300 3,000 S 4,500 7,600		
Health	82,700	13,400	S	S	79,200		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 27. Likelihood of taking additional college courses among 2001 and 2002 S&E bachelor's degree recipients who have not taken college courses since their most recent degree, by major field of degree: October 2003

	Total number not			
	taking college courses			
Major Gold	since most recent		will take additional colle	ŭ
Major field	degree ^a	Very likely	Somewhat likely	Very unlikely
All fields	519,500	303,400	163,700	52,400
Sciences	344,600	209,600	98,700	36,300
Biological, agricultural, and environmental life sciences	58,200	36,600	15,000	6,600
Agricultural/food sciences	8,400	2,800	3,600	1,900
Biological sciences	41,800	29,200	9,600	S
Environmental life sciences	8,000	4,600	1,800	S
Computer and information sciences	60,300	30,700	20,600	9,000
Mathematics and statistics	13,000	7,300	4,500	1,300
Physical and related sciences	13,500	7,300	4,800	1,400
Chemistry, except biochemistry	6,500	3,400	2,300	S
Earth/atmospheric/ocean sciences	3,400	1,800	1,300	S
Physics/astronomy	2,000	1,400	500	S
Other physical sciences	1,600	S	S	S
Psychology	69,300	46,700	19,000	S
Social and related sciences	130,300	81,000	34,900	14,400
Economics	27,900	15,900	8,800	3,200
Political and related sciences	36,200	23,400	8,800	4,000
Sociology/anthropology	40,900	26,200	10,000	4,700
Other social sciences	25,400	15,500	7,300	2,600
Engineering	70,100	37,700	24,700	7,700
Aerospace/aeronautical/astronautical engineering	1,800	1,300	400	S
Chemical engineering	6,000	3,100	2,300	S
Civil/architectural engineering	11,800	4,100	5,500	2,300
Electrical/computer engineering	21,600	13,400	6,100	2,100
Industrial engineering	4,800	2,900	1,500	S
Materials/metallurgical engineering	S	S	S	S
Mechanical engineering	15,500	8,800	5,700	S
Other engineering	7,600	3,700	3,000	S
Health	104,800	56,100	40,200	8,400

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 28. Likelihood of taking additional college courses among 2001 and 2002 S&E master's degree recipients who have not taken college courses since their most recent degree, by major field of degree: October 2003

	Total number not taking college courses since most recent	Likelihood	will take additional colle	ege courses
Major field	degree ^a	Very likely	Somewhat likely	Very unlikely
All fields	164,600	61,100	68,100	35,500
Sciences	67,600	26,200	26,900	14,500
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences	9,000 1,800 5,900	3,300 S 2,200	4,100 S 2,700	1,500 S S
Environmental life sciences Computer and information sciences	1,200 17,700	S 6,200	S 7,000	S 4,500
Mathematics and statistics	3,100	700	1,200	1,100
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	4,900 2,100 2,000 500 S	1,800 S S S S	2,000 S 900 S S	1,100 S S S S
Psychology	18,700	8,600	7,200	2,900
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	14,300 2,000 5,700 2,000 4,600	5,500 S 2,000 900 2,100	5,300 S 2,200 S 1,500	3,400 S 1,500 S S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	27,800 700 1,000 4,100 8,200 2,600 S 4,000 6,100	10,200 400 \$ 1,300 3,400 1,400 \$ 1,600 1,500	11,200 \$ 500 2,000 3,000 700 \$ 1,700 2,800	6,400 S S 900 1,900 S S S 1,800
Health	69,300	24,700	30,000	14,500

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 29. Type of degree or certificate sought by 2001 and 2002 S&E bachelor's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Took college courses between completing most recent						
				d week of Octo				
Major field	All recipients	Total number who took courses	Ph.D. or prof. degree	Master's degree	or certificate sough Other degree or certificate	No degree or certificate		
All fields	937,700	418,200	49,600	200,500	102,700	65,500		
Sciences	682,200	337,600	42,100	147,500	93,300	54,700		
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	92,600 5,100 83,200 4,200	17,700 S 16,600 S	23,200 1,500 19,600 2,100	38,800 1,600 36,000 S	12,900 S 11,000 S		
Computer and information sciences	84,800	24,500	S	14,800	2,600	6,200		
Mathematics and statistics	25,600	12,600	1,800	6,500	2,200	2,100		
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	22,300 13,400 3,200 5,000 S	7,400 4,900 S 2,300 S	6,400 2,600 1,900 1,700 S	5,800 4,600 S S	2,700 1,300 600 500 S		
Psychology	153,000	83,700	8,000	52,700	14,000	9,000		
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	101,900 14,200 32,900 33,100 21,800	6,100 S S S S	44,000 4,600 11,600 16,900 11,000	30,000 3,800 15,300 7,200 3,700	21,800 4,700 4,200 6,900 6,000		
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	42,200 1,400 4,700 4,400 14,100 1,800 1,300 9,300 5,200	5,600 S 1,100 S S S S S 1,200 S	25,500 1,000 1,900 3,100 9,100 1,100 S 6,200 2,300	3,500 S 800 S S S S S	7,600 S 900 S 3,000 S S 1,200 S		
Health	143,300	38,500	S	27,400	5,900	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 30. Type of degree or certificate sought by 2001 and 2002 S&E master's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Т	ook college course	es between co	mpleting most rece	nt	
			degree and	d week of Octo	ber 1, 2003		
		Total number	T	ype of degree	or certificate soug	ht	
	All	who took	Ph.D. or prof.	Master's	Other degree	No degree or	
Major field	recipients	courses	degree	degree	or certificate	certificate	
All fields	246,700	82,000	40,200	14,300	8,600	19,000	
Sciences	117,000	49,400	26,300	7,400	6,000	9,700	
Biological, agricultural, and environmental life sciences	16,800	7,800	3,600	S	1,800	1,500	
Agricultural/food sciences	2,900	1,100	S	S	S	S	
Biological sciences	12,100	6,100	2,600	S	1,600	1,300	
Environmental life sciences	1,800	S	S	S	S	S	
Computer and information sciences	27,200	9,500	3,500	2,800	S	S	
Mathematics and statistics	5,900	2,800	1,900	S	S	S	
Physical and related sciences	9,600	4,700	3,100	700	S	600	
Chemistry, except biochemistry	3,800	1,700	S	S	S	S	
Earth/atmospheric/ocean sciences	2,600	600	S	S	S	S	
Physics/astronomy	2,700	2,200	1,700	S	S	S	
Other physical sciences	S	S	S	S	S	S	
Psychology	32,000	13,300	7,300	S	S	3,000	
Social and related sciences	25,500	11,300	6,900	1,400	S	2,000	
Economics	3,900	1,900	1,300	S	S	S	
Political and related sciences	7,500	1,800	S	S	S	S	
Sociology/anthropology	5,500	3,600	2,600	S	S	S	
Other social sciences	8,700	4,000	2,000	S	S	S	
Engineering	47,000	19,200	10,800	3,000	1,000	4,400	
Aerospace/aeronautical/astronautical engineering	1,100	400	S	S	S	S	
Chemical engineering	1,900	900	700	S	S	S	
Civil/architectural engineering	6,000	1,900	900	S	S	S	
Electrical/computer engineering	16,100	7,900	4,400	S	S	2,400	
Industrial engineering	3,700	1,200	S	S	S	S	
Materials/metallurgical engineering	1,900	S	S	S	S	S	
Mechanical engineering	6,000	2,000	1,200	S	S	S	
Other engineering	10,300	4,200	2,000	S	S	S	
Health	82,700	13,400	S	S	S	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Most recent degree as of survey reference period, October 2003.

TABLE 31. Sex and race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Total number				Race/ethnici	y
		who took courses			Asian or	Under-	
	All	since most	S	ex	Pacific	represented	White, non-
Major field	recipients	recent degree	Male	Female	Islander	minority ^a	Hispanic
All fields	937,700	418,200	180,600	237,700	62,600	86,200	269,500
Sciences	682,200	337,600	140,600	196,900	48,700	67,400	221,500
Biological, agricultural, and environmental life sciences	150,700	92,600	38,200	54,400	17,900	16,000	58,700
Agricultural/food sciences	13,500	5,100	2,100	3,100	S	S	4,200
Biological sciences	125,000	83,200	34,400	48,800	17,200	15,100	50,900
Environmental life sciences	12,200	4,200	S	2,500	S	S	3,600
Computer and information sciences	84,800	24,500	16,800	7,700	9,800	4,400	10,400
Mathematics and statistics	25,600	12,600	7,100	5,400	2,300	1,700	8,500
Physical and related sciences	35,700	22,300	11,900	10,400	3,300	3,300	15,600
Chemistry, except biochemistry	19,800	13,400	6,200	7,200	2,500	2,100	8,700
Earth/atmospheric/ocean sciences	6,600	3,200	1,800	1,400	S	S	2,900
Physics/astronomy	7,000	5,000	3,700	1,300	S	700	3,700
Other physical sciences	2,300	S	S	S	S	S	S
Psychology	153,000	83,700	22,500	61,200	S	19,700	61,500
Social and related sciences	232,300	101,900	44,100	57,800	12,900	22,300	66,800
Economics	42,100	14,200	9,700	4,500	4,400	2,200	7,600
Political and related sciences	69,100	32,900	15,600	17,300	S	6,700	23,300
Sociology/anthropology	74,000	33,100	9,300	23,800	S	7,600	22,800
Other social sciences	47,100	21,800	9,500	12,300	S	5,700	13,100
Engineering	112,300	42,200	32,000	10,200	10,300	7,000	24,900
Aerospace/aeronautical/astronautical engineering	3,100	1,400	1,100	300	S	200	1,000
Chemical engineering	10,600	4,700	2,800	1,900	S	600	2,800
Civil/architectural engineering	16,300	4,400	3,000	1,400	S	700	2,900
Electrical/computer engineering	35,800	14,100	11,600	2,600	5,000	2,700	6,400
Industrial engineering	6,600	1,800	1,200	600	S	600	1,100
Materials/metallurgical engineering	2,300	1,300	S	S	S	S	S
Mechanical engineering	24,800	9,300	7,900	1,400	S	1,500	6,100
Other engineering	12,900	5,200	3,500	1,800	S	S	3,500
Health	143,300	38,500	8,000	30,500	S	11,800	23,200

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Includes American Indian or Alaska Native, black and Hispanic.

TABLE 32. Sex and race/ethnicity of 2001 and 2002 S&E master's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Total number				Race/ethnicit	y
		who took courses			Asian or	Under-	
	All	since most		ex	Pacific	represented	White, non-
Major field	recipients	recent degree	Male	Female	Islander	minority ^a	Hispanic
All fields	246,700	82,000	42,500	39,600	30,000	10,600	41,400
Sciences	117,000	49,400	23,000	26,400	16,600	7,200	25,500
Biological, agricultural, and environmental life sciences	16,800	7,800	3,300	4,500	S	1,200	4,700
Agricultural/food sciences	2,900	1,100	S	S	S	S	S
Biological sciences	12,100	6,100	2,400	3,700	S	1,000	3,600
Environmental life sciences	1,800	S	S	S	S	S	S
Computer and information sciences	27,200	9,500	5,800	3,700	7,600	S	S
Mathematics and statistics	5,900	2,800	1,700	1,100	S	200	1,200
Physical and related sciences	9,600	4,700	3,400	1,300	1,700	600	2,400
Chemistry, except biochemistry	3,800	1,700	S	S	S	S	S
Earth/atmospheric/ocean sciences	2,600	600	S	S	S	S	S
Physics/astronomy	2,700	2,200	1,700	500	900	S	1,100
Other physical sciences	S	S	S	S	S	S	S
Psychology	32,000	13,300	3,800	9,500	S	2,800	9,000
Social and related sciences	25,500	11,300	5,000	6,300	2,500	2,000	6,800
Economics	3,900	1,900	1,000	900	S	S	700
Political and related sciences	7,500	1,800	S	S	S	S	S
Sociology/anthropology	5,500	3,600	1,400	2,100	S	700	2,500
Other social sciences	8,700	4,000	S	2,600	S	S	2,500
Engineering	47,000	19,200	15,200	4,000	12,000	1,700	5,600
Aerospace/aeronautical/astronautical engineering	1,100	400	S	S	S	S	S
Chemical engineering	1,900	900	700	S	S	S	S
Civil/architectural engineering	6,000	1,900	1,600	S	S	S	900
Electrical/computer engineering	16,100	7,900	6,200	S	6,100	S	1,500
Industrial engineering	3,700	1,200	S	S	S	S	S
Materials/metallurgical engineering	1,900	S	S	S	S	S	S
Mechanical engineering	6,000	2,000	1,700	S	S	S	S
Other engineering	10,300	4,200	3,100	S	2,000	S	1,500
Health	82,700	13,400	S	9,200	S	S	10,300

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

^a Includes American Indian or Alaska Native, black and Hispanic.

TABLE 33. Educational activity since degree completion among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

			Did not comple colleg		
Major field	All recipients	Completed additional degree	In degree program	Not in a degree program	Did not take college courses
All fields	937,700	6,100	350,200	61,900	519,500
Sciences	682,200	4,600	281,500	51,400	344,600
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	\$ \$ \$ \$	78,400 4,100 71,000 3,300	12,800 S 10,900 S	58,200 8,400 41,800 8,000
Computer and information sciences	84,800	S	18,200	6,000	60,300
Mathematics and statistics	25,600	S	10,200	1,900	13,000
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	\$ \$ \$ \$ \$	19,200 11,900 2,500 4,300 S	2,600 1,300 600 400 S	13,500 6,500 3,400 2,000 1,600
Psychology	153,000	S	75,100	7,500	69,300
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	\$ \$ \$ \$ \$	80,400 9,400 28,700 26,100 16,300	20,600 4,700 4,200 6,300 5,500	130,300 27,900 36,200 40,900 25,400
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	1,000 S S S S S S S	33,900 1,100 3,600 3,400 11,000 1,400 S 7,900 4,400	7,300 S 900 S 2,900 S S 1,100 S	70,100 1,800 6,000 11,800 21,600 4,800 S 15,500 7,600
Health	143,300	S	34,800	S	104,800

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 34. Educational activity between degree completion and the survey reference week among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			Did not comple		
	• "	_		e courses	
M - 6 11	All	Completed	In degree	Not in a degree	Did not take college
Major field	recipients	additional degree	program	program	courses
All fields	246,700	2,200	61,900	18,000	164,600
Sciences	117,000	S	39,200	8,800	67,600
Biological, agricultural, and environmental life sciences	16,800	S	6,100	1,400	9,000
Agricultural/food sciences	2,900	S	S	S	1,800
Biological sciences	12,100	S	4,700	1,200	5,900
Environmental life sciences	1,800	S	S	S	1,200
Computer and information sciences	27,200	S	7,000	S	17,700
Mathematics and statistics	5,900	S	2,300	S	3,100
Physical and related sciences	9,600	S	4,100	S	4,900
Chemistry, except biochemistry	3,800	S	1,400	S	2,100
Earth/atmospheric/ocean sciences	2,600	S	S	S	2,000
Physics/astronomy	2,700	S	2,000	S	500
Other physical sciences	S	S	S	S	S
Psychology	32,000	S	10,500	2,500	18,700
Social and related sciences	25,500	S	9,200	1,800	14,300
Economics	3,900	S	1,400	S	2,000
Political and related sciences	7,500	S	1,400	S	5,700
Sociology/anthropology	5,500	S	2,900	S	2,000
Other social sciences	8,700	S	3,500	S	4,600
Engineering	47,000	S	14,500	4,300	27,800
Aerospace/aeronautical/astronautical engineering	1,100	S	300	S	700
Chemical engineering	1,900	S	800	S	1,000
Civil/architectural engineering	6,000	S	1,300	S	4,100
Electrical/computer engineering	16,100	S	5,600	2,200	8,200
Industrial engineering	3,700	S	S	S	2,600
Materials/metallurgical engineering	1,900	S	S	S	S
Mechanical engineering	6,000	S	1,700	S	4,000
Other engineering	10,300	S	3,100	S	6,100
Health	82,700	S	8,100	S	69,300

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE 35. Selected employment characteristics of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		Employed					
	All		Counting	g all jobs ^a	Principa	l job only ^b	
Major field	recipients	Total	Full time	Part time	Full time	Part time	
All fields	937,700	768,900	644,900	124,000	622,900	145,900	
Sciences	682,200	543,700	442,800	100,800	427,300	116,400	
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	150,700 13,500 125,000 12,200	103,900 11,500 82,000 10,300	81,200 10,000 62,000 9,200	22,600 1,500 20,000 S	79,600 9,600 61,200 8,900	24,200 2,000 20,900 S	
Computer and information sciences	84,800	76,900	70,000	6,900	68,600	8,300	
Mathematics and statistics	25,600	22,200	18,400	3,800	17,500	4,700	
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	35,700 19,800 6,600 7,000 2,300	28,100 14,800 5,600 5,700 2,000	22,400 12,100 4,700 3,800 1,900	5,700 2,700 900 1,900 S	22,100 11,900 4,700 3,700 1,900	6,000 2,900 900 2,000 S	
Psychology	153,000	122,800	96,600	26,200	90,900	31,800	
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	232,300 42,100 69,100 74,000 47,100	189,800 35,400 53,300 63,200 38,000	154,200 32,300 41,000 49,600 31,300	35,600 3,100 12,300 13,600 6,700	148,400 31,600 39,600 47,400 29,900	41,400 3,900 13,700 15,800 8,100	
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	112,300 3,100 10,600 16,300 35,800 6,600 2,300 24,800 12,900	98,400 2,900 8,800 15,300 30,800 6,100 1,900 22,300 10,200	89,000 2,500 8,200 14,500 27,700 5,500 1,400 19,700 9,300	9,400 500 S S 3,100 600 S 2,600 S	88,200 2,400 8,200 14,500 27,300 5,500 1,400 19,600 9,200	10,200 500 \$ \$ 3,500 600 \$ 2,700 1,000	
Health	143,300	126,800	113,000	13,800	107,400	19,400	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Category is based on a typical work week of 35 or more hours counting all jobs held during reference week. Employed graduates who worked 35 or more hours per week, counting all jobs, are classified as full time; all other employed graduates are classified as part time.

^b Category is based on number of hours usually worked during a typical week on principal job. Employed graduates who worked 35 or more hours per week on principal job are classified as full time and all other employed graduates are classified as part time.

TABLE 36. Selected employment characteristics of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			Employed					
	All		Counting	g all jobs ^a	Principa	job only ^b		
Major field	recipients	Total	Full time	Part time	Full time	Part time		
All fields	246,700	214,400	185,700	28,700	181,600	32,800		
Sciences	117,000	98,500	82,000	16,500	79,900	18,600		
Biological, agricultural, and environmental life sciences	16,800	14,200	12,200	2,000	11,900	2,300		
Agricultural/food sciences	2,900	2,700	2,500	S	2,400	S		
Biological sciences	12,100	10,100	8,500	1,700	8,300	1,900		
Environmental life sciences	1,800	1,300	1,200	S	1,200	S		
Computer and information sciences	27,200	21,000	18,400	S	18,400	S		
Mathematics and statistics	5,900	4,700	3,700	1,000	3,600	1,100		
Physical and related sciences	9,600	8,400	7,400	1,000	7,100	1,300		
Chemistry, except biochemistry	3,800	3,300	2,900	S	2,900	S		
Earth/atmospheric/ocean sciences	2,600	2,500	2,300	S	2,300	S		
Physics/astronomy	2,700	2,300	1,800	S	1,700	600		
Other physical sciences	S	S	S	S	S	S		
Psychology	32,000	29,900	24,400	5,500	23,500	6,400		
Social and related sciences	25,500	20,400	16,000	4,400	15,400	5,000		
Economics	3,900	3,300	2,200	1,100	2,200	1,100		
Political and related sciences	7,500	6,100	5,500	S	5,500	S		
Sociology/anthropology	5,500	4,200	2,900	1,200	2,800	1,400		
Other social sciences	8,700	6,800	5,300	1,500	4,900	1,900		
Engineering	47,000	41,500	36,600	4,900	36,400	5,100		
Aerospace/aeronautical/astronautical engineering	1,100	1,100	900	S	900	S		
Chemical engineering	1,900	1,600	1,400	S	1,400	S		
Civil/architectural engineering	6,000	5,600	5,200	S	5,200	S		
Electrical/computer engineering	16,100	14,000	11,700	2,300	11,600	2,400		
Industrial engineering	3,700	3,400	3,200	S	3,200	S		
Materials/metallurgical engineering	1,900	1,600	S	S	S	S		
Mechanical engineering	6,000	5,200	4,700	S	4,700	S		
Other engineering	10,300	9,000	8,000	S	8,000	S		
Health	82,700	74,400	67,100	S	65,300	9,100		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Category is based on a typical work week of 35 or more hours counting all jobs held during reference week. Employed graduates who worked 35 or more hours per week, counting all jobs, are classified as full time; all other employed graduates are classified as part time.

^b Category is based on number of hours usually worked during a typical week on principal job. Employed graduates who worked 35 or more hours per week on principal job are classified as full time and all other employed graduates are classified as part time.

TABLE 37. Labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All		In labor force		
Major field	recipients	Total	Employed	Unemployed	Not in labor force
All fields	937,700	813,700	768,900	44,800	124,000
Sciences	682,200	579,500	543,700	35,800	102,700
Biological, agricultural, and environmental life sciences	150,700	109,900	103,900	6,000	40,900
Computer and information sciences	84,800	80,900	76,900	4,000	S
Mathematics and statistics	25,600	23,200	22,200	S	2,400
Physical and related sciences	35,700	29,800	28,100	1,700	6,000
Psychology	153,000	131,900	122,800	9,100	21,100
Social sciences	232,300	203,800	189,800	14,000	28,400
Engineering	112,300	104,600	98,400	6,200	7,700
Health	143,300	129,600	126,800	S	13,700

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 38. Labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All		In labor force				
Major field	recipients	Total	Employed	Unemployed ^a	Not in labor force		
All fields	246,700	225,800	214,400	11,400	20,900		
Sciences	117,000	104,300	98,500	5,800	12,600		
Biological, agricultural, and environmental life sciences	16,800	14,600	14,200	S	2,200		
Computer and information sciences	27,200	24,100	21,000	3,200	S		
Mathematics and statistics	5,900	4,800	4,700	S	1,000		
Physical and related sciences	9,600	8,800	8,400	S	800		
Psychology	32,000	30,500	29,900	S	S		
Social sciences	25,500	21,500	20,400	1,100	4,100		
Engineering	47,000	43,800	41,500	2,300	3,200		
Health	82,700	77,700	74,400	S	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 39. Labor force status of 2001 and 2002 S&E bachelor's degree recipients not studying full time, by major field of degree: October 2003

	Not studying		In labor force			
Major field	full time	Total	Employed	Unemployed ^a	Not in labor force	
All fields	869,900	750,900	708,200	42,700	119,000	
Sciences	631,200	531,900	497,900	34,000	99,300	
Biological, agricultural, and environmental life sciences	143,100	102,200	96,600	5,600	40,800	
Computer and information sciences	77,200	73,900	70,100	3,700	S	
Mathematics and statistics	23,200	21,000	20,000	S	2,200	
Physical and related sciences	33,800	28,000	26,500	1,600	5,800	
Psychology	137,200	117,800	109,300	8,400	19,400	
Social sciences	216,700	189,000	175,400	13,600	27,700	
Engineering	102,900	95,500	89,500	5,900	7,400	
Health	135,800	123,500	120,700	S	12,400	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 40. Labor force status of 2001 and 2002 S&E master's degree recipients not studying full time, by major field of degree: October 2003

	Not studying		In labor force		
Major field	full time	Total	Employed	Unemployed ^a	Not in labor force
All fields	237,700	217,300	206,000	11,200	20,400
Sciences	110,800	98,500	92,800	5,700	12,200
Biological, agricultural, and environmental life sciences	15,800	13,700	13,200	S	2,200
Computer and information sciences	26,000	22,900	19,800	3,100	S
Mathematics and statistics	5,500	4,500	4,400	S	1,000
Physical and related sciences	9,200	8,400	8,000	S	800
Psychology	29,900	28,700	28,100	S	S
Social sciences	24,400	20,400	19,300	S	4,000
Engineering	45,500	42,300	40,000	2,200	3,200
Health	81,500	76,500	73,200	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 41. Labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

Major field and sex Total Employed Unemployed Not in labor force		All		In labor force			
Sciences 682 200 579,500 543,700 35,800 102,700 Male 298,600 257,000 240,200 16,800 41,600 Female 383,600 322,500 303,400 19,100 61,100 Biological, agricultural, and environmental life sciences 150,700 109,900 103,900 6,000 40,900 Male 61,600 42,700 63,400 3,800 21,900 Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S Female Female 24,700 22,400 21,700 S S S Male 13,800 12,400 11,800 S 1,400 S 1,400 Female 11,800 10,800 10,400 S 1,000 S 2,900 E 1,000 S 2,900	Major field and sex	recipients	Total	Employed	Unemployed ^a	Not in labor force	
Male Female 298,600 257,000 240,200 16,800 41,600 Female 383,600 322,500 303,400 19,100 61,100 Biological, agricultural, and environmental life sciences 150,700 109,900 103,900 6,000 40,900 Male 61,600 42,700 40,500 S 18,900 Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S Female 24,700 22,400 21,700 S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 16,800 13,700 13,100 70 3,100	All fields	937,700	813,700	768,900	44,800	124,000	
Female 383,600 322,500 303,400 19,100 61,100 Biological, agricultural, and environmental life sciences 150,700 109,900 103,900 6,000 40,900 Male 61,600 42,700 40,500 S 18,900 Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S S Female 24,700 22,400 21,700 S S 2,400 Malte 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100	Sciences	682,200	579,500	543,700	35,800	102,700	
Biological, agricultural, and environmental life sciences 150,700 109,900 103,900 6,000 40,900 Male 61,600 42,700 40,500 S 18,900 Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S S Female 24,700 22,400 21,700 S S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100	Male	298,600	257,000	240,200	16,800	41,600	
Male 61,600 42,700 40,500 S 18,900 Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S Female 24,700 22,400 21,700 S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300	Female	383,600	322,500	303,400	19,100	61,100	
Female 89,200 67,200 63,400 3,800 21,900 Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S Female 24,700 22,400 21,700 S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,800 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S S Female 114,200	Biological, agricultural, and environmental life sciences	150,700	109,900	103,900	6,000	40,900	
Computer and information sciences 84,800 80,900 76,900 4,000 S Male 60,100 58,500 55,300 3,300 S Female 24,700 22,400 21,700 S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203	Male	61,600	42,700	40,500	S	18,900	
Male Female 60,100 58,500 55,300 3,300 S S S Female 24,700 22,400 22,400 21,700 S S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 11,800 11,800 11,800 S 1,400 S 1,400 S 1,400 S 1,400 S 1,400 S 1,400 S 1,000 S 2,900 S 2,900 S 1,000 S 2,900 S 3,100 S 3,100 S 2,900 S 2,900 S 3,100 S 3,100 S 2,900 S 3,100 S 3,100 S 2,900 S 3,100 S 3,100 S 3,100 S 3,100 S 2,900 S 3,100 S 3,1	Female	89,200	67,200	63,400	3,800	21,900	
Female 24,700 22,400 21,700 S S Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800	Computer and information sciences	84,800	80,900	76,900	4,000		
Mathematics and statistics 25,600 23,200 22,200 S 2,400 Male 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 <t< td=""><td>Male</td><td>60,100</td><td>58,500</td><td>55,300</td><td>3,300</td><td></td></t<>	Male	60,100	58,500	55,300	3,300		
Male Female 13,800 12,400 11,800 S 1,400 Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 </td <td>Female</td> <td>24,700</td> <td>22,400</td> <td>21,700</td> <td>S</td> <td>S</td>	Female	24,700	22,400	21,700	S	S	
Female 11,800 10,800 10,400 S 1,000 Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 <td>Mathematics and statistics</td> <td>25,600</td> <td>23,200</td> <td>22,200</td> <td></td> <td>2,400</td>	Mathematics and statistics	25,600	23,200	22,200		2,400	
Physical and related sciences 35,700 29,800 28,100 1,700 6,000 Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Male	13,800	12,400	11,800	S	1,400	
Male 18,900 16,000 15,100 S 2,900 Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Female	11,800	10,800	10,400	S	1,000	
Female 16,800 13,700 13,100 700 3,100 Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Physical and related sciences	35,700	29,800	28,100	1,700	6,000	
Psychology 153,000 131,900 122,800 9,100 21,100 Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Male	18,900	16,000	15,100	S		
Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Female	16,800	13,700	13,100	700	3,100	
Male 38,800 33,300 30,700 S S Female 114,200 98,600 92,000 6,600 15,600 Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Psychology	153,000	131,900	122,800	9,100	21,100	
Social sciences 232,300 203,800 189,800 14,000 28,400 Male 105,300 94,100 87,000 7,100 11,300 Female 126,900 109,800 102,900 6,900 17,200 Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Male	38,800	33,300	30,700	S	S	
Male Female 105,300 109,800 109,800 102,900 6,900 17,200 Engineering Male Engineering Male Female 112,300 104,600 98,400 6,200 7,700 6,200 7,700 6,200 7,700 7,	Female	114,200	98,600	92,000	6,600	15,600	
Female 126,900 109,800 102,900 6,900 17,200 Engineering Male 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Social sciences		•				
Engineering 112,300 104,600 98,400 6,200 7,700 Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Male	•		•	,	·	
Male 88,300 83,200 78,500 4,700 5,100 Female 24,000 21,400 19,900 1,500 2,600	Female	126,900	109,800	102,900	6,900	17,200	
Female 24,000 21,400 19,900 1,500 2,600	Engineering		•	•	•		
10000	Male				•		
1/2 200 120 600 126 900 5 12 700	Female	24,000	21,400	19,900	1,500	2,600	
	Health	143,300	129,600	126,800	S	13,700	
Male 20,500 18,700 S S	Male						
Female 122,800 110,900 108,500 S 11,900	Female	122,800	110,900	108,500	S	11,900	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 42. Labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

	All		In labor force			
Major field and sex	recipients	Total Employed		Unemployed ^a	Not in labor force	
All fields	246,700	225,800	214,400	11,400	20,900	
Sciences	117,000	104,300	98,500	5,800	12,600	
Male	54,200	49,200	46,600	2,500	5,000	
Female	62,800	55,200	51,900	3,300	7,600	
Biological, agricultural, and environmental life sciences	16,800	14,600	14,200	S	2,200	
Male	7,400	6,300	6,200	S	S	
Female	9,400	8,300	7,900	S	1,100	
Computer and information sciences	27,200	24,100	21,000	3,200	S	
Male	17,000	15,900	14,300	S	S	
Female	10,200	8,300	6,600	S	S	
Mathematics and statistics	5,900	4,800	4,700	S	1,000	
Male	3,600	3,000	2,900	S	S	
Female	2,300	1,800	1,800	S	S	
Physical and related sciences	9,600	8,800	8,400	S	800	
Male	6,200	5,700	5,400	S	S	
Female	3,400	3,200	3,000	S	S	
Psychology	32,000	30,500	29,900	S	S	
Male	8,400	8,200	8,200	S	S	
Female	23,500	22,300	21,700	S	S	
Social sciences	25,500	21,500	20,400	1,100	4,100	
Male	11,600	10,200	9,500	S	1,400	
Female	14,000	11,300	10,900	S	2,600	
Engineering	47,000	43,800	41,500	2,300	3,200	
Male	37,800	35,400	33,700	1,700	2,400	
Female	9,200	8,400	7,800	S	900	
Health	82,700	77,700	74,400	S	S	
Male	18,400	18,400	18,400	S	S	
Female	64,300	59,300	56,000	S	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a The unemployed are those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 43. Labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

	All				
Major field and race/ethnicity	recipients	Total	In labor force Employed	Unemployed ^a	Not in labor force
All science and engineering fields	937,700	813,700	768,900	44,800	124,000
Sciences	682,200	579,500	543,700	35,800	102,700
Asian	92,400	71,700	67,400	4,300	20,700
Underrepresented minority	111,400	98,100	89,900	8,200	13,400
White, non-Hispanic	457,600	392,000	370,200	21,800	65,600
Other	20,800	17,800	16,200	S	S
Biological, agricultural, and environmental life sciences	150,700	109,900	103,900	6,000	40,900
Asian	23,500	14,100	13,400	S	9,300
Underrepresented minority	19,400	14,900	13,500	S	4,500
White, non-Hispanic	102,400	77,500	74,000	3,600	24,900
Other	5,400	S	S	S	S
Computer and information sciences	84,800	80,900	76,900	4,000	S
Asian	27,500	25,300	24,100	S	S
Underrepresented minority	11,700	11,400	10,100	S	S
White, non-Hispanic	43,000	41,600	40,100	S	S
Other	S	S	S	S	S
Mathematics and related sciences	25,600	23,200	22,200	S	2,400
Asian	4,400	3,600	3,300	S	S
Underrepresented minority	2,400	2,200	2,100	S	S
White, non-Hispanic	17,800	16,500	16,000	S	1,400
Other	S	S	S	S	S
Physical and related sciences	35,700	29,800	28,100	1,700	6,000
Asian	4,200	3,200	2,800	S	S
Underrepresented minority	3,900	3,100	3,000	S	800
White, non-Hispanic	26,500	22,500	21,400	1,100	4,000
Other	1,100	1,000	900	S	S
Psychology	153,000	131,900	122,800	9,100	21,100
Asian	S	S	S	S	S
Underrepresented minority	31,000	27,600	25,800	S	3,400
White, non-Hispanic	110,800	93,800	86,400	S	17,000
Other	S	S	S	S	S
Social and related sciences	232,300	203,800	189,800	14,000	28,400
Asian	25,000	18,300	16,600	S	6,700
Underrepresented minority	43,000	38,900	35,300	3,500	4,100
White, non-Hispanic	157,100	140,000	132,300	7,700	17,100
Other	7,200	6,700	5,600	S	S
Engineering	112,300	104,600	98,400	6,200	7,700
Asian	23,300	21,000	18,800	S	2,300
Underrepresented minority	13,500	12,600	11,900	700	900
White, non-Hispanic	71,400	67,100	64,000	3,100	4,300
Other	4,100	3,800	3,600	S	S

TABLE 43. Labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity. October 2003

	All				
Major field and race/ethnicity	recipients	Total	Employed	Unemployed ^a	Not in labor force
Health	143,300	129,600	126,800	S	13,700
Asian	S	S	S	S	S
Underrepresented minority	23,200	21,100	20,200	S	S
White, non-Hispanic	108,800	97,500	95,700	S	11,300
Other	S	S	S	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Underrepresented minority race/ethnicity category includes American Indian or Alaska Native, black, and Hispanic. "Other" race/ethnicity includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

^a Those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 44. Labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force	_	
Major field and race/ethnicity	recipients	Total	Employed	Unemployed ^a	Not in labor force
All science and engineering fields	246,700	225,800	214,400	11,400	20,900
Sciences	117,000	104,300	98,500	5,800	12,600
Asian	37,100	31,400	28,000	3,400	5,700
Underrepresented minority	12,900	12,000	11,400	S	900
White, non-Hispanic	64,200	58,500	56,900	1,700	5,700
Other	2,800	2,400	2,300	S	S
Biological, agricultural, and environmental life sciences	16,800	14,600	14,200	S	2,200
Asian	3,600	2,900	2,700	S	S
Underrepresented minority	1,300	1,200	1,100	S	S
White, non-Hispanic	11,300	10,100	9,900	S	1,300
Other	S	S	S	S	S
Computer and information sciences	27,200	24,100	21,000	3,200	S
Asian	20,600	18,200	15,600	S	S
Underrepresented minority	1,500	1,400	1,100	S	S
White, non-Hispanic	4,800	4,400	4,200	S	S
Other	S	S	S	S	S
Mathematics and related sciences	5,900	4,800	4,700	S	1,000
Asian	2,900	2,200	2,100	S	S
Underrepresented minority	400	400	400	S	S
White, non-Hispanic	2,500	2,300	2,200	S	S
Other	S	S	S	S	S
Physical and related sciences	9,600	8,800	8,400	S	800
Asian	2,900	2,500	2,300	S	S
Underrepresented minority	900	800	800	S	S
White, non-Hispanic	5,400	5,100	5,000	S	S
Other	S	S	S	S	S
Psychology	32,000	30,500	29,900	S	S
Asian	S	S	S	S	S
Underrepresented minority	5,100	5,000	4,800	S	S
White, non-Hispanic	23,700	22,300	21,900	S	S
Other	S	S	S	S	S
Social and related sciences	25,500	21,500	20,400	1,100	4,100
Asian	4,300	2,900	2,500	S	S
Underrepresented minority	3,700	3,300	3,200	S	S
White, non-Hispanic	16,500	14,400	13,800	S	2,100
Other	S	S	S	S	S
Engineering	47,000	43,800	41,500	2,300	3,200
Asian	23,900	21,900	20,400	S	2,000
Underrepresented minority	2,900	2,800	2,700	S	S
White, non-Hispanic	18,900	17,900	17,600	S	1,000
Other	1,300	1,200	S	S	S

TABLE 44. Labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force		
Major field and race/ethnicity	recipients	Total	Employed	Unemployed ^a	Not in labor force
Health	82,700	77,700	74,400	S	S
Asian	S	S	S	S	S
Underrepresented minority	8,200	7,700	7,700	S	S
White, non-Hispanic	68,100	63,500	60,900	S	S
Other	S	S	S	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Underrepresented minority race/ethnicity category includes American Indian or Alaska Native, black, and Hispanic. "Other" race/ethnicity includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race. Estimates are from a sample survey of college graduates who received bachelor's or master's degrees in science or engineering fields in 2001 or 2002; estimates may differ from degree counts presented in other Science Resources Statistics publications.

^a Those who were not working on October 1 and who were seeking work or who were on layoff from a job.

TABLE 45. Relation of occupation to field of degree among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		S&E	occupation ^a	
Major field	All employed	Occupation in same broad field as degree ^a	Occupation in different broad S&E or S&E-related field than degree ^b	Non-S&E occupation
All fields	768,900	273,200	74,800	420,900
Sciences	543,700	98,100	62,100	383,500
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	103,900 11,500 82,000 10,300	26,100 1,900 22,300 1,900	26,100 2,200 20,500 3,400	51,600 7,400 39,200 5,000
Computer and information sciences	76,900	38,900	S	35,100
Mathematics and statistics	22,200	3,100	3,400	15,600
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	28,100 14,800 5,600 5,700 2,000	11,800 7,100 2,100 2,300 S	6,500 3,900 1,000 1,400 S	9,800 3,800 2,500 2,000 1,500
Psychology	122,800	S	12,600	105,900
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	189,800 35,400 53,300 63,200 38,000	14,000 2,900 5,400 3,600 S	10,500 2,200 S 3,900 3,200	165,400 30,300 46,600 55,700 32,800
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	98,400 2,900 8,800 15,300 30,800 6,100 1,900 22,300 10,200	67,200 2,100 6,800 13,100 17,000 3,500 1,500 16,900 6,300	11,600 S S S 7,600 S S S S	19,600 700 1,500 2,100 6,200 2,200 S 4,600 2,200
Health	126,800	107,900	S	17,800

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTE: Detail may not add to total because of rounding.

^a S&E occupations include postsecondary educators. S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^b Comparisons between occupation and degree field were done at broad field level only. For example, among people with chemistry bachelor's degrees working in physical science occupations, these occupations may be in chemistry or in another physical science field. Comparisons are between field of 2001 or 2002 S&E bachelor's degree and principal job in October 2003.

TABLE 46. Relation of occupation to field of degree among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

-		S&E	occupation ^a	
Major field	All employed	Occupation in same broad field as degree ^a	Occupation in different broad S&E or S&E-related field than degree ^b	Non-S&E occupation
All fields	214,400	131,700	24,800	57,900
Sciences	98,500	45,200	12,000	41,300
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	14,200 2,700 10,100 1,300	7,900 1,700 5,800 S	3,200 S 2,100 S	3,100 S 2,200 S
Computer and information sciences	21,000	12,100	2,900	6,000
Mathematics and statistics	4,700	2,500	S	1,100
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	8,400 3,300 2,500 2,300 S	5,300 2,100 1,500 1,600 S	1,600 S S S S	1,500 S S S S
Psychology	29,900	12,400	S	16,300
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	20,400 3,300 6,100 4,200 6,800	5,000 1,400 S 1,400 S	2,100 S S S S	13,300 1,500 4,500 2,400 4,900
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	41,500 1,100 1,600 5,600 14,000 3,400 1,600 5,200 9,000	28,200 900 1,200 5,100 7,800 2,100 S 4,300 5,500	8,800 S S S 4,800 S S S S	4,500 S S S S S S S S
Health	74,400	58,400	S	12,100

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTE: Detail may not add to total because of rounding.

^a S&E occupations include postsecondary educators. S&E-related occupations include diagnosing/treating practitioners, registered nurses, pharmacists, dieticians, therapists, physician assistants, health technologists and technicians, health and related sciences postsecondary educators and other health occupations. For details, see technical notes.

^b Comparisons between occupation and degree field were done at broad field level only. For example, among people with chemistry bachelor's degrees working in physical science occupations, these occupations may be in chemistry or in another physical science field.

Comparisons are between field of 2001 or 2002 S&E master's degree and principal job in October 2003.

TABLE 47. Satisfaction with selected job factors among employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	Very satisfied or somewhat satisfied with job factor									
			Contri-	Degree of			Level of		Opportunitie	
	All		bution to	independ-		Job	responsi-		for advance	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	768,900	571,000	624,600	685,900	548,800	657,300	650,600	662,800	489,800	549,200
Sciences	543,700	388,500	419,700	476,900	363,700	451,600	448,200	463,300	329,100	363,700
Biological, agricultural, and environmental life sciences	103,900	72,600	87,900	93,700	74,800	87,700	90,500	86,900	64,100	69,400
Agricultural/food sciences	11,500	7,500	9,900	10,000	8,500	10,000	9,500	9,600	7,100	7,900
Biological sciences	82,000	57,800	69,700	75,300	59,100	69,400	72,600	68,200	51,000	55,300
Environmental life sciences	10,300	7,300	8,400	8,400	7,200	8,300	8,400	9,200	6,000	6,300
Computer and information sciences	76,900	60,100	56,200	67,900	55,900	63,500	64,000	64,800	50,600	58,000
Mathematics and statistics	22,200	17,400	16,900	19,500	15,500	18,700	18,600	19,500	16,000	16,400
Physical and related sciences	28,100	20,300	23,000	25,000	20,900	23,900	23,900	24,500	19,000	20,600
Chemistry, except biochemistry	14,800	10,700	12,400	13,300	11,400	13,000	12,800	13,100	10,100	11,100
Earth/atmospheric/ocean sciences	5,600	3,900	4,600	5,200	3,900	4,500	4,900	4,800	3,800	3,700
Physics/astronomy	5,700	4,100	4,600	5,000	4,400	5,100	4,900	5,000	4,300	4,400
Other physical sciences	2,000	1,600	1,400	1,600	1,100	1,400	1,400	1,600	900	1,300
Psychology	122,800	83,700	94,300	106,000	73,200	101,000	99,700	102,500	68,600	76,400
Social and related sciences	189,800	134,500	141,400	164,700	123,400	156,800	151,500	165,000	110,800	122,900
Economics	35,400	26,600	23,200	30,700	23,000	29,800	27,000	29,900	22,000	23,800
Political and related sciences	53,300	38,100	40,400	46,200	34,500	45,200	44,100	48,100	30,600	35,700
Sociology/anthropology	63,200	42,300	48,000	55,200	39,900	50,000	48,800	53,500	34,300	38,200
Other social sciences	38,000	27,500	29,700	32,600	26,000	31,900	31,700	33,500	23,900	25,300
Engineering	98,400	83,100	81,900	90,000	77,700	86,200	87,100	83,000	74,000	81,700
Aerospace/aeronautical/astronautical engineering	2,900	2,600	2,400	2,800	2,300	2,600	2,500	2,300	2,300	2,500
Chemical engineering	8,800	7,700	7,200	7,900	6,400	7,700	7,300	7,300	6,400	7,300
Civil/architectural engineering	15,300	13,400	13,900	14,300	12,600	14,000	14,000	13,300	13,000	13,500
Electrical/computer engineering	30,800	25,000	25,200	27,800	24,100	26,000	27,800	26,600	22,600	25,400
Industrial engineering	6,100	5,100	4,500	5,600	4,600	5,400	5,000	5,400	4,600	4,800
Materials/metallurgical engineering	1,900	1,400	1,600	1,500	1,500	1,600	1,700	1,700	S	1,400
Mechanical engineering	22,300	19,100	18,800	21,100	17,500	19,600	19,700	18,500	16,500	18,500
Other engineering	10,200	8,900	8,300	9,100	8,600	9,400	8,800	8,000	7,600	8,300
Health	126,800	99,400	123,000	119,000	107,500	119,600	115,300	116,500	86,800	103,800

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Column detail may not add to total because of rounding. Respondents were asked to rate their satisfaction with each job factor for their principal job held during week of October 1, 2003 using categories of very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. Respondents may have reported "very satisfied" or "somewhat satisfied" for more than one job factor.

TABLE 48. Satisfaction with selected job factors among employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Very satisfied or somewhat satisfied with job factor								
			Contri-	Degree of			Level of		Opportunitie	S
	All		bution to	independ-	Intellectual	Job	responsi-		for advance	-
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	214,400	174,400	194,200	199,200	180,000	183,600	192,200	190,800	146,200	163,000
Sciences	98,500	75,000	87,600	91,400	82,000	82,300	88,000	86,500	64,800	72,600
Biological, agricultural, and environmental life sciences	14,200	11,100	12,400	13,200	11,300	11,600	12,600	12,300	9,200	10,400
Agricultural/food sciences	2,700	2,600	2,600	2,600	2,500	2,200	2,600	2,400	1,800	2,000
Biological sciences	10,100	7,400	8,600	9,300	7,600	8,100	8,700	8,700	6,200	7,200
Environmental life sciences	1,300	1,100	1,100	1,300	1,200	1,300	1,200	1,200	1,300	1,200
Computer and information sciences	21,000	16,000	18,400	19,000	17,700	17,000	18,300	18,400	14,300	16,700
Mathematics and statistics	4,700	3,700	4,000	4,200	3,900	3,700	4,100	3,700	3,000	3,600
Physical and related sciences	8,400	6,500	7,400	7,900	7,500	6,800	7,500	7,300	5,700	6,200
Chemistry, except biochemistry	3,300	2,200	2,800	3,000	2,800	2,400	2,600	2,700	1,800	2,200
Earth/atmospheric/ocean sciences	2,500	2,100	2,200	2,300	2,200	2,200	2,200	2,200	1,800	2,000
Physics/astronomy	2,300	1,700	2,000	2,100	2,100	1,900	2,200	2,100	1,800	1,700
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	29,900	22,200	28,000	28,500	26,000	26,300	28,200	27,100	19,600	21,300
Social and related sciences	20,400	15,500	17,300	18,700	15,500	16,900	17,400	17,600	12,900	14,400
Economics	3,300	2,700	2,600	3,000	2,700	3,000	2,800	2,800	2,300	2,400
Political and related sciences	6,100	5,000	5,100	5,700	4,500	5,500	5,400	5,300	4,100	4,800
Sociology/anthropology	4,200	3,200	3,700	3,800	3,200	3,500	3,400	3,600	2,700	2,700
Other social sciences	6,800	4,600	5,900	6,200	5,100	4,900	5,800	5,900	3,900	4,600
Engineering	41,500	35,000	35,200	39,000	35,900	34,100	36,300	36,100	31,100	34,400
Aerospace/aeronautical/astronautical engineering	1,100	900	1,000	1,000	900	900	900	900	800	800
Chemical engineering	1,600	1,400	1,400	1,500	1,400	1,300	1,500	1,300	1,200	1,300
Civil/architectural engineering	5,600	4,700	4,700	5,100	4,900	4,800	5,100	5,200	4,500	4,600
Electrical/computer engineering	14,000	11,900	12,300	13,700	12,600	11,400	12,100	12,600	10,800	12,000
Industrial engineering	3,400	2,900	2,700	3,300	3,000	2,800	2,900	3,000	2,400	2,800
Materials/metallurgical engineering	1,600	S	S	S	S	S	S	S	S	S
Mechanical engineering	5,200	4,300	4,600	4,900	4,500	4,300	4,700	4,500	3,800	4,300
Other engineering	9,000	7,600	7,200	8,100	7,400	7,300	7,800	7,200	6,300	7,400
Health	74,400	64,400	71,400	68,800	62,100	67,100	67,800	68,200	50,300	56,100

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Column detail may not add to total because of rounding. Respondents were asked to rate their satisfaction with each job factor for their principal job held during week of October 1, 2003 using categories of very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. Respondents may have reported "very satisfied" or "somewhat satisfied" for more than one job factor.

TABLE 49. Relation of job to highest degree among employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree:

October 2003

	All			
Major field	employed	Closely related	Somewhat related	Not related
All fields	768,900	373,700	207,000	188,200
Sciences	543,700	212,900	164,000	166,700
Biological, agricultural, and environmental life sciences	103,900	53,600	24,100	26,200
Agricultural/food sciences	11,500	6,700	2,500	2,300
Biological sciences	82,000	41,900	18,600	21,600
Environmental life sciences	10,300	5,000	3,000	2,300
Computer and information sciences	76,900	37,600	26,100	13,200
Mathematics and statistics	22,200	11,100	6,600	4,400
Physical and related sciences	28,100	16,300	5,700	6,100
Chemistry, except biochemistry	14,800	9,000	3,100	2,700
Earth/atmospheric/ocean sciences	5,600	3,200	1,000	1,300
Physics/astronomy	5,700	3,500	1,200	1,100
Other physical sciences	2,000	S	S	S
Psychology	122,800	38,800	41,700	42,200
Social and related sciences	189,800	55,600	59,700	74,600
Economics	35,400	10,200	14,900	10,300
Political and related sciences	53,300	13,000	14,000	26,200
Sociology/anthropology	63,200	17,700	20,800	24,700
Other social sciences	38,000	14,600	10,000	13,400
Engineering	98,400	56,400	31,700	10,200
Aerospace/aeronautical/astronautical engineering	2,900	1,600	900	400
Chemical engineering	8,800	3,900	3,700	1,100
Civil/architectural engineering	15,300	11,300	3,300	S
Electrical/computer engineering	30,800	17,200	10,400	3,200
Industrial engineering	6,100	2,700	2,200	1,100
Materials/metallurgical engineering	1,900	S	S	S
Mechanical engineering	22,300	12,700	7,300	2,400
Other engineering	10,200	5,700	3,300	1,200
Health	126,800	104,400	11,200	11,200

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Questionnaire item is "To what extent was your work on your principal job related to your highest degree? Was it..."

TABLE 50. Relation of job to highest degree among employed 2001 and 2002 S&E master's degree recipients, by major field of degree:

October 2003

	All			
Major field	employed	Closely related	Somewhat related	Not related
All fields	214,400	164,500	36,700	13,200
Sciences	98,500	70,900	19,700	8,000
Biological, agricultural, and environmental life sciences	14,200	10,900	2,100	1,200
Agricultural/food sciences	2,700	2,200	S	S
Biological sciences	10,100	7,500	1,400	1,200
Environmental life sciences	1,300	1,100	S	S
Computer and information sciences	21,000	15,200	4,700	S
Mathematics and statistics	4,700	3,400	1,100	S
Physical and related sciences	8,400	6,500	1,400	S
Chemistry, except biochemistry	3,300	2,900	S	S
Earth/atmospheric/ocean sciences	2,500	1,500	S	S
Physics/astronomy	2,300	1,900	S	S
Other physical sciences	S	S	S	S
Psychology	29,900	24,100	4,200	S
Social and related sciences	20,400	10,800	6,300	3,300
Economics	3,300	2,000	1,200	S
Political and related sciences	6,100	2,700	2,100	1,300
Sociology/anthropology	4,200	2,700	800	S
Other social sciences	6,800	3,400	2,100	1,200
Engineering	41,500	29,800	9,200	2,500
Aerospace/aeronautical/astronautical engineering	1,100	800	S	S
Chemical engineering	1,600	1,200	300	S
Civil/architectural engineering	5,600	4,600	900	S
Electrical/computer engineering	14,000	10,700	2,300	S
Industrial engineering	3,400	2,100	1,100	S
Materials/metallurgical engineering	1,600	S	S	S
Mechanical engineering	5,200	3,300	1,700	S
Other engineering	9,000	5,900	2,400	S
Health	74,400	63,800	7,800	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Questionnaire item is "To what extent was your work on your principal job related to your highest degree? Was it..."

TABLE 51. Occupation of employed 2001 and 2002 S&E bachelor's degree recipients, by sex and race/ethnicity: October 2003

			_	Race/ethnicity						
			-		American					
		_			Indian/					
	All		Sex		Alaska	Black, non-		White, non-		
Occupation	employed	Male	Female	Asian	Native	Hispanic	Hispanic	Hispanic	Other ^a	
All occupations	768,900	337,100	431,700	91,300	4,400	60,000	57,500	529,900	25,800	
Scientists	146,800	91,000	55,800	31,000	S	6,600	8,900	95,900	3,900	
Biological, agricultural, and environmental life scientist	30,900	12,600	18,300	S	S	S	1,200	23,400	S	
Computer and information scientist	71,600	53,900	17,700	21,900	S	3,200	4,300	40,100	S	
Mathematical scientist	5,300	3,200	2,100	S	S	S	S	4,000	S	
Physical scientist	17,900	10,000	7,800	S	S	800	1,000	13,800	S	
Psychologist	4,800	S	S	S	S	S	S	S	S	
Social scientist	16,300	8,200	8,000	S	S	S	1,100	11,700	S	
Engineers	72,900	58,200	14,800	13,200	S	3,100	5,100	48,700	2,700	
Science and engineering-related occupations	188,900	45,800	143,100	14,800	S	14,800	9,900	139,400	8,800	
Health-related occupation	143,400	23,900	119,500	S	S	11,900	7,000	106,400	7,000	
S&E manager	5,600	1,400	S	S	S	S	S	4,000	S	
S&E precollege teacher	19,700	9,100	10,600	S	S	1,900	1,500	14,600	S	
S&E technician/technologist	17,600	10,700	6,900	S	S	S	900	12,500	S	
Other S&E-related occupation	2,700	S	S	S	S	S	S	S	S	
Non-science and engineering occupations	360,200	142,200	218,000	32,300	2,400	35,500	33,700	246,000	10,400	
Arts/humanities-related occupation	9,500	4,500	5,100	S	S	S	S	7,400	S	
Management-related occupation	41,100	22,500	18,600	6,200	S	3,400	3,800	25,700	S	
Non-S&E manager	1,800	S	S	S	S	S	S	S	S	
Non-S&E postsecondary teacher	5,100	S	3,200	S	S	S	S	3,700	S	
Non-S&E precollege/other teacher	40,900	7,800	33,000	S	S	4,500	5,000	28,200	S	
Sales/marketing occupation	58,400	28,600	29,800	6,700	S	4,000	5,100	40,900	S	
Social service-related occupation	45,300	8,600	36,600	S	S	8,100	5,500	28,100	S	
Other non-S&E occupation	158,100	66,600	91,600	15,500	S	14,000	12,100	111,100	4,500	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Scientists and engineers occupations include postsecondary education. For details, see technical notes.

S&E = science and engineering.

^a Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 52. Occupation of employed 2001 and 2002 S&E master's degree recipients, by sex and race/ethnicity: October 2003

				Race/ethnicity						
	All	S	Sex		American Indian/ Alaska	Black, non-		White, non-		
Occupation	employed	Male	Female	Asian	Native	Hispanic	Hispanic	Hispanic	Other ^a	
All occupations	214,400	98,700	115,700	51,800	S	12,000	9,000	135,300	5,500	
Scientists	69,700	40,000	29,700	28,600	S	2,700	2,800	32,700	2,600	
Biological, agricultural, and environmental life scientist	12,100	5,800	6,300	3,300	S	S	700	7,400	S	
Computer and information scientist	25,800	18,200	7,600	18,400	S	900	S	5,500	S	
Mathematical scientist	4,100	2,600	1,500	1,600	S	S	S	2,000	S	
Physical scientist	7,100	4,900	2,200	2,000	S	S	S	4,300	S	
Psychologist	12,700	4,300	8,400	S	S	S	S	9,100	S	
Social scientist	8,000	4,300	3,700	S	S	S	S	4,400	S	
Engineers	30,400	24,900	5,500	13,800	S	800	1,600	13,400	S	
Science and engineering-related occupations	68,800	16,300	52,500	5,400	S	3,300	1,600	58,100	S	
Health-related occupation	61,700	12,700	49,000	S	S	S	S	53,600	S	
S&E manager	1,600	S	S	S	S	S	S	S	S	
S&E precollege teacher	2,800	1,200	1,700	S	S	S	S	1,700	S	
S&E technician/technologist	2,400	S	S	S	S	S	S	S	S	
Other S&E-related occupation	S	S	S	S	S	S	S	S	S	
Non-science and engineering occupations	45,500	17,500	28,000	4,100	S	5,200	3,000	31,000	S	
Arts/humanities-related occupation	1,300	S	S	S	S	S	S	S	S	
Management-related occupation	7,300	4,000	3,300	S	S	1,000	S	4,700	S	
Non-S&E manager	S	S	S	S	S	S	S	S	S	
Non-S&E postsecondary teacher	2,100	S	S	S	S	S	S	S	S	
Non-S&E precollege/other teacher	3,600	S	2,300	S	S	S	S	1,800	S	
Sales/marketing occupation	3,200	S	2,200	S	S	S	S	2,400	S	
Social service-related occupation	14,300	2,600	11,700	S	S	1,600	1,000	10,500	S	
Other non-S&E occupation	11,900	5,700	6,200	S	S	1,000	1,000	8,800	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Scientists and engineers occupations include postsecondary education. For details, see technical notes.

S&E = science and engineering.

^a Includes Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 53. Occupation of employed 2001 and 2002 S&E bachelor's degree recipients, by age: October 2003

	All	Less than 25	25-29	30-34	35 years
Occupation	employed	years	years	years	or more
All occupations	768,900	368,800	260,400	58,400	81,300
Scientists	146,800	74,000	52,000	12,100	8,700
Biological, agricultural, and environmental life scientist	30,900	17,000	11,400	S	S
Computer and information scientist	71,600	29,500	28,100	8,400	5,500
Mathematical scientist	5,300	2,700	2,100	S	S
Physical scientist	17,900	10,900	4,800	900	1,200
Psychologist	4,800	S	S	S	S
Social scientist	16,300	10,800	3,800	S	S
Engineers	72,900	29,500	34,300	5,400	3,800
Science and engineering-related occupations	188,900	72,500	55,900	20,900	39,600
Health-related occupation	143,400	52,400	40,200	15,200	35,500
S&E manager	5,600	S	S	S	S
S&E precollege teacher	19,700	9,200	7,500	1,400	1,500
S&E technician/technologist	17,600	8,500	6,200	S	S
Other S&E-related occupation	2,700	2,100	S	S	S
Non-science and engineering occupations	360,200	192,700	118,300	20,100	29,200
Arts/humanities-related occupation	9,500	6,200	S	S	S
Management-related occupation	41,100	20,800	15,000	S	3,600
Non-S&E manager	1,800	S	S	S	S
Non-S&E postsecondary teacher	5,100	3,200	S	S	S
Non-S&E precollege/other teacher	40,900	23,800	10,300	S	4,700
Sales/marketing occupation	58,400	30,500	21,900	2,600	3,400
Social service-related occupation	45,300	21,700	12,900	3,900	6,800
Other non-S&E occupation	158,100	85,900	54,300	8,900	9,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Science and engineering fields include postsecondary education. For details, see technical notes.

TABLE 54. Occupation of employed 2001 and 2002 S&E master's degree recipients, by age: October 2003

	All	Less than 25	25-29	30-34	35 years
Occupation	employed	years	years	years	or more
All occupations	214,400	5,100	94,600	54,700	60,000
Scientists	69,700	1,200	34,200	19,500	14,700
Biological, agricultural, and environmental life scientist	12,100	S	4,900	3,300	3,700
Computer and information scientist	25,800	S	13,100	7,900	4,100
Mathematical scientist	4,100	S	1,800	1,500	700
Physical scientist	7,100	S	3,000	2,600	1,500
Psychologist	12,700	S	7,000	3,000	2,700
Social scientist	8,000	S	4,500	1,300	S
Engineers	30,400	1,200	17,600	7,300	4,200
Science and engineering-related occupations	68,800	S	26,100	17,600	23,500
Health-related occupation	61,700	S	22,800	16,100	21,300
S&E manager	1,600	S	S	S	S
S&E precollege teacher	2,800	S	1,100	S	S
S&E technician/technologist	2,400	S	1,700	S	S
Other S&E-related occupation	S	S	S	S	S
Non-science and engineering occupations	45,500	S	16,600	10,200	17,500
Arts/humanities-related occupation	1,300	S	S	S	S
Management-related occupation	7,300	S	3,000	1,600	2,600
Non-S&E manager	S	S	S	S	S
Non-S&E postsecondary teacher	2,100	S	S	S	S
Non-S&E precollege/other teacher	3,600	S	S	S	1,900
Sales/marketing occupation	3,200	S	S	S	S
Social service-related occupation	14,300	S	5,100	2,800	5,900
Other non-S&E occupation	11,900	S	4,500	2,900	4,400

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Science and engineering fields include postsecondary education. For details, see technical notes.

TABLE 55. Primary work activity of employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

Major field	All employed	Computer applications	Management, sales, adminis- tration	Research and development	Teaching	Other
All fields	768,900	71,300	237,700	146,600	85,200	228,100
Sciences	543,700	56,200	195,200	92,500	71,400	128,300
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences Computer and information sciences Mathematics and statistics Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy	103,900 11,500 82,000 10,300 76,900 22,200 28,100 14,800 5,600 5,700	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	29,300 4,700 22,100 2,500 21,600 5,800 6,000 2,600 1,500 1,100	35,000 2,700 28,700 3,600 9,700 2,800 10,800 6,500 1,900 2,200	12,000 S 9,600 S 4,100 7,500 4,800 2,300 900 1,300	24,800 2,700 19,600 2,500 7,200 2,800 5,100 2,800 1,000 600
Other physical sciences	2,000 122,800	S S	S 48,000	S 10,800	S 17,400	S 43,400
Psychology Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	189,800 35,400 53,300 63,200 38,000	11,000 2,400 3,300 S S	84,500 20,200 24,400 27,500 12,300	23,600 4,800 7,700 7,500 3,600	25,600 1,600 4,400 9,400 10,300	45,100 6,400 13,600 16,000 9,200
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	98,400 2,900 8,800 15,300 30,800 6,100 1,900 22,300 10,200	13,600 500 S S 8,000 600 S 1,700 1,600	25,700 500 2,500 5,400 6,100 2,500 \$ 6,000 2,500	44,300 1,200 3,600 7,300 13,600 1,900 S 11,900 3,600	3,600 S S S 1,400 S S S	11,200 600 2,000 1,800 1,600 900 \$ 1,900 2,000
Health	126,800	S	16,800	S	10,200	88,600

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.

S&E = science and engineering.

TABLE 56. Primary work activity of employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			Management,			
	All	Computer	sales, adminis-	Research and		
Major field	employed	applications	tration	development	Teaching	Other
All fields	214,400	24,100	34,100	55,700	23,600	77,000
Sciences	98,500	14,500	16,700	26,700	14,100	26,500
Biological, agricultural, and environmental life sciences	14,200	S	2,500	6,800	2,100	2,400
Agricultural/food sciences	2,700	S	S	1,300	S	S
Biological sciences	10,100	S	1,400	5,100	1,700	1,600
Environmental life sciences	1,300	S	S	S	S	S
Computer and information sciences	21,000	11,500	2,200	5,500	S	S
Mathematics and statistics	4,700	800	S	1,500	1,500	S
Physical and related sciences	8,400	S	S	5,200	1,300	S
Chemistry, except biochemistry	3,300	S	S	2,200	S	S
Earth/atmospheric/ocean sciences	2,500	S	S	1,300	S	S
Physics/astronomy	2,300	S	S	1,600	500	S
Other physical sciences	S	S	S	S	S	S
Psychology	29,900	S	4,200	3,600	4,700	17,100
Social and related sciences	20,400	1,100	6,700	4,100	3,800	4,700
Economics	3,300	S	900	1,000	S	S
Political and related sciences	6,100	S	2,300	S	S	1,900
Sociology/anthropology	4,200	S	1,200	1,000	S	900
Other social sciences	6,800	S	2,300	S	1,600	1,400
Engineering	41,500	7,300	7,500	22,300	1,500	2,900
Aerospace/aeronautical/astronautical engineering	1,100	S	S	700	S	S
Chemical engineering	1,600	S	S	1,000	S	S
Civil/architectural engineering	5,600	S	1,400	3,100	S	S
Electrical/computer engineering	14,000	4,300	S	7,500	S	S
Industrial engineering	3,400	S	1,200	1,400	S	S
Materials/metallurgical engineering	1,600	S	S	S	S	S
Mechanical engineering	5,200	S	800	3,200	S	S
Other engineering	9,000	S	2,600	4,100	S	S
Health	74,400	S	9,900	S	8,000	47,600

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.

S&E = science and engineering.

TABLE 57. Work-related training taken by employed 2001 and 2002 S&E bachelor's degree recipients, by occupation: October 2003

		Any	General		Training in	_
		type of work-	professional	Management	occupational	
Occupation	All employed	related training ^a	training	training	field	Other training
All occupations	768,900	431,200	160,400	105,200	399,900	45,800
Scientists ^b	146,800	65,900	23,900	12,300	59,300	5,200
Biological, agricultural, and environmental life scientist	30,900	12,600	4,800	S	11,500	S
Computer and information scientist	71,600	31,900	9,300	6,700	29,600	2,500
Mathematical scientist	5,300	2,500	1,300	S	2,400	S
Physical scientist	17,900	7,400	2,000	1,200	6,600	1,000
Psychologist	4,800	S	S	S	S	S
Social scientist	16,300	9,100	4,800	S	7,100	S
Engineers ^b	72,900	48,100	18,300	13,900	44,100	5,400
Science and engineering-related occupations	188,900	130,400	36,000	25,600	126,300	10,100
Health-related occupation	143,400	102,100	24,500	19,700	98,900	7,400
S&E manager	5,600	3,600	S	S	3,500	S
S&E precollege teacher	19,700	15,100	6,000	2,400	14,700	1,500
S&E technician/technologist	17,600	7,900	2,000	S	7,500	S
Other S&E-related occupation	2,700	1,700	S	S	1,700	S
Non-science and engineering occupations	360,200	186,800	82,200	53,400	170,100	25,100
Arts/humanities-related occupation	9,500	3,700	S	S	2,800	S
Management-related occupation	41,100	26,200	14,000	10,900	24,500	2,700
Non-S&E manager	1,800	S	S	S	S	S
Non-S&E postsecondary teacher	5,100	S	S	S	S	S
Non-S&E precollege/other teacher	40,900	26,300	8,600	4,100	25,900	2,800
Sales/marketing occupation	58,400	25,300	11,600	8,200	23,100	2,100
Social service-related occupation	45,300	35,100	12,300	9,900	32,600	7,800
Other non-S&E occupation	158,100	66,700	32,300	17,800	58,100	8,900

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Training was during the period October 1, 2002 to October 1, 2003.

S&E = science and engineering.

^a Respondents may have taken more than one type of work-related training, therefore detail will not add to total.

^b Scientists and engineers occupations include postsecondary education. For details, see technical notes.

TABLE 58. Work-related training taken by employed 2001 and 2002 S&E master's degree recipients, by occupation: October 2003

		Any	General		Training in	
		type of work-	professional	Management	occupational	
Occupation	All employed	related training ^a	training	training	field	Other training
All occupations	214,400	142,600	43,100	30,500	132,800	11,700
Scientists ^b	69,700	37,700	14,400	7,100	34,000	3,700
Biological, agricultural, and environmental life scientist	12,100	7,000	3,200	2,200	6,000	S
Computer and information scientist	25,800	12,500	4,100	2,100	11,600	S
Mathematical scientist	4,100	2,000	800	S	1,700	S
Physical scientist	7,100	3,800	1,700	S	3,400	S
Psychologist	12,700	9,000	2,200	S	8,600	S
Social scientist	8,000	3,500	2,400	S	2,800	S
Engineers ^b	30,400	17,800	6,000	5,600	15,700	1,600
Science and engineering-related occupations	68,800	54,600	12,000	7,900	53,000	S
Health-related occupation	61,700	49,700	9,700	6,500	48,800	S
S&E manager	1,600	S	S	S	S	S
S&E precollege teacher	2,800	2,100	S	S	1,900	S
S&E technician/technologist	2,400	S	S	S	S	S
Other S&E-related occupation	S	S	S	S	S	S
Non-science and engineering occupations	45,500	32,500	10,800	9,800	30,100	3,900
Arts/humanities-related occupation	1,300	S	S	S	S	S
Management-related occupation	7,300	4,800	2,300	3,000	4,000	S
Non-S&E manager	S	S	S	S	S	S
Non-S&E postsecondary teacher	2,100	S	S	S	S	S
Non-S&E precollege/other teacher	3,600	2,500	S	S	2,500	S
Sales/marketing occupation	3,200	S	S	S	S	S
Social service-related occupation	14,300	12,700	3,600	1,600	12,200	S
Other non-S&E occupation	11,900	7,600	2,000	2,300	7,100	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Training was during the period October 1, 2002 to October 1, 2003.

S&E = science and engineering.

^a Respondents may have taken more than one type of work-related training, therefore detail will not add to total.

^b Scientists and engineers occupations include postsecondary education. For details, see technical notes.

TABLE 59. Work-related training taken by employed 2001 and 2002 S&E bachelor's degree recipients, by employment sector: October 2003

Sector of employment	All employed	Any type of work- related training ^a	General professional training	Management training	Training in occupational field	Other training
All sectors	768,900	431,200	160,400	105,200	399,900	45,800
Educational institution	171,100	90,000	34,000	13,400	81,600	9,100
4-year college and university ^b	101,000	41,000	16,600	5,700	35,700	3,200
Other educational ^c	70,100	49,000	17,400	7,700	45,900	5,800
Government	87,100	57,500	25,900	15,100	55,300	7,400
Federal government	35,800	23,900	11,700	9,500	22,400	1,500
State or local government	51,200	33,600	14,100	5,600	32,900	5,900
Private industry and business (non-educational)	510,700	283,700	100,500	76,700	263,000	29,300
Private, for profit company ^d	392,800	207,100	77,400	56,700	191,400	21,400
Nonprofit organizations	92,200	66,100	20,300	18,900	62,200	6,000
Self-employed ^d	25,800	10,600	2,800	S	9,500	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Training was during the period October 1, 2002 to October 1, 2003.

S&E = science and engineering.

^a Respondents may have taken more than one type of work-related training, therefore, detail will not add to total.

^b Includes university-affiliated medical schools or research organizations.

^c Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

^d Persons reporting they were self-employed but in an incorporated business are classified as "private, for-profit."

TABLE 60. Work-related training taken by employed 2001 and 2002 S&E master's degree recipients, by employment sector: October 2003

		-				
Sector of employment	All employed	Any type of work- related training ^a	General professional training	Management training	Training in occupational field	Other training
All sectors	214,400	142,600	43,100	30,500	132,800	11,700
Educational institution 4-year college and university ^b Other educational ^c	62,700	34,900	12,300	4,200	32,700	2,100
	42,500	18,100	6,900	2,100	16,200	1,200
	20,200	16,800	5,400	2,100	16,500	S
Government Federal government State or local government	28,900	23,500	8,500	8,600	21,900	2,200
	12,200	9,600	4,300	3,900	8,700	1,300
	16,700	13,800	4,100	4,700	13,200	S
Private industry and business (non-educational) Private, for profit company ^d Nonprofit organizations Self-employed ^d	122,900	84,200	22,400	17,600	78,300	7,400
	94,700	60,800	17,100	13,100	56,200	6,000
	23,600	20,800	4,700	4,200	19,500	S
	4,500	2,600	S	S	2,600	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Detail may not add to total because of rounding. Training was during the period October 1, 2002 to October 1, 2003.

S&E = science and engineering.

^a Respondents may have taken more than one type of work-related training, therefore, detail will not add to total.

^b Includes university-affiliated medical schools or research organizations.

^c Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

^d Persons reporting they were self-employed but in an incorporated business are classified as "private, for-profit."

TABLE 61. Importance of selected job factors to employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

			(Considered jo	ob factor to be	very impo	rtant or som	ewhat impor	tant	
			Contri-	Degree of			Level of		Opportunitie	S
	All		bution to	independ-	Intellectual	Job	responsi-		for advance	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	768,900	745,100	705,900	741,200	756,500	749,700	737,900	721,900	745,700	749,400
Sciences	543,700	529,200	498,000	522,500	534,400	528,600	518,900	509,200	527,900	526,900
Biological, agricultural, and environmental life sciences	103,900	101,400	97,600	100,300	102,600	100,900	100,300	97,300	102,100	100,300
Agricultural/food sciences	11,500	11,300	10,500	11,200	11,400	11,500	11,500	10,600	11,300	11,300
Biological sciences	82,000	80,200	77,100	79,000	81,100	79,400	79,000	76,800	80,600	79,200
Environmental life sciences	10,300	10,000	10,000	10,100	10,100	10,000	9,800	9,900	10,200	9,900
Computer and information sciences	76,900	75,800	64,300	74,000	76,100	75,800	72,800	71,200	75,600	75,600
Mathematics and statistics	22,200	21,200	19,500	21,100	21,700	21,400	20,900	20,800	21,100	21,300
Physical and related sciences	28,100	27,400	25,400	26,500	27,600	27,200	26,500	26,500	27,200	27,100
Chemistry, except biochemistry	14,800	14,600	13,700	14,100	14,400	14,500	14,100	13,900	14,500	14,600
Earth/atmospheric/ocean sciences	5,600	5,600	4,800	5,300	5,600	5,500	5,200	5,400	5,600	5,500
Physics/astronomy	5,700	5,300	5,200	5,300	5,600	5,200	5,300	5,500	5,400	5,000
Other physical sciences	2,000	2,000	1,700	1,800	2,000	2,000	2,000	1,700	1,800	2,000
Psychology	122,800	120,400	115,300	119,000	121,400	120,700	119,400	116,900	117,700	120,800
Social and related sciences	189,800	182,900	175,900	181,600	185,100	182,600	179,000	176,500	184,200	182,000
Economics	35,400	34,500	29,700	34,100	34,500	34,400	33,900	33,100	35,000	34,900
Political and related sciences	53,300	51,100	49,900	50,800	52,500	50,300	50,900	48,900	51,300	51,900
Sociology/anthropology	63,200	60,700	60,400	60,400	61,200	61,200	59,100	59,200	61,400	59,100
Other social sciences	38,000	36,700	35,900	36,300	37,000	36,600	35,100	35,200	36,500	36,100
Engineering	98,400	95,100	84,100	93,500	96,300	95,600	93,900	90,900	95,700	96,300
Aerospace/aeronautical/astronautical engineering	2,900	2,900	2,400	2,700	2,900	2,800	2,800	2,700	2,900	2,900
Chemical engineering	8,800	8,300	7,200	8,400	8,600	8,600	8,400	8,300	8,500	8,700
Civil/architectural engineering	15,300	14,900	13,400	14,600	14,700	15,100	14,400	14,300	14,800	14,800
Electrical/computer engineering	30,800	30,000	26,300	29,600	30,300	29,900	29,400	28,200	29,900	30,200
Industrial engineering	6,100	5,800	5,400	5,700	6,000	5,900	5,900	5,700	6,000	6,000
Materials/metallurgical engineering	1,900	1,700	1,600	1,800	1,800	1,900	1,800	1,400	1,600	1,900
Mechanical engineering	22,300	21,800	19,100	21,000	22,100	21,800	21,500	20,600	22,100	21,900
Other engineering	10,200	9,700	8,600	9,600	9,900	9,700	9,500	9,800	10,000	9,900
Health	126,800	120,800	123,700	125,200	125,800	125,500	125,100	121,700	122,100	126,200

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Respondents were asked the following question: "When thinking about a job, how important is each of the following factors to you?" The response categories were very important, somewhat important, somewhat unimportant, and not important at all.

TABLE 62. Importance of selected job factors to employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			(Considered jo	ob factor to be	e very impo	rtant or som	ewhat impor	tant	
	•		Contri-	Degree of			Level of		Opportunitie	S
	All		bution to	independ-	Intellectual	Job	responsi-		for advance	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	214,400	208,600	200,400	207,100	209,700	208,800	205,400	201,000	204,000	211,000
Sciences	98,500	95,600	92,000	94,600	96,700	94,900	93,100	92,000	94,000	96,800
Biological, agricultural, and environmental life sciences	14,200	13,900	13,400	13,400	13,900	13,600	13,100	13,400	13,500	13,900
Agricultural/food sciences	2,700	2,700	2,700	2,600	2,700	2,700	2,400	2,500	2,600	2,600
Biological sciences	10,100	9,800	9,400	9,500	9,800	9,500	9,500	9,600	9,800	9,900
Environmental life sciences	1,300	1,300	1,200	1,300	1,300	1,300	1,200	1,300	1,100	1,300
Computer and information sciences	21,000	20,300	18,600	19,200	20,400	19,400	20,300	18,400	20,000	20,700
Mathematics and statistics	4,700	4,700	4,100	4,600	4,600	4,500	4,200	4,400	4,400	4,500
Physical and related sciences	8,400	8,100	7,400	7,800	8,000	8,100	7,400	7,700	8,000	8,100
Chemistry, except biochemistry	3,300	3,100	2,400	2,900	2,900	3,100	2,600	2,800	3,100	3,100
Earth/atmospheric/ocean sciences	2,500	2,300	2,400	2,300	2,400	2,300	2,300	2,400	2,300	2,400
Physics/astronomy	2,300	2,300	2,100	2,200	2,200	2,200	2,100	2,000	2,100	2,200
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	29,900	28,700	29,000	29,500	29,500	29,300	28,600	28,700	28,000	29,900
Social and related sciences	20,400	19,900	19,500	19,900	20,300	20,100	19,600	19,500	19,900	19,700
Economics	3,300	3,200	3,000	3,200	3,300	3,200	3,200	3,200	3,200	3,200
Political and related sciences	6,100	6,100	6,000	6,000	6,100	6,100	5,900	5,900	6,000	6,000
Sociology/anthropology	4,200	4,000	4,100	4,100	4,200	4,100	4,000	4,000	4,000	4,100
Other social sciences	6,800	6,500	6,400	6,600	6,800	6,700	6,400	6,400	6,600	6,400
Engineering	41,500	40,400	36,100	38,900	41,000	40,300	39,800	37,600	40,600	40,600
Aerospace/aeronautical/astronautical engineering	1,100	1,000	1,000	1,000	1,100	1,000	1,000	1,000	1,000	1,000
Chemical engineering	1,600	1,500	1,500	1,500	1,500	1,500	1,500	1,200	1,500	1,500
Civil/architectural engineering	5,600	5,400	5,000	5,200	5,500	5,500	5,300	5,000	5,600	5,400
Electrical/computer engineering	14,000	13,800	12,400	13,100	14,000	13,700	13,400	12,900	13,700	13,800
Industrial engineering	3,400	3,400	2,900	3,300	3,300	3,400	3,300	3,200	3,400	3,400
Materials/metallurgical engineering	1,600	1,600	S	1,600	1,600	1,600	1,600	S	S	1,600
Mechanical engineering	5,200	5,100	4,400	4,800	5,200	5,000	5,000	4,700	5,100	5,100
Other engineering	9,000	8,600	7,400	8,500	8,900	8,600	8,700	8,200	8,800	8,800
Health	74,400	72,500	72,300	73,600	72,000	73,500	72,500	71,400	69,400	73,600

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Detail may not add to total because of rounding. Respondents were asked the following question: "When thinking about a job, how important is each of the following factors to you?" The response categories were very important, somewhat important, somewhat unimportant, and not important at all.

TABLE 63. Employment sector of 2001 and 2002 S&E bachelor's degree recipients, by occupation: October 2003

	_		Sector					
Occupation	All employed	Educational institution ^a	Government ^b	Private industry and business ^c				
	768,900	171,100	87,100	510,700				
All occupations	700,700	171,100	07,100	310,700				
Scientists ^d	146,800	45,400	16,700	84,700				
Biological, agricultural, and environmental life scientist	30,900	18,200	3,700	9,000				
Computer and information scientist	71,600	7,600	6,400	57,600				
Mathematical scientist	5,300	3,100	S	S				
Physical scientist	17,900	8,600	1,300	8,000				
Psychologist	4,800	S	S	S				
Social scientist	16,300	5,100	3,300	7,800				
Engineers ^d	72,900	9,400	11,000	52,600				
Science and engineering-related occupations	188,900	43,700	17,800	127,500				
Health-related occupation	143,400	19,500	14,800	109,100				
S&E manager	5,600	S	S	5,400				
S&E precollege teacher	19,700	19,600	S	S				
S&E technician/technologist	17,600	4,500	2,700	10,400				
Other S&E-related occupation	2,700	S	S	2,600				
Non-science and engineering occupations	360,200	72,600	41,600	246,000				
Arts/humanities-related occupation	9,500	S	S	7,300				
Management-related occupation	41,100	2,300	4,500	34,300				
Non-S&E manager	1,800	S	S	1,400				
Non-S&E postsecondary teacher	5,100	4,500	S	S				
Non-S&E precollege/other teacher	40,900	34,800	S	4,800				
Sales/marketing occupation	58,400	S	S	57,300				
Social service-related occupation	45,300	7,500	9,100	28,700				
Other non-S&E occupation	158,100	21,000	25,100	112,000				

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

^d Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

TABLE 64. Employment sector of 2001 and 2002 S&E master's degree recipients, by occupation: October 2003

		Sector				
Occupation	All employed	Educational institution ^a	Government ^b	Private industry and business ^c		
All occupations	214,400	62,700	28,900	122,900		
Scientists ^d	69,700	27,500	8,200	34,100		
Biological, agricultural, and environmental life scientist	12,100	6,300	2,800	3,100		
Computer and information scientist	25,800	3,900	S	20,400		
Mathematical scientist	4,100	2,100	S	1,600		
Physical scientist	7,100	3,200	900	3,000		
Psychologist	12,700	8,500	S	3,000		
Social scientist	8,000	3,500	1,400	3,000		
Engineers ^d	30,400	6,700	2,700	20,900		
Science and engineering-related occupations	68,800	17,000	7,900	43,900		
Health-related occupation	61,700	13,500	7,300	40,900		
S&E manager	1,600	S	S	1,500		
S&E precollege teacher	2,800	2,800	S	S		
S&E technician/technologist	2,400	S	S	S		
Other S&E-related occupation	S	S	S	S		
Non-science and engineering occupations	45,500	11,500	10,100	23,900		
Arts/humanities-related occupation	1,300	S	S	S		
Management-related occupation	7,300	S	2,100	4,400		
Non-S&E manager	S	S	S	S		
Non-S&E postsecondary teacher	2,100	2,100	S	S		
Non-S&E precollege/other teacher	3,600	3,000	S	S		
Sales/marketing occupation	3,200	S	S	3,100		
Social service-related occupation	14,300	3,200	3,300	7,700		
Other non-S&E occupation	11,900	1,700	3,700	6,500		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

^d Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

TABLE 65. Employment sector of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		Sector					
	_	Educational		Private industry			
Major field	All employed	institution ^a	Government ^b	and business ^c			
All fields	768,900	171,100	87,100	510,700			
Sciences	543,700	140,600	59,800	343,300			
Biological, agricultural, and environmental life sciences	103,900	35,100	11,400	57,400			
Agricultural/food sciences	11,500	2,500	S	7,800			
Biological sciences	82,000	30,900	7,900	43,200			
Environmental life sciences	10,300	1,700	2,100	6,400			
Computer and information sciences	76,900	9,200	7,500	60,200			
Mathematics and statistics	22,200	9,800	1,800	10,500			
Physical and related sciences	28,100	11,400	2,400	14,300			
Chemistry, except biochemistry	14,800	6,000	S	8,000			
Earth/atmospheric/ocean sciences	5,600	1,900	700	2,900			
Physics/astronomy	5,700	3,200	600	1,900			
Other physical sciences	2,000	S	S	1,500			
Psychology	122,800	34,100	13,200	75,400			
Social and related sciences	189,800	40,900	23,600	125,300			
Economics	35,400	3,600	2,600	29,200			
Political and related sciences	53,300	8,100	8,900	36,200			
Sociology/anthropology	63,200	16,400	7,400	39,400			
Other social sciences	38,000	12,800	4,700	20,500			
Engineering	98,400	12,100	14,500	71,800			
Aerospace/aeronautical/astronautical engineering	2,900	400	800	1,700			
Chemical engineering	8,800	1,200	800	6,800			
Civil/architectural engineering	15,300	S	3,800	10,600			
Electrical/computer engineering	30,800	3,400	4,700	22,800			
Industrial engineering	6,100	700	S	5,100			
Materials/metallurgical engineering	1,900	S	S	S			
Mechanical engineering	22,300	2,700	2,200	17,400			
Other engineering	10,200	2,200	1,700	6,400			
Health	126,800	18,400	12,800	95,700			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

TABLE 66. Employment sector of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Sector					
	_	Educational		Private industry			
Major field	All employed	institution ^a	Government ^b	and business ^c			
All fields	214,400	62,700	28,900	122,900			
Sciences	98,500	38,800	14,500	45,200			
Biological, agricultural, and environmental life sciences	14,200	5,900	2,300	5,900			
Agricultural/food sciences	2,700	S	S	S			
Biological sciences	10,100	4,500	1,200	4,500			
Environmental life sciences	1,300	S	S	S			
Computer and information sciences	21,000	4,800	S	14,800			
Mathematics and statistics	4,700	2,400	S	2,000			
Physical and related sciences	8,400	4,000	1,000	3,400			
Chemistry, except biochemistry	3,300	1,300	S	1,700			
Earth/atmospheric/ocean sciences	2,500	700	S	1,200			
Physics/astronomy	2,300	1,700	S	500			
Other physical sciences	S	S	S	S			
Psychology	29,900	14,500	4,800	10,600			
Social and related sciences	20,400	7,200	4,800	8,400			
Economics	3,300	1,200	S	1,800			
Political and related sciences	6,100	1,200	1,700	3,300			
Sociology/anthropology	4,200	1,800	1,000	1,400			
Other social sciences	6,800	3,000	1,700	2,000			
Engineering	41,500	8,700	3,400	29,300			
Aerospace/aeronautical/astronautical engineering	1,100	S	S	500			
Chemical engineering	1,600	700	S	800			
Civil/architectural engineering	5,600	S	1,100	3,700			
Electrical/computer engineering	14,000	3,400	S	9,800			
Industrial engineering	3,400	S	S	2,800			
Materials/metallurgical engineering	1,600	S	S	S			
Mechanical engineering	5,200	1,000	S	3,900			
Other engineering	9,000	2,000	S	6,300			
Health	74,400	15,200	10,900	48,300			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

TABLE 67. Median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sex, race/ethnicity, and major field of degree: October 2003

	All					Race/ethnicity		
	employed	S	ex		Black, non-		White, non-	
Major field	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other ^a
All fields	\$36,000	\$40,000	\$35,000	\$41,000	\$34,000	\$35,000	\$36,000	\$39,000
Sciences	32,000	35,000	30,000	37,000	30,000	34,000	31,000	34,000
Biological, agricultural, and environmental life sciences	29,000	32,000	29,000	S	28,000	31,000	29,000	S
Agricultural/food sciences	29,000	32,000	26,000	S	S	S	29,000	S
Biological sciences	29,000	30,000	29,000	S	28,000	31,000	29,000	S
Environmental life sciences	30,000	32,000	29,000	S	S	S	31,000	S
Computer and information sciences	45,000	46,000	44,000	47,000	39,000	38,000	45,000	S
Mathematics and statistics	36,000	38,000	35,000	40,000	33,000	38,000	35,000	S
Physical and related sciences	35,000	36,000	34,000	S	32,000	34,000	35,000	S
Chemistry, except biochemistry	35,000	36,000	34,000	S	32,000	34,000	36,000	S
Earth/atmospheric/ocean sciences	32,000	32,000	31,000	S	S	S	31,000	S
Physics/astronomy	40,000	39,000	40,000	S	S	S	40,000	S
Other physical sciences	31,000	S	S	S	S	S	S	S
Psychology	28,000	30,000	28,000	S	26,000	31,000	29,000	S
Social and related sciences	30,000	35,000	29,000	36,000	30,000	35,000	30,000	30,000
Economics	37,000	38,000	35,000	39,000	39,000	38,000	35,000	S
Political and related sciences	30,000	35,000	29,000	S	26,000	36,000	31,000	S
Sociology/anthropology	29,000	29,000	28,000	S	30,000	30,000	28,000	S
Other social sciences	30,000	32,000	28,000	S	30,000	35,000	30,000	S
Engineering	50,000	50,000	48,000	52,000	49,000	45,000	49,000	49,000
Aerospace/aeronautical/astronautical engineering	48,000	48,000	51,000	S	S	49,000	48,000	S
Chemical engineering	53,000	53,000	53,000	S	53,000	50,000	52,000	S
Civil/architectural engineering	44,000	44,000	44,000	S	S	43,000	44,000	S
Electrical/computer engineering	53,000	53,000	54,000	53,000	51,000	49,000	53,000	S
Industrial engineering	47,000	47,000	47,000	S	50,000	40,000	48,000	S
Materials/metallurgical engineering	S	S	S	S	S	S	S	S
Mechanical engineering	50,000	50,000	52,000	S	46,000	46,000	50,000	S
Other engineering	43,000	44,000	42,000	S	S	S	44,000	S
Health	43,000	41,000	43,000	S	43,000	S	43,000	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

^a Includes American Indian, Alaska Native, Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 68. Median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sex, race/ethnicity, and major field of degree: October 2003

	All					Race/ethnicity				
	employed	S	ex		Black, non-		White, non-			
Major field	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other ^a		
All fields	\$52,000	\$58,000	\$48,000	\$60,000	\$44,000	\$47,000	\$50,000	\$65,000		
Sciences	45,000	49,000	40,000	55,000	42,000	41,000	41,000	43,000		
Biological, agricultural, and environmental life sciences	40,000	41,000	38,000	S	S	S	41,000	S		
Agricultural/food sciences	39,000	40,000	S	S	S	S	41,000	S		
Biological sciences	40,000	45,000	38,000	S	S	S	40,000	S		
Environmental life sciences	41,000	S	S	S	S	S	S	S		
Computer and information sciences	60,000	66,000	56,000	59,000	S	S	68,000	S		
Mathematics and statistics	54,000	56,000	51,000	55,000	S	S	50,000	S		
Physical and related sciences	49,000	52,000	45,000	51,000	S	S	49,000	S		
Chemistry, except biochemistry	53,000	53,000	48,000	S	S	S	S	S		
Earth/atmospheric/ocean sciences	44,000	46,000	42,000	S	S	S	44,000	S		
Physics/astronomy	58,000	S	S	S	S	S	57,000	S		
Other physical sciences	S	S	S	S	S	S	S	S		
Psychology	38,000	36,000	38,000	S	38,000	40,000	36,000	S		
Social and related sciences	42,000	43,000	41,000	S	40,000	40,000	42,000	S		
Economics	49,000	44,000	48,000	S	S	S	45,000	S		
Political and related sciences	46,000	46,000	45,000	S	S	S	49,000	S		
Sociology/anthropology	34,000	30,000	36,000	S	S	S	32,000	S		
Other social sciences	40,000	42,000	38,000	S	S	S	42,000	S		
Engineering	65,000	65,000	60,000	64,000	65,000	62,000	65,000	S		
Aerospace/aeronautical/astronautical engineering	60,000	61,000	S	S	S	S	51,000	S		
Chemical engineering	63,000	64,000	54,000	S	S	S	63,000	S		
Civil/architectural engineering	54,000	54,000	52,000	54,000	S	S	54,000	S		
Electrical/computer engineering	70,000	70,000	70,000	69,000	S	S	73,000	S		
Industrial engineering	71,000	72,000	65,000	S	S	S	76,000	S		
Materials/metallurgical engineering	S	S	S	S	S	S	S	S		
Mechanical engineering	59,000	58,000	59,000	54,000	S	S	59,000	S		
Other engineering	65,000	67,000	60,000	61,000	S	S	63,000	S		
Health	53,000	55,000	50,000	S	43,000	S	52,000	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

^a Includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 69. Median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sex, race/ethnicity, and occupation: October 2003

	All					Race/ethnicity		
	employed	S	ex		Black, non-		White, non-	
Occupation	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other ^a
All occupations	\$36,000	\$40,000	\$35,000	\$41,000	\$34,000	\$35,000	\$36,000	\$39,000
Scientists	40,000	43,000	38,000	45,000	38,000	36,000	39,000	38,000
Biological, agricultural, and environmental life scientist	32,000	32,000	30,000	S	S	S	32,000	S
Computer and information scientist	48,000	49,000	45,000	49,000	42,000	43,000	49,000	S
Mathematical scientist	40,000	39,000	S	S	S	S	48,000	S
Physical scientist	36,000	36,000	35,000	S	S	34,000	35,000	S
Psychologist	S	S	S	S	S	S	S	S
Social scientist	34,000	32,000	37,000	S	S	S	33,000	S
Engineers	50,000	50,000	48,000	53,000	50,000	48,000	49,000	45,000
Science and engineering-related occupations	38,000	36,000	40,000	40,000	40,000	35,000	38,000	43,000
Health-related occupation	41,000	39,000	41,000	S	40,000	33,000	41,000	41,000
S&E manager	66,000	60,000	S	S	S	S	70,000	S
S&E precollege teacher	32,000	32,000	32,000	S	31,000	34,000	32,000	S
S&E technician/technologist	29,000	31,000	26,000	S	S	38,000	28,000	S
Other S&E-related occupation	46,000	S	S	S	S	S	S	S
Non-science and engineering occupations	30,000	32,000	28,000	30,000	29,000	32,000	30,000	30,000
Arts/humanities-related occupation	28,000	27,000	27,000	S	S	S	27,000	S
Management-related occupation	40,000	44,000	36,000	50,000	35,000	37,000	40,000	S
Non-S&E manager	60,000	S	S	S	S	S	S	S
Non-S&E postsecondary teacher	S	S	S	S	S	S	S	S
Non-S&E precollege/other teacher	28,000	29,000	27,000	S	29,000	33,000	27,000	S
Sales/marketing occupation	31,000	35,000	29,000	29,000	30,000	34,000	32,000	S
Social service-related occupation	27,000	28,000	26,000	S	26,000	29,000	25,000	S
Other non-S&E occupation	28,000	30,000	27,000	27,000	29,000	28,000	28,000	28,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data. Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

^a Includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 70. Median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sex, race/ethnicity, and occupation: October 2003

	All			Race/ethnicity						
	employed	S	ex		Black, non-		White, non-			
Occupation	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other ^a		
All occupations	\$52,000	\$58,000	\$48,000	\$60,000	\$44,000	\$47,000	\$50,000	\$65,000		
Scientists	55,000	58,000	49,000	60,000	55,000	54,000	46,000	65,000		
Biological, agricultural, and environmental life scientist	43,000	41,000	45,000	40,000	S	S	45,000	S		
Computer and information scientist	65,000	67,000	58,000	63,000	58,000	S	70,000	S		
Mathematical scientist	60,000	62,000	60,000	S	S	S	57,000	S		
Physical scientist	48,000	53,000	41,000	S	S	S	50,000	S		
Psychologist	39,000	40,000	39,000	S	S	S	39,000	S		
Social scientist	54,000	54,000	53,000	S	S	S	42,000	S		
Engineers	62,000	63,000	56,000	60,000	63,000	61,000	63,000	S		
Science and engineering-related occupations	52,000	56,000	50,000	S	48,000	S	52,000	S		
Health-related occupation	52,000	57,000	50,000	S	S	S	52,000	S		
S&E manager	74,000	S	S	S	S	S	S	S		
S&E precollege teacher	36,000	41,000	33,000	S	S	S	38,000	S		
S&E technician/technologist	42,000	S	S	S	S	S	S	S		
Other S&E-related occupation	S	S	S	S	S	S	S	S		
Non-science and engineering occupations	42,000	45,000	39,000	45,000	39,000	40,000	42,000	S		
Arts/humanities-related occupation	S	S	S	S	S	S	S	S		
Management-related occupation	54,000	58,000	42,000	S	50,000	S	52,000	S		
Non-S&E manager	S	S	S	S	S	S	S	S		
Non-S&E postsecondary teacher	S	S	S	S	S	S	S	S		
Non-S&E precollege/other teacher	35,000	S	35,000	S	S	S	S	S		
Sales/marketing occupation	54,000	S	53,000	S	S	S	54,000	S		
Social service-related occupation	37,000	S	37,000	S	37,000	S	35,000	S		
Other non-S&E occupation	42,000	44,000	39,000	S	36,000	S	44,000	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data. Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

S&E = science and engineering.

^a Includes American Indian or Alaska Native, Native Hawaiian or other Pacific Islander and individuals reporting more than one race.

TABLE 71. Median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sector of employment and major field of degree: October 2003

			Sector		
		Educational		Private industry	
Major field	All employed	institution ^a	Government ^b	and business ^c	
All fields	\$36,000	\$31,000	\$38,000	\$37,000	
Sciences	32,000	30,000	33,000	32,000	
Biological, agricultural, and environmental life sciences	29,000	30,000	30,000	29,000	
Agricultural/food sciences	29,000	S	S	28,000	
Biological sciences	29,000	30,000	31,000	29,000	
Environmental life sciences	30,000	S	29,000	32,000	
Computer and information sciences	45,000	34,000	47,000	47,000	
Mathematics and statistics	36,000	32,000	40,000	42,000	
Physical and related sciences	35,000	32,000	38,000	35,000	
Chemistry, except biochemistry	35,000	30,000	S	36,000	
Earth/atmospheric/ocean sciences	32,000	32,000	31,000	31,000	
Physics/astronomy	40,000	39,000	S	39,000	
Other physical sciences	31,000	S	S	S	
Psychology	28,000	30,000	28,000	28,000	
Social and related sciences	30,000	29,000	32,000	31,000	
Economics	37,000	30,000	35,000	38,000	
Political and related sciences	30,000	30,000	35,000	29,000	
Sociology/anthropology	29,000	26,000	30,000	29,000	
Other social sciences	30,000	29,000	33,000	30,000	
Engineering	50,000	36,000	46,000	50,000	
Aerospace/aeronautical/astronautical engineering	48,000	S	42,000	52,000	
Chemical engineering	53,000	S	S	54,000	
Civil/architectural engineering	44,000	S	45,000	44,000	
Electrical/computer engineering	53,000	S	49,000	55,000	
Industrial engineering	47,000	S	S	48,000	
Materials/metallurgical engineering	S	S	S	S	
Mechanical engineering	50,000	S	49,000	50,000	
Other engineering	43,000	S	41,000	45,000	
Health	43,000	42,000	48,000	42,000	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

TABLE 72. Median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sector of employment and major field of degree: October 2003

_		Sector				
		Educational		Private industry		
Major field	All employed	institution ^a	Government ^b	and business ^c		
All fields	\$52,000	\$40,000	\$50,000	\$57,000		
Sciences	45,000	40,000	41,000	51,000		
Biological, agricultural, and environmental life sciences	40,000	33,000	43,000	49,000		
Agricultural/food sciences	39,000	S	S	S		
Biological sciences	40,000	32,000	44,000	50,000		
Environmental life sciences	41,000	S	S	S		
Computer and information sciences	60,000	45,000	S	66,000		
Mathematics and statistics	54,000	42,000	S	63,000		
Physical and related sciences	49,000	40,000	S	54,000		
Chemistry, except biochemistry	53,000	S	S	54,000		
Earth/atmospheric/ocean sciences	44,000	S	S	44,000		
Physics/astronomy	58,000	S	S	S		
Other physical sciences	S	S	S	S		
Psychology	38,000	40,000	35,000	33,000		
Social and related sciences	42,000	38,000	41,000	44,000		
Economics	49,000	S	S	49,000		
Political and related sciences	46,000	S	50,000	43,000		
Sociology/anthropology	34,000	S	39,000	30,000		
Other social sciences	40,000	35,000	40,000	S		
Engineering	65,000	36,000	56,000	65,000		
Aerospace/aeronautical/astronautical engineering	60,000	S	S	63,000		
Chemical engineering	63,000	S	S	65,000		
Civil/architectural engineering	54,000	S	53,000	54,000		
Electrical/computer engineering	70,000	S	S	70,000		
Industrial engineering	71,000	S	S	68,000		
Materials/metallurgical engineering	S	S	S	S		
Mechanical engineering	59,000	S	S	60,000		
Other engineering	65,000	S	S	66,000		
Health	53,000	40,000	53,000	54,000		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

TABLE 73. Median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sector of employment and occupation: October 2003

	_		Sector				
	_	Educational		Private industry			
Occupation	All employed	institution ^a	Government ^b	and business ^c			
All occupations	\$36,000	\$31,000	\$38,000	\$37,000			
Scientists	40,000	31,000	39,000	43,000			
Biological, agricultural, and environmental life scientist	32,000	30,000	28,000	33,000			
Computer and information scientist	48,000	38,000	49,000	50,000			
Mathematical scientist	40,000	S	S	S			
Physical scientist	36,000	S	39,000	36,000			
Psychologist	S	S	S	S			
Social scientist	34,000	S	S	34,000			
Engineers	50,000	45,000	47,000	50,000			
Science and engineering-related occupations	38,000	35,000	44,000	40,000			
Health-related occupation	41,000	38,000	45,000	40,000			
S&E manager	66,000	S	S	66,000			
S&E precollege teacher	32,000	32,000	S	S			
S&E technician/technologist	29,000	25,000	27,000	30,000			
Other S&E-related occupation	46,000	S	S	46,000			
Non-science and engineering occupations	30,000	28,000	30,000	30,000			
Arts/humanities-related occupation	28,000	S	S	27,000			
Management-related occupation	40,000	S	43,000	40,000			
Non-S&E manager	60,000	S	S	S			
Non-S&E postsecondary teacher	S	S	S	S			
Non-S&E precollege/other teacher	28,000	28,000	S	S			
Sales/marketing occupation	31,000	S	S	32,000			
Social service-related occupation	27,000	27,000	29,000	25,000			
Other non-S&E occupation	28,000	26,000	30,000	27,000			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data. Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

TABLE 74. Median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sector of employment and occupation: October 2003

			Sector of employmen	t
	_	Educational		Private industr
Occupation	All employed	institution ^a	Government ^b	and business ^o
All occupations	\$52,000	\$40,000	\$50,000	\$57,000
Scientists	55,000	40,000	46,000	62,000
Biological, agricultural, and environmental life scientist	43,000	37,000	54,000	53,000
Computer and information scientist	65,000	S	S	66,000
Mathematical scientist	60,000	43,000	S	69,000
Physical scientist	48,000	S	S	56,000
Psychologist	39,000	40,000	S	S
Social scientist	54,000	S	40,000	61,000
Engineers	62,000	35,000	57,000	63,000
Science and engineering-related occupations	52,000	40,000	57,000	55,000
Health-related occupation	52,000	41,000	57,000	55,000
S&E manager	74,000	S	S	71,000
S&E precollege teacher	36,000	36,000	S	S
S&E technician/technologist	42,000	S	S	S
Other S&E-related occupation	S	S	S	S
Non-science and engineering occupations	42,000	36,000	42,000	44,000
Arts/humanities-related occupation	S	S	S	S
Management-related occupation	54,000	S	42,000	55,000
Non-S&E manager	S	S	S	S
Non-S&E postsecondary teacher	S	S	S	S
Non-S&E precollege/other teacher	35,000	35,000	S	S
Sales/marketing occupation	54,000	S	S	54,000
Social service-related occupation	37,000	41,000	40,000	33,000
Other non-S&E occupation	42,000	S	41,000	43,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data. Scientists and engineers occupations include S&E postsecondary educators. For more details, see technical notes.

^a Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools university-affiliated research organizations, and all other educational institutions.

^b Government includes local, state, and federal government, military, and commissioned corps.

^c Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

APPENDIX A. TECHNICAL NOTES

These technical notes on the 2003 National Survey of Recent College Graduates (NSRCG) include information on sampling and weighting, survey methodology, sampling and nonsampling errors, as well as discussions on data comparisons to previous cycles of the NSRCG and the Integrated Postsecondary Education Data System (IPEDS) data. For a more detailed discussion of survey methodology, refer to the 2003 NSRCG Methodology Report and to the National Science Foundation's (NSF's) Division of Science Resources Statistics (SRS) website at http://www.nsf.gov/statistics/.

OVERVIEW

NSRCG is sponsored by NSF's Division of Science Resources Statistics (SRS). NSRCG is one of three SRS data collections covering personnel and graduates in science, engineering, and health fields. The other two surveys are the National Survey of College Graduates (NSCG) and the Survey of Doctorate Recipients (SDR). Together, they constitute NSF's Scientists and Engineers Statistical Data System (SESTAT). These surveys serve as the basis for developing estimates and characteristics of the total population of scientists and engineers in the United States.

The first NSF-sponsored NSRCG (then known as the New Entrants Survey) was conducted in 1974. Subsequent surveys were conducted about every 2 years. The initial survey collected data on only bachelor's degree recipients, but all subsequent surveys included both bachelor's and master's degree recipients.

For the 2003 NSRCG, a sample of 300 colleges and universities was asked to provide lists of eligible bachelor's and master's degree recipients. From these lists, a sample of 18,000 graduates (13,061 bachelor's and 4,939 master's degree recipients) was selected. These graduates were interviewed between October 2003 and July 2004. Data for the survey were collected using three data collection modes: mail, Web, and computer-assisted telephone interviewing (CATI). The weighted response rates were 98.7 percent for institutions and 63.3 percent for graduates.

The NSRCG questionnaire underwent revisions for the 2003 survey. All revisions were done in coordination with revisions to the other SESTAT surveys. Following recommendations resulting from the pretest, NSF made several modifications to the 2003 data collection instrument. Although no questions from the 2001 NSRCG survey were deleted in the 2003 version, some were added to the sections on employment and work-related experiences. Other questions were modified to promote more accurate reporting or better understanding of the question.

Data on recent graduates with bachelor's and master's degrees in health fields were collected for the first time in the 2003 NSRCG data collection effort. Users of the data on health fields are urged to use caution when reviewing these data because graduates in health fields who did not respond to the mail questionnaire were not followed up during the Web and CATI stages of the data collection. Consequently, this population has lower response rates than graduates who received degrees in other fields of study.

Following is a list of questions that were added or modified during 2001 through 2003.

New Questions in the 2003 NSRCG:

B17 (Type of academic position(s) held in principal job). This question was added to gain a better understanding of the types of positions held by employees working in the academic sector.

B18 (Faculty rank). Formerly asked only in the SDR, this question was added to NSRCG and NSCG in 2003 to account for sample members who may hold faculty rank. The presence of this question in all three surveys will promote consistency among the three surveys.

B32 (Overall satisfaction with principal job). This question was intended as a follow-up to the previous question, which asks about satisfaction with specific aspects of the principal job.

B36/B37 (Federal support through grants and contracts). These questions were added to NSRCG in order to better understand the role of federal support in the work of all scientists and engineers, and to promote consistency with the other SESTAT surveys.

B38 (2002 income). This question was added to the 2003 NSRCG to be consistent with the other SESTAT surveys.

C1, *C2*, *C3* (*Publications/patents*). These questions were added to the 2003 NSRCG because they provide one of the few measures of work productivity and they are also found in the other SESTAT surveys.

Modifications to Questions that Were in the 2001 NSRCG:

A17/A18 (Degree grid/financing for degrees). Instead of asking about financing for each degree, the financial support questions were removed from the degree grid. Data were collected for undergraduate and graduate degrees, consistent with data gathered for doctorates.

Field of study verbatim and self-code was separated into two questions so that the verbatim was reported before the self-code.

Location of the degree grid in the questionnaire was changed to promote a more natural flow in the questionnaire.

A9-A16 (Enrollment during reference week) and A20-A23 (Enrollment between last degree earned and reference week). Previous versions of the questionnaire asked respondents to report on their educational activities between their most recent degree and the reference week, during the reference week, after the reference week, and in the future. In 2003, NSF dropped the questions about educational activities after the reference week and in the future. The order of the education questions was changed to promote better flow. The 2003 questionnaire first asked about educational activities during the reference week (A9–A16), then about all degrees earned as of the reference week (degree grid), and finally about educational activities between the most recent degree reported in the degree grid and October 1.

A19 (Money borrowed to finance degrees and money still owed). The question was changed from an openended response format to a "mark one answer" response format.

B1 (Working for pay or profit). Instructions were simplified and separated from the question stem.

B5, **B20** (**Job description verbatim**). Extra lines were added to allow longer open-ended answers.

B11 (Employer's main business). Lines were added to report department/division and street address.

B12 (Employer size). The final two response categories were changed; the last was broken into two categories.

B14 (*Employer type*). The self-employed response category was moved to the top of the list.

B16 (*Type of educational institution*). The preschool, elementary, and middle school response category was combined with the secondary school system response category.

B24 (Relationship between principal job and highest degree). The wording of this question was simplified.

B27 (*Primary work activities*). The order of response categories was changed. Wording of response choices for employee relations, managing/supervising, and production was modified based on "other, specify" responses from previous survey cycles.

B35 (*Salary*). This question had been divided into two parts in previous NSRCG survey cycles to maintain consistency between the paper and CATI instruments. In 2003, the two parts were combined into one question to promote consistency with the NSCG and SDR paper questionnaires.

bD1 (*Marital status*). An extra response category was added for "living in a marriage-like relationship."

D8–D11 (Citizenship/residency). Permanent residents of the United States were asked to report the year they attained permanent residency status.

SAMPLE DESIGN

NSRCG used a two-stage sample design. In the first stage, a stratified nationally representative sample of 300 institutions was selected. The first-stage sample was drawn in two steps. In the first step, certainty institutions were identified from the list of all institutions¹; all certainty institutions were included in the sample. In the second step, noncertainty institutions were sampled from the list that did not include the certainty institutions. For each institution, the measure of size, a composite related to cohort (two groups: 2000–2001 and 2001–2002 academic years), degree type (bachelor's and master's), major (21 fields of study), race/ethnicity (non-Hispanic

¹ Certainty institutions were selected by identifying the institutions with the largest number of graduates with science, engineering, and health bachelor's and master's degrees in the 2000–2001 and 2001–2002 academic years.

whites, non-Hispanic Asians and Pacific Islanders, and underrepresented minorities—blacks, Hispanics, and American Indians/Alaska Natives). Eighty-five self-representing or certainty institutions were identified and included in the sample in the first step. The remaining noncertainty institutions on the list were implicitly stratified by sorting the list by type of control (public, private), region (Northeast, Northwest, Southeast, Southwest), and the percentage of degrees awarded in science, engineering, or health fields of study. Two hundred fifteen noncertainty units were selected by systematically sampling from the ordered list with probability proportional to size in the second step.

The second stage of the sampling process selected science, engineering, and health graduates (within the sampled institutions). Each sampled institution was asked to provide lists of graduates for sampling. Within graduation year (cohort), each eligible graduate was then classified into one of 504 sampling strata based on the cross classification of the following variables:

- Two cohorts by degree year (2000–2001 and 2001–2002 academic years)
- Two degree types (bachelor's and master's)
- 21 major fields of study
- Three race/ethnicity groups (non-Hispanic white, non-Hispanic Asian or Pacific Islander or unknown race, and Hispanic, black, or American Indian/Alaska Native)

Table A-1 lists the major fields and corresponding sampling rates. These rates are overall sampling rates for the major field, by cohort. To achieve the within-institution sampling rate, the overall rate was divided by the institution's probability of selection. The sampling rates by stratum were applied within each eligible, responding institution, and resulted in sampling 17,952 graduates. One academic institution insisted on selecting its own sample and returned a sample of 48 graduates. The 48 graduates from that school and the 17,952 graduates selected from the 295 participating schools provided the total sample of 18,000 graduates.

Graduate Eligibility

To be included in the sample, graduates had to meet all of the following criteria:

- They received a bachelor's or master's degree in an eligible S&E or health-related major from the college or university from which they were sampled.
- They received their degree within the two academic years in the study. For the 2003 study, there were two academic years (July 2000 through June 2001 and July 2001 through June 2002).
- They were younger than 76 years of age and were not institutionalized during the week of October 1, 2003 (the reference week).
- They lived in the United States during the reference week.

DATA COLLECTION AND RESPONSE

Before collecting data from graduates, it was first necessary to obtain the cooperation of the sampled insti-

TABLE A-1. NSRCG sampling rates by field and level of degree: October 2003

	Bachelor's	Master's
Major field	rate	rate
Sciences		
Biological sciences	0.0065	0.0253
Computer sciences	0.0099	0.0135
Environmental/agricultural/		
forestry sciences	0.0241	0.0282
Mathematics/statistics	0.0263	0.0398
Chemistry	0.0271	0.0347
Physics/astronomy	0.0499	0.0476
Other physical sciences, earth		
sciences, geology, oceanography	0.0419	0.0431
Psychology	0.0055	0.0134
Economics	0.0181	0.0301
Political science	0.0116	0.0268
Sociology/anthropology	0.0112	0.0297
Other social sciences	0.0166	0.0266
Engineering		
Aeronautical/astronautical		
engineering	0.1187	0.0982
Chemical engineering	0.0348	0.0639
Civil engineering	0.0267	0.0280
Electrical engineering	0.0211	0.0216
Industrial engineering	0.0569	0.0360
Mechanical engineering	0.0265	0.0297
Other engineering	0.0242	0.0256
Health		
Health related-administrative	0.0098	0.0052
Health related-clinical	0.0043	0.0057

tutions that provided lists of graduates. Of the 300 sampled institutions, 296 provided lists of graduates for sampling in the 2003 NSRCG and 4 did not provide graduate lists. The institutional list collection had a 98.7 percent unweighted response rate and a 97.2 percent weighted response rate.

Graduate data collection took place between October 2003 and July 2004; mail questionnaires were the initial mode of data collection, followed by CATI and an Internet-based Web instrument. Advance letters were sent to all selected graduates announcing the study and requesting phone numbers where they could be reached during the survey period. Before the data collection process could begin, extensive efforts to locate the graduates were required. Student contact information had to be obtained from educational institutions; once the information was collected, names, addresses, and telephone information were sent to an address review and updating service. Additional locating activities included use of computerized telephone number searches, national change of address searches, school alumni office contacts, school major field department contacts, Internet searches, directory assistance, military locators, post office records, personal referrals from parents or others who knew a graduate in question, and professional tracking organizations.

Table A-2 gives the response rates by cohort, degree, major, type of address, sex, and race/ethnicity. The overall unweighted graduate response rate was 68.1 percent; the weighted response rate was 67.1 percent. As can be seen from table A-2, response rates varied somewhat by graduate characteristics. Rates were lowest for graduates identified on the school sampling lists as non-U.S. residents. It is possible that many unlocated persons listed as non-U.S. residents were actually ineligible for the survey because they lived outside the United States during the survey reference week. However, a graduate was only classified as ineligible if his or her ineligibility status could be confirmed.

WEIGHT CALCULATIONS

To produce national estimates, the data were weighted. The weighting procedures adjusted for unequal selection probabilities, for nonresponse at the institution and graduate level, and for duplication of graduates on the sampling file (graduates in both cohorts).² In addition, a ratio adjustment was made at the institution level, using the number of degrees awarded as reported in IPEDS for specified categories of major and degree level.

Because this adjustment was designed to reduce the variability associated with sampling institutions, it was not affected by the differences in target populations between NSRCG and IPEDS at the person level. These differences between NSRCG and IPEDS are discussed in a later section of these notes under the section "Comparisons With IPEDS Data." The final adjustment to the graduate weights adjusted for responding graduates who could have been sampled twice. For example, a person who obtained an eligible bachelor's degree in 2001 could have obtained an eligible master's degree in 2002 and could have been sampled for either degree. To make the estimates from the survey essentially unbiased, the weights of all responding graduates who could have been sampled twice were divided by 2. The weights of the graduates who were not eligible to be sampled twice were not adjusted.

Two weights were developed for the 2003 NSRCG: full NSRCG sample weights for use in computing survey estimates, and replicate weights for variance estimation using a jackknife replication variance estimation procedure.

Data Editing

Editing checks were included within the CATI and web systems, including range checks, skip pattern rules, and logical consistency checks. Skip patterns were controlled by the CATI and web systems so that inappropriate items were avoided and appropriate items were not missed. For logical consistency check violations, CATI and web screens appeared that explained the discrepancy and asked the respondent for corrections. All edit checks discussed previously were rerun after data collection and again when item nonresponse imputation was completed.

Post data collection editing was also conducted on the data collected in the NSRCG. Standard editing procedures were specified by NSF through the issuance of "SESTAT Editing Guidelines," which were distributed to all SESTAT contractors to ensure consistent application of editing rules across the three SESTAT surveys. The majority of editing at this stage involved correcting range, skip, and consistency errors, as well as other gen-

² Prior to graduate sampling, the sampling frames (sampling lists received from the institutions) were unduplicated. These cases were generally due to double majors. For example, if a graduate received two eligible bachelor's degrees during the 2001 academic year, only one record was kept on the frame, recording one major as the first major and the other as the second major (according to a set protocol).

TABLE A-2. Response status of sampled graduates and unweighted and weighted graduate response rates, by graduate characteristics

		Sampled gradua	ites by status			
		Complete	Ineligible		Graduate respons	se rate (%) b
Graduate characteristic	Total	response	response	Nonresponse	Unweighted	Weighted
Total	18,000	10,831	1,015	6,154	65.8	63.3
Graduation cohort						
2000-01	8,949	5,314	516	3,119	65.1	63.0
2001–02	9,051	5,517	499	3,035	66.5	63.6
Sampled degree						
Bachelor's	13,061	7,978	597	4,486	65.7	63.4
Master's	4,939	2,853	418	1,668	66.2	63.1
Sampled degree major						
Biological sciences	1,220	803	57	360	70.5	70.6
Chemistry	693	481	18	194	72.0	74.1
Computer sciences	1,299	711	77	511	60.7	63.7
Economics	971	532	85	354	63.5	61.8
Environmental/agricultural science	706	443	51	212	70.0	71.3
Mathematics/statistics	952	651	59	242	74.6	71.5
Physics/astronomy	527	387	34	106	79.9	80.7
Political sciences	1,090	621	88	381	65.0	65.7
Psychology	1,347	808	45	494	63.3	64.3
Sociology/anthropology	1,111	654	63	394	64.5	64.1
Other physical sciences, earth science	499	331	43	125	74.9	78.3
Other social sciences	1,098	590	109	399	63.7	61.5
Engineering, aero/astronautical	485	315	31	139	71.3	73.2
Engineering, chemical	541	391	22	128	76.3	76.9
Engineering, civil	713	465	24	224	68.6	68.3
Engineering, electrical	1,185	732	58	395	66.7	66.1
Engineering, industrial	540	343	32	165	69.4	69.8
Engineering, mechanical	897	584	39	274	69.5	70.8
Other engineering	736	481	53	202	72.6	73.6
Health related, administrative	673	238	17	418	37.9	37.3
Health related, clinical	717	270	10	437	39.1	41.8
Location provided by school at time of sampling ^c		2.0			07	
U.S. address only	15,239	9,557	699	4,983	67.3	64.5
Foreign address	2,761	1,274	316	1,171	57.6	56.2
Sex of graduate	2,701	1,271	0.10	1,171	07.0	00.2
Male	9,269	5,523	572	3,174	65.8	65.3
Female	8,731	5,308	443	2,980	65.9	61.5
Race/ethnicity	0,731	3,300	443	2,700	00.7	01.0
Hispanic, black, or American Indian	5,508	3,219	263	2,026	63.2	59.2
Non-Hispanic Asian or Pacific Islander or	3,300	J,Z17	203	2,020	03.2	37.2
unknown race	4,250	2,247	390	1,613	62.0	60.3
Non-Hispanic white	8,242	5,365	362	2,515	69.5	66.1

^a Graduates living outside of the United States during the week of 15 April 2001; graduates who reported an ineligible major field for their sampled degree; those who did not attend the sampled school within the time frame; deceased; duplicates; those who did not receive a bachelor's or master's degree; and institutionalized.

NOTE: Cohort, degree, major, sex, and race/ethnicity codes are as reported by institutions at time of sampling and may not match data reported by survey respondents.

^b Calculated as (R-I)/ [(R-I) + (N * p)], where R = response (complete plus ineligible), I = ineligible, N = nonresponse, and p = proportion of response found in scope, calculated as (R-I)/R.

^c Additional address information may have been provided by alumni office during data collection. Graduates from whom both a U.S. and a foreign address were provided are included in the foreign address category.

eral violations, such as multiple responses to "Mark One" questions.

IMPUTATION OF MISSING DATA

Missing data occurred if the respondent cooperated with the survey but did not answer one or more individual questions. The level of item nonresponse in this study was generally low for most questions. However, imputation for item nonresponse was performed for each survey item to make the study results simpler to present and to allow consistent totals to be obtained when analyzing different questionnaire items. "Not applicable" responses were not imputed because they represented respondents who were not eligible to answer the given item.

Imputation was performed using a hot-deck method. Hot-deck methods estimate the missing value of an item by using values of the same item from other record(s) in the same file. Using the hot-deck procedure, each missing questionnaire item was imputed separately. First, respondent records were sorted by items thought to be related to the missing item. Next, a value was imputed for each item nonresponse recipient from a respondent donor within the same subgroup. The results of the imputation procedure were reviewed to ensure that the plan had been followed correctly. In addition, all edit checks were run on the imputed file to be sure that no data inconsistencies were created in the imputation process.

ACCURACY OF ESTIMATES

The survey estimates provided in these tables are subject to two sources of error: sampling and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population and hence are subject to sampling variability. If the interviews had been conducted with a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower.

If all possible samples were surveyed under similar conditions, intervals within plus or minus 1.96 standard errors of a particular statistic would include the statistic computed from all members of the population in about 95 percent of the samples. This is the 95 percent confidence interval. For example, suppose the estimate of the total number of 2001 and 2002 bachelor's degree recipients majoring in engineering is 109,247 and the estimated standard error is 2,536. In this case, the 95 percent confidence interval for the statistic would extend from $109,247 - (2,536 \times 1.96)$ to $109,247 + (2,536 \times 1.96)$

= 104,276 to 114,218. This means that one can be confident that intervals constructed in this way contain the true population parameter for 95 percent of all possible samples.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistics of interest for each replicate. The mean square error of the replicate estimates around their corresponding full sample estimate provides an estimate of the sampling variance of the statistic of interest. To construct the replicates, 108 stratified subsamples of the full sample were created. One hundred and eight jackknife replicates were then formed by deleting one subsample at a time from the full sample.

GENERALIZED VARIANCE FUNCTIONS

Generalized variance functions (GVF), an alternative to direct estimate, provides users with a simple, fast tool for estimating variances. When users do not have access to the software required for direct variance estimation, they can predict the variance for the 2003 NSRCG estimates by using the GVF models. This method, however, is limited because it can be used only for estimates of totals and percentages of individuals with certain characteristics of interest. Several steps are involved in using GVFs to estimate the standard errors of the estimates. First, the standard errors for a large number of different estimates were computed directly by using the jackknife replication procedures described previously. Next, models were fitted to the estimates, and standard errors and the parameters of these models were estimated from the direct estimates. These models and their estimated parameters were used to approximate the standard error of an estimate from the survey. Models were fitted for the two general types of estimates of primary interest: estimated totals and estimated percentages. Domains were determined for which separate GVF models were needed. For the 2003 NSRCG, models were fitted separately for the entire graduate population and S&E only (excluding health-related fields) by degree (for example, bachelor's and master's). Within each group, parameters were estimated by sex, major field, occupation, and race/ethnicity. Tables A-3 and A-4 show the estimates of the parameters.

SAMPLING ERRORS FOR TOTALS

Let \hat{Y} denote an estimator of the population total Y. GVF models usually are created for the relative variance of an estimated total \hat{Y} , or $RelVar(\hat{Y}) = Var(\hat{Y})/Y^2$,

TABLE A-3. Estimated parameters for computing generalized variances for estimates from the 2003 NSRCG: All fields of study

	All re	cipients		Bachelor	r's recipients		Master	's recipients	
	paramete	er estimates		paramet	er estimates		parame	ter estimates	
Domain	а	b	DEFF	а	b	DEFF	а	b	DEFF
All graduates	-0.000198	246.967	2.2	-0.000268	257.930	2.0	-0.000698	224.360	2.5
Sex	0.000170	240.707	2.2	0.000200	237.730	2.0	0.000070	224.500	2.0
Male	-0.000257	156.574	1.7	-0.000321	154.276	1.6	-0.001350	174.069	2.1
Female	-0.000457	309.700	2.2	-0.000628	329.664	2.1	-0.001594	271.467	2.5
Major									
Science majors	-0.000187	176.474	1.5	-0.000256	194.013	1.5	-0.000599	96.228	1.5
Engineering majors	-0.000409	73.489	1.5	-0.000599	75.997	1.6	-0.001208	72.015	1.4
Health-related science majors	-0.002976	664.058	1.3	-0.005577	767.440	1.4	-0.005648	551.833	1.3
Occupation									
Scientists	-0.000360	163.188	1.7	-0.000633	182.203	1.7	-0.000964	135.685	1.8
Engineers	-0.000211	85.996	1.6	-0.000312	89.372	1.7	-0.000761	77.194	1.4
Health related	-0.001761	540.546	2.2	-0.002604	557.999	2.1	-0.003610	486.163	1.9
Other	-0.000167	194.930	1.6	-0.000216	197.348	1.5	0.007980	177.131	2.1
Unemployed	-0.000379	233.895	1.7	-0.000346	230.993	1.6	-0.001958	208.613	2.2
Race/ethnicity									
American Indian/Alaska Native	0.059948	102.868	1.6	0.066782	122.787	1.6	0.007152	96.361	1.2
Asian	-0.000733	209.093	1.3	-0.001420	230.946	1.0	-0.002151	211.214	1.8
Black, non-Hispanic	0.001845	146.792	2.4	0.001671	153.851	2.2	0.019353	77.830	2.4
Hispanic	0.000618	114.291	2.1	0.000531	120.730	1.9	0.001868	81.650	2.5
White, non-Hispanic	-0.000318	281.195	2.1	-0.000415	289.952	2.0	-0.001055	257.104	2.5

DEFF = design effect.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE A-4. Estimated parameters for computing generalized variances for estimates from the 2003 NSRCG: S&E majors

	All re	ecipients		Bachelo	r's recipients		Maste	r's recipients	
	paramet	er estimates		paramet	er estimates		parame	eter estimates	;
Domain	а	b	DEFF	а	b	DEFF	а	b	DEFF
All graduates	-0.000135	156.027	1.7	-0.000193	174.645	1.7	-0.000432	91.214	1.5
Sex									
Male	-0.000228	134.205	1.6	-0.000322	148.807	1.6	-0.000797	93.678	1.4
Female	-0.000334	175.208	1.7	-0.000459	196.453	1.7	-0.000981	90.093	1.6
Major									
Science majors	-0.000187	176.474	1.5	-0.000256	194.013	1.5	-0.000599	96.228	1.5
Engineering majors	-0.000409	73.489	1.5	-0.000599	75.997	1.6	-0.001208	72.015	1.4
Occupation									
Scientists	-0.000352	152.418	1.7	-0.000644	182.910	1.7	-0.000724	102.310	1.5
Engineers	-0.000211	85.996	1.6	-0.000312	89.372	1.7	-0.000761	77.194	1.4
Health related	-0.000830	169.392	1.7	-0.000870	177.563	1.7	-0.001482	77.998	1.5
Other	-0.000193	173.811	1.4	-0.000258	185.261	1.4	-0.000903	97.531	1.4
Unemployed	0.000139	148.032	1.4	0.000115	160.392	1.4	-0.000485	89.050	1.3
Race/ethnicity									
American Indian/Alaska Native	0.023476	67.966	1.4	0.028876	70.819	1.4	-0.001711	32.470	0.9
Asian	-0.000770	178.076	1.1	-0.001441	214.628	1.0	-0.001894	145.270	1.3
Black, non-Hispanic	0.001062	75.254	1.6	0.001023	85.717	1.7	-0.001164	43.794	1.4
Hispanic	0.000642	81.826	1.8	0.000690	89.286	1.7	-0.001028	41.518	1.6
White, non-Hispanic	-0.000224	167.718	1.6	-0.000297	185.606	1.6	-0.000668	77.746	1.3

DEFF = design effect.

S&E=science and engineering.

where $Var(\hat{Y})$ is the variance of \hat{Y} . The modeling process typically begins with the assumption that the relative variance of the estimated total \hat{Y} is a linear function of the inverse of the total Y, or

$$RelVar(\hat{Y}) = \gamma_0 + \frac{\gamma_1}{Y}$$
 (1)

Many empirical works have favored the relative variance model in equation (1), for which Wolter (1985) provides some justification. To determine the most promising model, an empirical investigation of the model (2) was conducted and its equivalent form:

$$Var(\hat{Y}) = \alpha Y^2 + \beta Y \tag{2}$$

The fitting method that is chosen can result in different estimates for model coefficients, and thus, for differences in the resulting GVF variance predictions. After examining the residuals, outliers were excluded from the fitted model and refit the GVF model. Models (1) and (2) were evaluated and it was determined that the model in (2) was the better choice. Based on this estimated final model, the standard error of an estimated total \hat{Y} can then be predicted by evaluating the model with \hat{Y} and the model parameter estimates a and b. The final model used for the 2003 NSRCG is (2) above. Thus, with \hat{Y} , a and b, which are estimates of the model parameters α and β from GVF model (2), the predicted standard error (which is the square root of the variances) can be calculated as:

$$se(\hat{Y}) = (a\hat{Y}^2 + b\hat{Y})^{1/2}$$
 (3)

where $_{\mathcal{SC}}(\hat{Y})$ is the predicted standard error of the estimated total \hat{Y} .

To use the NSRCG GVF, the following steps should be followed to approximate the standard error of an estimated total:

- Obtain the estimated total \hat{Y} from the survey.
- Determine the most appropriate domain for the estimate from table A-3 or A-4.
- Refer to table A-3 or A-4 to get the estimates of *a* and *b* for this domain.
- Compute the generalized variance using equation (3) above.

For example, suppose that the number of bachelor's or master's degree recipients in engineering is 130,759 ($\hat{Y} = 130,759$). The most appropriate domain from table 3 is engineering majors. For this domain, the parameters are a = -0.000409 and b = 73.489. Approximate the standard error using equation (3) as follows:

$$se(130,759) = \sqrt{-0.000409 (130,759)^2 + 73.489 (130,759)} = 1,616$$

Sampling Errors for Percentages

Two GVF methods were investigated for estimating generalized standard errors of percentage estimates. In Method 1, the parameter estimates from the GVF model for totals were used to predict the standard error of an estimated percentage. With model (2) used for totals, an approximate standard error for the estimated percentage \hat{p} is:

$$se(\hat{P}) = \left[\frac{b}{\hat{Y}}\hat{P}(100 - \hat{P})\right]^{1/2} \tag{4}$$

Unlike Method 1, which was based on regression estimation, Method 2 produces generalized standard errors directly for percentages. Model (2) assumes the design effect (i.e., the ratio of the variance of an estimate to the variance of the same estimate from a simple random sample) is a constant within each domain. Generalized standard errors were then computed by using a domain-specific average design effect associated with a range of statistics for each cell. Because the variance for an estimated percentage \hat{p} from a simple random sample is $\hat{P}(100-\hat{P})/n$, the standard error of an estimated percentage can be written as:

$$se(\hat{P}) = \left(\frac{\hat{P}(100 - \hat{P})}{n} \times ADEFF\right)^{1/2}$$
 (5)

where *n* is the sample size for the corresponding domain and ADEFF is the average design effect (Bieler and Williams 1990).

For the 2003 NSRCG, design effects were computed separately for each domain. The average values of the design effects from these computations are shown in table A-3 and table A-4. Although users can use both methods to predict standard errors for percentage estimates,

empirically investigating the methods suggested that Method 2 as presented in equation (5) above is the better choice.

The following steps should be followed to approximate the standard error of an estimated percentage using Method 2:

- Obtain the estimated percentage and sample size from the survey.
- Determine the most appropriate domain for the estimate from table A-3 or A-4.
- Refer to table A-3 or table A-4 to get the estimates of the DEFF for this domain.
- Compute the generalized variance using equation (5) above

For example, suppose the percentage of unemployed was 17 percent ($\hat{p} = 17$) and the total number of S&E in the survey sample was 10,831 (n=10,831). The most appropriate domain from table A-3 is all graduates, and the ADEFF for this domain is 1.7. Approximate the standard error using equation (5) as:

$$se(17\%) = \sqrt{1.7(17)(100-17)/10831} = 0.47\%$$

Nonsampling Errors

In addition to sampling errors, the survey estimates are subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage), reporting errors, and errors made while collecting and processing data. These errors can sometimes bias the data. The 2003 NSRCG included procedures specifically designed to minimize nonsampling errors. In addition, some special studies conducted during the previous cycles of NSRCG provided some measures of nonsampling errors that are useful in understanding the data from the current survey as well.

Procedures to minimize nonsampling errors were followed throughout the survey. Extensive questionnaire design work was done by Mathematica Policy Research. This work included focus groups, expert panel reviews, and mail and CATI pretests. This design work was done in conjunction with the other two SESTAT surveys.

Comprehensive training and monitoring of interviewers and data processing staff helped to ensure the consis-

tency and accuracy of the data. Data collection was done almost entirely by telephone to help reduce the amount of item nonresponse and item inconsistency. Nonresponse was handled in ways designed to minimize the impact on data quality (through weighting adjustments and imputation). In data preparation, a special effort was made in the area of occupational coding. Respondent-chosen codes were verified by data preparation staff using a variety of information collected on the survey and applying coding rules developed by NSF for the SESTAT surveys.

Although general sampling theory can be used to estimate the sampling variability of a statistic, measuring a nonsampling error is not easy. Usually it requires conducting an experiment as part of the data collection, or using data external to the study. In the 1995 NSRCG, two quality analysis studies were conducted: (1) an analysis of occupational coding and (2) a CATI reinterview. As noted previously, these special studies can also inform analysts about the 2003 survey data.

The occupational coding report included an analysis of the 1995 CATI autocoding of occupation and the best coding operation. During CATI interviewing, each respondent's verbatim occupation description was autocoded by computer into a standard SESTAT code, whenever possible. Autocoding included both coding directly to a final category and coding to an intermediate code-selection screen. If the description could not be autocoded, the respondent was asked to select the appropriate occupation category during the interview. For the primary occupation, 22 percent of the responses were autocoded to a final category and 19 percent were autocoded to an intermediate screen. The results of the occupation autocoding were examined, and the process was found to be successful and efficient.

For the best coding operation, an occupational worksheet for each respondent was generated and reviewed by an experienced occupational coder. This review was based on the work-related information provided by the graduate. If the respondent's self-selected occupation code was inappropriate, a new or "best" code was assigned. A total of 17,894 responses was received to the three occupation questions in the 1995 survey cycle. Of these, 25 percent received updated codes during the best coding process: 16 percent were recoded from the "other" category and 9 percent were recoded from the "non-other" categories. This analysis indicated that the best coding activity was necessary to ensure that the most appropriate occupation codes were included on the final

data file. As a result of this 1995 NSRCG quality study, the best coding procedure was implemented in the 1997, 1999, 2001, and 2003 surveys as well. In the 2003 survey, a total of 10,215 occupations were assigned an occupation best code following data collection. Of these, 66.5 percent of the cases had a best code that matched the self-code, and 33.5 percent were assigned a best code that differed from the self-code.

The second quality analysis study conducted in the 1995 NSRCG involved a reinterview of a sample of 800 respondents. For this study, sampled respondents were interviewed a second time, and responses to the two interviews were compared. This analysis found that the questionnaire items in which respondents were asked to provide reasons for certain events or behaviors had a relatively large index of inconsistency values. Examples include reasons for not working during the reference week and reasons for working part time. High response variability is typical for items that ask about reasons and beliefs rather than behaviors, and the results were not unusual for these types of items. Some of the other differences between the two interviews were attributed to the time lag between the original interview and reinterview.

For the 1993 NSRCG, two data quality studies were completed: (1) an analysis of interviewer variance and (2) a behavioral coding analysis of 100 recorded interviews. The interviewer variance study was designed to measure the impact of interviewer effects on the precision of the estimates. The results showed that interviewer effects for most items were minimal and thus had a very limited effect on the standard error of the estimates. Interviewer variance was highest for open-ended questions.

The behavioral coding study was done to observe the extent to which interviewers were following the structured interview and the extent to which it became necessary for them to give unstructured additional explanation or comments to respondents. As part of the study, 100 interviews were taped and then coded on a variety of behavioral dimensions. This analysis revealed that on the whole, the interview proceeded in a very structured manner, with 85 percent of all question and answer "dyads" being "asked and answered only." Additional unstructured interaction/discussion took place most frequently for questions in which there was some ambiguity in the topic. In most cases, this interaction was judged to have facilitated obtaining the correct response.

The results from the quality studies were used to identify questionnaire items that might need additional revision for the next study cycle. Debriefing sessions concerning the survey were held with interviewers, and the information obtained from these sessions was also used to revise the survey for the next cycle.

Comparisons of Data With Previous Years' Results

It is important to exercise caution when making comparisons with previous NSRCG results. During the 1993 cycle, the SESTAT system underwent considerable revision in several areas, including survey eligibility, data collection procedures, questionnaire content and wording, and data coding and editing procedures. The changes made for the 1995 through 2001 cycles were less significant but might affect some data trend analysis. Although the 1993 through 2003 survey data are fairly comparable, care must be taken when comparing results from the 1990s surveys to surveys from the 1980s, due to significant changes made in 1993. For a detailed discussion of these changes, refer to the 1993 through 2001 NSRCG methodology reports.

In the 2003 survey, data were collected on graduates with bachelor's and master's degrees in health fields. This additional information has altered the structure of the tabular presentations. All tables that present data on degree fields will include, for the first time, data on graduates with health degrees.

The reporting on graduates with health degrees has also caused a structural change in the tables that present data on employment status. In previous years, data on employed graduates were presented in two categories: by employment in an S&E occupation³ and by employment in a non-S&E occupation. In 2003, a third category was added: S&E related occupations. S&E related occupations include health-related occupations, S&E managers, S&E precollege teachers, and S&E technicians and technologists.

Estimates from the 2003 NSRCG cannot be directly compared to the 2001 NSRCG results unless the respondents with health degrees are excluded from the 2003 data.

³S&E occupations include the following broad groups: biological, agricultural, and environmental life scientists; computer and information scientists; mathematicians and statisticians; psychologists; social and related scientists; engineers; and postsecondary teachers in science and engineering fields.

COMPARISONS WITH IPEDS DATA

The National Center for Education Statistics (NCES) conducts a survey of the nation's postsecondary institutions, called the Integrated Postsecondary Education Data System (IPEDS). The IPEDS Completions Survey reports the number of degrees awarded by all major fields of study, along with estimates by sex and race/ethnicity.

Although both NSRCG and IPEDS are surveys of postsecondary education and both report on completions from those institutions, important differences in the target populations for the two surveys directly affect estimates on the number of graduates. The reason for the different target populations is that the goals of the surveys are not the same. The IPEDS estimates of degrees awarded are intended to measure the output of the educational system. The NSRCG estimates are intended to measure the supply and utilization of a portion of graduates in the years after they completed their degree. These differing goals result in definitions of the target population that are not completely consistent for the two surveys. The main differences between the two surveys that affect comparisons of estimates overall and by race/ ethnicity are as follows:

- The IPEDS Completions data file represents a count of degrees awarded, whereas NSRCG represents graduates (persons). If a person receives more than one degree, institutions are instructed to report each degree separately in IPEDS. In NSRCG, each person is counted only once.
- NSRCG includes only people who were residing in the United States during the reference week for the survey (the week of October 1). People who received degrees during the years covered by the survey but resided outside the United States during the reference week appear in IPEDS counts, but not in NSRCG counts.
- NSRCG includes only major fields of study that meet the specific SESTAT system definition of S&E and health, whereas IPEDS includes all fields. The SESTAT field codes were designed to map directly to the six-digit Classification of Instructional Program (CIP) codes used in IPEDS. However, published reports from the two studies may group the specific field codes differently for reporting purposes. Therefore, when comparing the NSRCG estimates in this report to IPEDS, care must be taken to select and group the IPEDS estimates according to the NSRCG field definitions. For example, the NSRCG reporting category of computer and information sci-

ences does not include computer programming or data processing technology, but these fields are included in this category in the NCES *Digest of Education Statistics*. In addition, several NSRCG reporting categories include fields classified as multi-interdisciplinary studies in IPEDS. IPEDS and NSRCG definitions for the social and related sciences reporting category vary more than any other reporting category. The IPEDS category for social sciences also includes history, whereas the NSF category excludes history.

- The IPEDS data reflect information submitted by institutions from administrative records, whereas NSRCG represents reports of individual graduates collected in interviews. Often, estimates differ when the mode of data collection and sources of data are different.
- Whereas IPEDS is a census of postsecondary institutions, NSRCG is a sample survey. As a result, NSRCG estimates include the sampling error inherent in all sample surveys.
- The NSRCG collects data from graduates using the new OMB race/ethnicity categories while IPEDS has not yet adopted the new race/ethnicity categories.
- Changes in the codes used for collecting data on race/ ethnicity need to be taken into account when looking at estimates by race/ethnicity. Prior to the 1994-95 academic year, IPEDS collected race/ethnicity data only by broad two-digit CIP code fields, not by the specific six-digit CIP fields needed to identify the S&E fields as defined on NSRCG. Therefore, it is not possible to obtain IPEDS race/ethnicity data that precisely match the S&E population as defined by NSRCG for the academic years prior to 1995. For example, the two-digit CIP for social sciences and history includes history, which is not an S&E field, but does not include some S&E fields such as agricultural economics and public policy analysis, which are included in the NSF category for social and related sciences.

Despite the above-referenced factors, NSRCG and IPEDS estimates are consistent when appropriate adjustments for these differences are made. For example, the proportional distributions of graduates by field of study are nearly identical, and the numerical estimates are similar. More information on the comparison of NSRCG and IPEDS estimates is available in *A Comparison of Estimates in the NSRCG and IPEDS*. This report is avail-

able on the SESTAT website at http://sestat.nsf.gov in the Research Compendium section.

OTHER EXPLANATORY INFORMATION

DEFINITIONS

The following definitions are provided to facilitate the reader's use of the data in this report.

Major field of study: Derived from the survey major field category most closely related to the respondent's degree field.

Occupation: Derived from the survey job list category most closely related to the respondent's primary job.

Labor force: The labor force includes individuals working full or part time as well as those not working but seeking work or on layoff. It is a sum of the employed and the unemployed.

Unemployed: The unemployed are those who were not working on October 1 and were seeking work or on layoff from a job.

Type of employer: The sector of employment in which the respondent was working on his or her primary job held during the week of October 1, 2003. The following are definitions for each of these categories. *Private industry and business* includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed. *Educational institutions* include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions. *Government* includes local, state, and federal government, military, and commissioned corps.

Primary work activity: Refers to the activity that occupied the most time on the respondent's job. In reporting the data, those who reported applied research, basic research, development, or design work were grouped together in "research and development (R&D)." Those who reported accounting, finance or contracts, employee relations, quality or productivity management, sales and marketing, or managing and supervising were grouped into "management, sales, administration." Those who reported

production, operations, maintenance, professional services, or other activities were grouped into "other."

Full-time salary: The annual salary for the full-time employed, defined as those who were not self-employed (either incorporated or not incorporated), whose principal job was not less than 35 hours per week, and who were not full-time students on the reference date (October 1, 2003). Graduates who did not receive salaries were asked to report earned income, excluding business expenses. To annualize salary, reported hourly salaries were multiplied by the reported number of hours paid per week, then multiplied by 52; reported weekly salaries were multiplied by 52; reported monthly salaries were multiplied by 12. Yearly and academic yearly salaries were left as reported.

Race/ethnicity: All graduates, both U.S. citizens and non-U.S. citizens, are included in the race/ethnicity data presented in this report. In tables with sufficient sample size, race/ethnicity data are presented by the specific categories of white, non-Hispanic; black, non-Hispanic; Hispanic; Asian; and American Indian or Alaska Native. The "other" race/ethnicity category includes Native Hawaiian and other Pacific Islanders and individuals in multirace categories. In tables where the sample size is not sufficient to present data by specific category, the groups of black, Hispanic, and American Indian or Alaskan Native are combined into the underrepresented minority category.

COVERAGE OF TABLES

The tables in this report present information for two groups of recent graduates. The first group consists of persons who earned bachelor's degrees in science, engineering, and health fields from U.S. institutions during academic years 2001 and 2002. The second group includes those who earned science, engineering, and health master's degrees during the same two years. Standard error tables are presented as a separate set and are included in appendix B.

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TABLE B-1. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

_	Primary education and employment status							
	_			Not full-tin	ne student		_	
Major field	All recipients	Full-time student	Employed in S&E occupation	Employed in S&E-related occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed	
All fields	3,149	5,802	3,658	4,282	6,749	4,175	S	
Sciences	2,881	5,005	3,383	2,049	6,022	3,458	S	
Biological, agricultural, and environmental life sciences	1,263	3,021	2,143	1,432	2,577	1,317	S	
Agricultural/food sciences	1,170	619	S	S	867	S	S	
Biological sciences	1,144	2,889	2,027	1,388	2,481	1,268	S	
Environmental life sciences	1,152	355	594	S	685	S	\$2,100	
Computer and information sciences	1,246	1,059	2,382	S	2,221	1,018	1,200	
Mathematics and statistics	411	526	488	S	633	337	1,400	
Physical and related sciences	551	750	623	307	648	345	S	
Chemistry, except biochemistry	360	651	463	S	422	S	1,400	
Earth/atmospheric/ocean sciences	854	239	413	S	388	S	S	
Physics/astronomy	294	285	193	S	213	S	1,200	
Other physical sciences	866	S	S	S	736	S	1,800	
Psychology	1,415	2,653	S	S	3,541	2,083	2,400	
Social and related sciences	2,034	2,269	1,396	717	2,963	1,743	S	
Economics	730	799	609	S	1,341	659	1,300	
Political and related sciences	910	1,606	646	S	1,526	886	S	
Sociology/anthropology	1,235	1,243	S	S	1,931	907	S	
Other social sciences	815	918	S	S	1,353	840	S	
Engineering	845	1,197	1,502	S	1,024	741	S	
Aerospace/aeronautical/astronautical engineering	54	133	141	S	158	S	2,400	
Chemical engineering	182	306	355	S	215	S	S	
Civil/architectural engineering	182	223	468	S	350	S	S	
Electrical/computer engineering	480	742	986	S	713	465	S	
Industrial engineering	138	169	230	S	218	S	2,900	
Materials/metallurgical engineering	450	S	S	S	S	S	S	
Mechanical engineering	317	580	691	S	448	292	S	
Other engineering	510	465	558	S	350	S	S	
Health	1,316	2,731	S	3,904	2,345	S	1,900	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-2. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

			Primary educ	cation and emplo			
Major field	All recipients	Full-time student		_			
			Employed in S&E occupation	Employed in S&E-related occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed
All fields	2,906	2,200	2,396	3,817	3,102	2,069	\$1,600
Sciences	1,523	1,735	1,809	337	1,546	878	S
Biological, agricultural, and environmental life sciences	497	520	669	296	407	S	2,300
Agricultural/food sciences	370	S	324	S	S	S	2,300
Biological sciences	475	451	515	293	324	S	4,900
Environmental life sciences	323	S	S	S	S	S	S
Computer and information sciences	1,137	889	1,080	S	590	685	4,300
Mathematics and statistics	298	278	335	S	192	S	10,100
Physical and related sciences	151	347	368	S	248	S	1,700
Chemistry, except biochemistry	51	254	255	S	S	S	2,400
Earth/atmospheric/ocean sciences	170	S	202	S	S	S	S
Physics/astronomy	110	162	151	S	S	S	1,100
Other physical sciences	S	S	S	S	S	S	S
Psychology	412	885	1,028	S	1,193	S	2,200
Social and related sciences	626	603	480	S	708	380	S
Economics	265	297	218	S	240	S	1,900
Political and related sciences	386	S	286	S	451	S	2,800
Sociology/anthropology	191	306	S	S	301	S	3,500
Other social sciences	292	369	S	S	455	S	1,900
Engineering	669	874	985	S	500	473	S
Aerospace/aeronautical/astronautical engineering	49	S	72	S	S	S	5,700
Chemical engineering	101	130	141	S	S	S	5,500
Civil/architectural engineering	172	216	282	S	S	S	S
Electrical/computer engineering	416	607	650	S	S	S	S
Industrial engineering	208	S	249	S	S	S	9,900
Materials/metallurgical engineering	619	S	S	S	S	S	S
Mechanical engineering	208	250	318	S	S	S	4,400
Other engineering	671	402	684	S	275	S	4,100
Health	2,282	S	S	3,799	2,556	S	3,900

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-3. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

			Primary educ	_			
Major field and sex	-		Not full-time student				
			Employed in	Employed in S&E-related occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed
	All	Full-time	S&E				
	recipients	student	occupation				
All fields	3,149	5,802	3,658	4,282	6,749	4,175	S
All licius	2,777	-,	2,222	1,242	5,	.,	_
Sciences	2,881	5,005	3,383	2,049	6,022	3,458	S
Male	2,435	3,062	2,542	1,050	3,938	1,873	S
Female	2,400	3,756	2,355	1,787	4,665	2,822	S
Biological, agricultural, and environmental life sciences	1,263	3,021	2,143	1,432	2,577	1,317	S
Male	2,528	2,312	1,071	808	1,486	762	S
Female	2,655	2,336	1,851	1,150	2,292	1,121	S
Computer and information sciences	1,246	1,059	2,382	S	2,221	1,018	\$1,200
Male	2,022	947	2,141	S	2,111	952	3,600
Female	1,530	S	1,091	S	1,273	S	2,000
Mathematics and statistics	411	526	488	S	633	337	1,400
Male	644	417	330	S	617	S	1,100
Female	610	342	345	S	491	S	S
Physical and related sciences	551	750	623	307	648	345	S
Male	749	554	407	S	445	240	S
Female	760	640	431	S	544	235	1,900
Psychology	1,415	2,653	S	S	3,541	2,083	2,400
Male	2,458	1,499	S	S	2,134	S	S
Female	2,726	2,280	S	S	3,367	1,962	S
Social sciences	2,034	2,269	1,396	717	2,963	1,743	S
Male	2,764	1,732	1,005	S	2,332	1,152	3,500
Female	2,803	1,800	877	627	2,991	1,237	S
Engineering	845	1,197	1,502	S	1,024	741	S
Male	1,282	1,183	1,586	S	1,014	653	S
Female	1,058	477	836	S	452	364	1,500
Health	1,316	2,731	S	3,904	2,345	S	1,900
Male	781	947	S	1,380	647	S	3,100
Female	1,244	2,679	S	3,512	2,267	S	2,200

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-4. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

	Primary education and employment status						
Major field and sex	All recipients	Full-time student	Not full-time student				<u>-</u>
			Employed in S&E occupation	Employed in S&E-related occupation	Employed in non-S&E occupation	Not employed	Median salary for full-time employed
All fields	2,906	2,200	2,396	3,817	3,102	2,069	\$1,600
Sciences	1,523	1,735	1,809	337	1,546	878	S
Male	1,110	1,130	1,258	S	1,006	542	S
Female	1,243	1,158	1,316	294	1,143	612	S
Biological, agricultural, and environmental life sciences	497	520	669	296	407	S	2,300
Male	500	339	466	S	279	S	1,300
Female	557	416	495	291	295	S	3,000
Computer and information sciences	1,137	889	1,080	S	590	685	4,300
Male	1,247	S	1,053	S	539	S	1,800
Female	918	S	605	S	407	S	6,700
Mathematics and statistics	298	278	335	S	192	S	10,100
Male	330	272	290	S	S	S	9,100
Female	241	133	175	S	99	S	1,900
Physical and related sciences	151	347	368	S	248	S	1,700
Male	345	330	382	S	S	S	4,500
Female	324	155	293	S	161	S	4,000
Psychology	412	885	1,028	S	1,193	S	2,200
Male	808	541	561	S	583	S	5,900
Female	933	735	870	S	1,007	S	2,200
Social sciences	626	603	480	S	708	380	S
Male	727	417	391	S	516	S	S
Female	676	466	287	S	567	300	2,200
Engineering	669	874	985	S	500	473	S
Male	930	786	1,057	S	468	365	S
Female	647	403	530	S	210	314	S
Health	2,282	S	S	3,799	2,556	S	3,900
Male	839	S	S	2,080	S	S	3,900
Female	2,162	S	S	2,742	1,629	S	1,000

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-5. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

	_		Primary educ	ation and emplo	yment status		_
	_						
			Employed in	Employed in	Employed		Median salary
	All	Full-time	S&E	S&E-related	in non-S&E	Not	for full-time
Major field and race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed
All science and engineering fields	3,149	5,802	3,658	4,282	6,749	4,175	S
Sciences	2,881	5,005	3,383	2,049	6,022	3,458	S
Asian	2,378	2,338	2,010	S	2,336	1,202	\$2,300
Underrepresented minority	1,525	1,571	891	605	1,779	1,040	1,200
White, non-Hispanic	2,895	4,293	2,956	1,814	4,784	2,693	S
Other	1,877	905	S	S	1,244	S	1,500
Biological, agricultural, and environmental life sciences	1,263	3,021	2,143	1,432	2,577	1,317	S
Asian	1,986	1,936	S	S	S	S	S
Underrepresented minority	1,603	913	443	459	703	399	2,300
White, non-Hispanic	2,492	2,706	1,806	1,327	2,187	971	S
Other	1,132	S	S	S	S	S	S
Computer and information sciences	1,246	1,059	2,382	S	2,221	1,018	1,200
Asian	1,938	S	1,737	S	1,308	S	1,100
Underrepresented minority	1,569	S	677	S	747	S	1,400
White, non-Hispanic	2,422	752	1,878	S	1,766	S	2,100
Other	S	S	S	S	S	S	S
Mathematics and statistics	411	526	488	S	633	337	1,400
Asian	571	S	S	S	496	S	1,000
Underrepresented minority	247	134	S	S	214	S	1,000
White, non-Hispanic	731	466	421	S	639	S	1,000
Other	S	S	S	S	S	S	S
Physical and related sciences	551	750	623	307	648	345	S
Asian	587	402	S	S	S	S	S
Underrepresented minority	378	205	184	S	192	S	1,100
White, non-Hispanic	810	721	610	S	607	253	S
Other	271	S	S	S	S	S	S
Psychology	1,415	2,653	S	S	3,541	2,083	2,400
Asian	S	S	S	S	S	S	S
Underrepresented minority	1,715	949	S	S	1,578	S	2,900
White, non-Hispanic	2,774	2,482	S	S	3,278	1,991	1,400
Other	S	S	S	S	S	S	S
Social sciences	2,034	2,269	1,396	717	2,963	1,743	S
Asian	2,103	1,054	S	S	1,528	S	2,700
Underrepresented minority	1,614	801	243	S	1,383	552	1,200
White, non-Hispanic	2,996	2,014	1,269	S	3,068	1,393	S
Other	1,218	S	S	S	1,020	S	3,100
Engineering	845	1,197	1,502	S	1,024	741	S
Asian	1,456	796	1,030	S	557	S	S
Underrepresented minority	908	249	554	S	298	194	3,200
White, non-Hispanic	1,640	756	1,448	S	798	524	S

TABLE B-5. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

			Primary educ	ation and emplo	yment status		
	_				_		
			Employed in	Employed in	Employed		Median salary
	All	Full-time	S&E	S&E-related	in non-S&E	Not	for full-time
Major field and race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed
Other	602	S	452	S	S	S	6,100
Health	1,316	2,731	S	3,904	2,345	S	1,900
Asian	S	S	S	S	S	S	S
Underrepresented minority	2,998	S	S	2,522	S	S	2,000
White, non-Hispanic	3,905	2,441	S	4,151	2,302	S	2,700
Other	S	S	S	S	S	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-6. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

			Primary educ	ation and emplo			_
	_			Not full-tin	ne student		_
			Employed in	Employed in	Employed		Median salary
	All	Full-time	S&E	S&E-related	in non-S&E	Not	for full-time
Major field race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed
All science and engineering fields	2,906	2,200	2,396	3,817	3,102	2,069	\$1,600
Sciences	1,523	1,735	1,809	337	1,546	878	S
Asian	1,648	1,345	1,231	S	797	744	4,500
Underrepresented minority	457	332	351	S	477	247	2,300
White, non-Hispanic	1,077	945	1,302	312	1,414	395	1,700
Other	501	S	S	S	S	S	5,600
Biological, agricultural, and environmental life sciences	497	520	669	296	407	S	2,300
Asian	557	S	S	S	S	S	S S
Underrepresented minority	193	S	S	S	141	S	7,400
White, non-Hispanic	566	362	507	275	373	S	1,900
Other	500 S	302 S	307 S	2/3 S	3/3 S	S	1,700 S
Other	3	3	3	3	3	3	3
Computer and information sciences	1,137	889	1,080	S	590	685	4,300
Asian	1,601	S	1,127	S	S	680	1,200
Underrepresented minority	317	S	S	S	S	S	2,400
White, non-Hispanic	772	S	298	S	501	S	9,700
Other	S	S	S	S	S	S	S
Mathematics and statistics	298	278	335	S	192	S	10,100
Asian	357	S	S	S	S	S	14,800
Underrepresented minority	74	S	S	S	S	S	8,200
White, non-Hispanic	288	165	206	S	S	S	4,800
Other	S S	S	S S	S	S	S	s
Physical and related sciences	151	347	368	S	248	S	1,700
Asian	336	281	S	S	S	S	4,400
Underrepresented minority	151	70	129	S	S	S	6,900
White, non-Hispanic	339	255	292	S	212	S	2,100
Other	537 S	233 S	S S	S	S S	S	2,100 S
Other	3	3	3	3	3	3	3
Psychology	412	885	1,028	S	1,193	S	2,200
Asian	S	S	S	S	S	S	S
Underrepresented minority	491	239	253	S	466	S	2,600
White, non-Hispanic	1,066	592	898	S	1,088	S	1,600
Other	S	S	S	S	S	S	S
Social sciences	626	603	480	S	708	380	S
Asian	658	S	S	S	S	S	S
Underrepresented minority	375	164	S	S	301	S	S
White, non-Hispanic	713	469	422	S	669	269	1,700
Other	S	S	S	S	S	S	S
Engineering	669	874	985	S	500	473	S
Asian	1,090	822	945	S	S	S	4,400
Underrepresented minority	314	143	236	S	S	S	5,200
White, non-Hispanic	847	347	793	S	384	S	S
				-			

TABLE B-6. Standard errors for primary education and employment status, and median salary of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

		Primary education and employment status							
	_			Not full-tin	ne student		_		
			Employed in	Employed in	Employed		Median salary		
	All	Full-time	S&E	S&E-related	in non-S&E	Not	for full-time		
Major field race/ethnicity	recipients	student	occupation	occupation	occupation	employed	employed		
Health	2,282	S	S	3,799	2,556	S	3,900		
Asian	S	S	S	S	S	S	S		
Underrepresented minority	1,790	S	S	S	S	S	2,000		
White, non-Hispanic	3,353	S	S	3,334	S	S	3,700		
Other	S	S	S	S	S	S	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-7. Standard errors for sex and race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

						Race/e	thnicity		
					Under	represented r	minority		
					American	1		•	
					Indian/				
	All		ex		Alaska	Black, non-		White, non-	
Major field	recipients	Male	Female	Asian	Native	Hispanic	Hispanic	Hispanic	Other
All fields	3,149	2,595	2,671	2,395	1,604	4,450	3,310	4,668	2,762
Sciences	2,881	2,435	2,400	2,378	755	2,897	2,582	2,895	1,877
Biological, agricultural, and environmental life sciences	1,263	2,528	2,655	1,986	S	1,195	1,207	2,492	1,132
Agricultural/food sciences	1,170	691	849	S	S	S	S	1,116	S
Biological sciences	1,144	2,364	2,448	2,031	S	1,156	1,179	2,449	S
Environmental life sciences	1,152	865	738	S	S	S	S	1,087	S
Computer and information sciences	1,246	2,022	1,530	1,938	S	832	1,445	2,422	S
Mathematics and statistics	411	644	610	571	S	207	167	731	S
Physical and related sciences	551	749	760	587	S	316	273	810	271
Chemistry, except biochemistry	360	554	611	540	S	225	171	602	S
Earth/atmospheric/ocean sciences	854	522	453	S	S	S	S	773	S
Physics/astronomy	294	257	229	S	S	84	64	323	S
Other physical sciences	866	S	507	S	S	S	S	739	S
Psychology	1,415	2,458	2,726	S	S	1,506	1,260	2,774	S
Social and related sciences	2,034	2,764	2,803	2,103	S	1,298	1,493	2,996	1,218
Economics	730	1,064	1,047	1,096	S	418	331	1,174	S
Political and related sciences	910	1,756	1,609	S	S	674	703	1,615	S
Sociology/anthropology	1,235	1,586	1,930	S	S	776	888	1,568	S
Other social sciences	815	1,422	1,435	S	S	460	711	1,281	S
Engineering	845	1,282	1,058	1,456	S	478	811	1,640	602
Aerospace/aeronautical/astronautical engineering	54	82	71	S	S	S	37	112	S
Chemical engineering	182	312	290	320	S	88	107	401	S
Civil/architectural engineering	182	446	401	395	S	105	169	524	S
Electrical/computer engineering	480	629	636	882	S	316	417	868	S
Industrial engineering	138	219	193	S	S	101	183	240	S
Materials/metallurgical engineering	450	368	S	S	S	S	S	330	S
Mechanical engineering	317	451	392	534	S	184	268	734	S
Other engineering	510	628	449	S	S	S	143	609	S
Health	1,316	781	1,244	S	S	2,698	1,373	3,905	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-8. Standard errors for sex and race/ethnicity of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

					Race	ethnicity	
					Under-		
	All		ex		represented	White, non-	
Major field	recipients	Male	Female	Asian	minority	Hispanic	Other
All fields	2,906	1,381	2,564	2,376	1,833	3,378	1,356
Sciences	1,523	1,110	1,243	1,648	457	1,077	501
Biological, agricultural, and environmental life sciences	497	500	557	557	193	566	S
Agricultural/food sciences	370	316	264	S	S	310	S
Biological sciences	475	451	516	439	179	521	S
Environmental life sciences	323	S	211	S	S	272	S
Computer and information sciences	1,137	1,247	918	1,601	317	772	S
Mathematics and statistics	298	330	241	357	74	288	S
Physical and related sciences	151	345	324	336	151	339	S
Chemistry, except biochemistry	51	251	248	S	116	241	S
Earth/atmospheric/ocean sciences	170	206	198	S	S	194	S
Physics/astronomy	110	154	121	177	S	169	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	412	808	933	S	491	1,066	S
Social and related sciences	626	727	676	658	375	713	S
Economics	265	304	233	251	143	220	S
Political and related sciences	386	487	404	S	217	488	S
Sociology/anthropology	191	312	304	S	181	272	S
Other social sciences	292	398	358	S	220	428	S
Engineering	669	930	647	1,090	314	847	299
Aerospace/aeronautical/astronautical engineering	49	69	50	S	S	71	S
Chemical engineering	101	119	89	148	S	112	S
Civil/architectural engineering	172	243	194	287	99	304	S
Electrical/computer engineering	416	560	448	640	120	506	S
Industrial engineering	208	244	146	254	S	259	S
Materials/metallurgical engineering	619	614	S	S	S	S	S
Mechanical engineering	208	255	155	304	114	268	S
Other engineering	671	642	362	514	170	553	S
Health	2,282	839	2,162	S	1,790	3,353	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-9. Standard errors for race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

					oresented	White,			
	All	As	ian	min	ority	non-H	ispanic	Otl	her
Major field	recipients	Male	Female	Male	Female	Male	Female	Male	Female
All fields	3,149	2,570	2,624	1,968	3,760	3,368	4,617	1,677	1,955
Sciences	2,881	2,514	2,390	1,704	1,982	3,004	3,371	1,169	1,492
Biological, agricultural, and environmental life sciences	1,263 1,170	1,464 S	1,896 S	711 S	1,307 S	2,344 644	2,638 823	S S	S S
Agricultural/food sciences	1,144	S	1,901	712	1,265	2,202	2,422	S	S
Biological sciences Environmental life sciences	1,152	S	S	S	S	875	603	S	S
Computer and information sciences	1,246	1,845	1,438	1,461	547	2,005	1,179	S	S
Mathematics and statistics	411	467	353	178	192	567	630	S	S
Physical and related sciences	551	446	374	236	310	745	604	S	S
Chemistry, except biochemistry	360	S	S	185	215	514	534	S	S
Earth/atmospheric/ocean sciences	854	S	S	S	S	505	389	S	S
Physics/astronomy	294	S	S	106	40	267	205	S	S
Other physical sciences	866	S	S	S	S	S	S	S	S
Psychology	1,415	S	S	939	1,359	2,316	3,236	S	S
Social and related sciences	2,034	1,434	1,573	1,031	1,445	2,828	2,774	832	932
Economics	730	957	S	415	289	989	809	S	S
Political and related sciences	910	S	S	571	703	1,572	1,561	S	S
Sociology/anthropology	1,235	S	S	461	975	1,529	1,868	S	S
Other social sciences	815	S	S	484	585	1,371	1,392	S	S
Engineering	845	1,313	658	699	350	1,623	721	496	324
Aerospace/aeronautical/astronautical engineering	54	S	S	44	S	106	63	S	S
Chemical engineering	182	S	S	83	97	322	258	S	S
Civil/architectural engineering	182	S	S	162	102	536	313	S	S
Electrical/computer engineering	480	800	S	417	147	864	224	S	S
Industrial engineering	138	S	S	112	104	231	135	S	S
Materials/metallurgical engineering	450	S	S	S	S	252	S	S	S
Mechanical engineering	317	530	S	274	91	719	377	S	S
Other engineering	510	S	S	S	115	561	399	S	S
Health	1,316	S	S	S	2,915	1,255	3,642	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-10. Standard errors for race/ethnicity of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

				Underrep	Underrepresented		White,		
	All	As	ian	min	ority	non-H	ispanic	Ot	her
Major field	recipients	Male	Female	Male	Female	Male	Female	Male	Female
All fields	2,906	1,610	2,219	985	1,473	2,061	3,000	521	S
Sciences	1,523	1,583	1,316	469	422	1,238	1,370	231	S
Biological, agricultural, and environmental life sciences	497	S	S	153	148	434	497	S	S
Agricultural/food sciences	370	S	S	S	S	258	S	S	S
Biological sciences	475	S	S	S	114	368	451	S	S
Environmental life sciences	323	S	S	S	S	S	S	S	S
Computer and information sciences	1,137	1,557	915	256	S	600	468	S	S
Mathematics and statistics	298	352	S	55	53	212	171	S	S
Physical and related sciences	151	323	S	122	101	322	295	S	S
Chemistry, except biochemistry	51	S	S	S	S	S	S	S	S
Earth/atmospheric/ocean sciences	170	S	S	S	S	203	189	S	S
Physics/astronomy	110	S	S	S	S	159	79	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S
Psychology	412	S	S	S	398	789	1,101	S	S
Social and related sciences	626	420	464	230	302	638	674	S	S
Economics	265	S	S	S	S	222	154	S	S
Political and related sciences	386	S	S	S	S	459	352	S	S
Sociology/anthropology	191	S	S	S	145	285	284	S	S
Other social sciences	292	S	S	S	173	401	361	S	S
Engineering	669	1,158	483	275	140	782	444	S	S
Aerospace/aeronautical/astronautical engineering	49	S	S	S	S	74	S	S	S
Chemical engineering	101	S	S	S	S	S	S	S	S
Civil/architectural engineering	172	294	S	S	S	251	178	S	S
Electrical/computer engineering	416	720	435	S	S	450	S	S	S
Industrial engineering	208	S	S	S	S	253	S	S	S
Materials/metallurgical engineering	619	S	S	S	S	S	S	S	S
Mechanical engineering	208	312	S	S	S	259	108	S	S
Other engineering	671	459	S	S	S	505	289	S	S
Health	2,282	S	S	S	1,373	1,589	2,609	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-11. Standard errors for age of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

-	All	Less than 25	25-29	30-34	35 years
Major field	recipients	years	years	years	or more
All fields	3,149	11,477	7,518	4,130	8,132
Sciences	2,881	8,216	6,012	3,006	4,277
Biological, agricultural, and environmental life sciences	1,263	3,073	2,757	1,223	893
Agricultural/food sciences	1,170	891	774	S	S
Biological sciences	1,144	2,873	2,573	1,166	S
Environmental life sciences	1,152	761	808	S	S
Computer and information sciences	1,246	2,165	2,025	1,166	1,449
Mathematics and statistics	411	740	629	296	303
Physical and related sciences	551	891	675	506	496
Chemistry, except biochemistry	360	542	566	S	215
Earth/atmospheric/ocean sciences	854	407	374	238	144
Physics/astronomy	294	328	219	S	S
Other physical sciences	866	S	S	S	393
Psychology	1,415	3,035	2,557	1,465	2,191
Social and related sciences	2,034	3,927	2,982	1,494	1,743
Economics	730	1,256	975	389	S
Political and related sciences	910	1,776	1,632	542	457
Sociology/anthropology	1,235	1,995	1,935	844	1,161
Other social sciences	815	1,750	1,117	823	1,093
Engineering	845	1,602	1,604	738	684
Aerospace/aeronautical/astronautical engineering	54	132	129	S	S
Chemical engineering	182	319	302	S	S
Civil/architectural engineering	182	477	552	289	S
Electrical/computer engineering	480	923	848	450	491
Industrial engineering	138	220	237	S	S
Materials/metallurgical engineering	450	251	S	S	S
Mechanical engineering	317	607	651	378	281
Other engineering	510	586	582	S	S
Health	1,316	6,285	4,637	2,540	6,122

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-12. Standard errors for age of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Less than 25	25-29	30-34	35 years
Major field	recipients	years	years	years	or more
All fields	2,906	1,005	4,677	3,112	4,242
Sciences	1,523	373	1,680	1,588	1,679
Biological, agricultural, and environmental life sciences	497	S	573	458	439
Agricultural/food sciences	370	S	272	S	S
Biological sciences	475	S	506	359	383
Environmental life sciences	323	S	S	S	S
Computer and information sciences	1,137	S	815	1,121	918
Mathematics and statistics	298	S	302	296	218
Physical and related sciences	151	S	364	344	289
Chemistry, except biochemistry	51	S	272	255	S
Earth/atmospheric/ocean sciences	170	S	166	174	S
Physics/astronomy	110	S	195	141	S
Other physical sciences	S	S	S	S	S
Psychology	412	S	1,022	803	1,085
Social and related sciences	626	S	708	648	599
Economics	265	S	259	177	190
Political and related sciences	386	S	411	366	340
Sociology/anthropology	191	S	301	291	225
Other social sciences	292	S	390	369	374
Engineering	669	382	1,053	821	621
Aerospace/aeronautical/astronautical engineering	49	S	90	S	S
Chemical engineering	101	S	141	S	S
Civil/architectural engineering	172	S	288	253	S
Electrical/computer engineering	416	S	624	541	318
Industrial engineering	208	S	289	200	250
Materials/metallurgical engineering	619	S	S	S	S
Mechanical engineering	208	S	304	211	S
Other engineering	671	S	564	508	437
Health	2,282	S	3,948	2,511	3,659

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-13. Standard errors for citizenship of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All		U.S. citizen		
Major field	recipients	Total	From birth	Naturalized	Non-U.S. citizen
All fields	3,149	4,531	5,750	4,060	2,979
Sciences	2,881	4,008	4,731	3,394	2,630
Biological, agricultural, and environmental life sciences	1,263	1,846	2,464	1,894	1,173
Agricultural/food sciences	1,170	1,163	1,166	S	S
Biological sciences	1,144	1,761	2,395	1,810	1,171
Environmental life sciences	1,152	1,151	1,114	S	S
Computer and information sciences	1,246	1,689	2,373	2,103	1,333
Mathematics and statistics	411	589	630	505	371
Physical and related sciences	551	580	690	390	289
Chemistry, except biochemistry	360	417	539	369	S
Earth/atmospheric/ocean sciences	854	839	822	S	S
Physics/astronomy	294	313	312	S	S
Other physical sciences	866	862	860	S	S
Psychology	1,415	1,793	2,274	1,344	S
Social and related sciences	2,034	2,273	2,593	1,559	1,135
Economics	730	845	1,039	728	S
Political and related sciences	910	1,022	1,276	785	S
Sociology/anthropology	1,235	1,259	1,686	927	S
Other social sciences	815	854	998	S	S
Engineering	845	1,171	1,484	1,052	922
Aerospace/aeronautical/astronautical engineering	54	65	84	66	S
Chemical engineering	182	224	336	264	S
Civil/architectural engineering	182	328	376	S	S
Electrical/computer engineering	480	753	960	786	676
Industrial engineering	138	163	203	S	S
Materials/metallurgical engineering	450	337	344	S	S
Mechanical engineering	317	393	503	392	S
Other engineering	510	520	533	S	S
Health	1,316	1,848	2,568	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-14. Standard errors for citizenship of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All		U.S. citizen				
Major field	recipients	Total	From birth	Naturalized	Non-U.S. citizen		
All fields	2,906	2,864	3,398	2,723	2,029		
Sciences	1,523	1,464	1,465	893	1,786		
Biological, agricultural, and environmental life sciences	497	592	608	S	499		
Agricultural/food sciences	370	322	322	S	S		
Biological sciences	475	538	538	S	392		
Environmental life sciences	323	297	297	S	S		
Computer and information sciences	1,137	1,157	944	453	1,764		
Mathematics and statistics	298	270	242	S	334		
Physical and related sciences	151	352	344	S	326		
Chemistry, except biochemistry	51	272	257	S	272		
Earth/atmospheric/ocean sciences	170	189	188	S	S		
Physics/astronomy	110	152	161	S	148		
Other physical sciences	S	S	S	S	S		
Psychology	412	631	800	S	S		
Social and related sciences	626	689	781	369	521		
Economics	265	241	261	S	302		
Political and related sciences	386	458	505	S	S		
Sociology/anthropology	191	246	270	S	S		
Other social sciences	292	378	396	S	S		
Engineering	669	1,123	919	598	1,107		
Aerospace/aeronautical/astronautical engineering	49	71	78	S	S		
Chemical engineering	101	134	135	S	144		
Civil/architectural engineering	172	296	283	S	305		
Electrical/computer engineering	416	592	495	417	648		
Industrial engineering	208	283	276	S	262		
Materials/metallurgical engineering	619	S	S	S	S		
Mechanical engineering	208	317	281	S	308		
Other engineering	671	680	647	S	515		
Health	2,282	2,438	3,105	S	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-15. Standard errors for undergraduate grade point average of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All		Undergraduate GPA			
Major field	recipients	Below 2.75	2.75 to 3.24	3.25 or highe		
All fields	3,149	4,028	6,540	7,306		
Sciences	2,881	3,647	5,533	5,797		
Biological, agricultural, and environmental life sciences	1,263	1,880	2,509	2,876		
Agricultural/food sciences	1,170	399	715	856		
Biological sciences	1,144	1,916	2,363	2,803		
Environmental life sciences	1,152	S	746	704		
Computer and information sciences	1,246	1,110	1,991	2,245		
Mathematics and statistics	411	335	596	676		
Physical and related sciences	551	453	715	749		
Chemistry, except biochemistry	360	342	566	593		
Earth/atmospheric/ocean sciences	854	281	465	420		
Physics/astronomy	294	114	249	258		
Other physical sciences	866	S	S	472		
Psychology	1,415	1,865	2,909	3,312		
Social and related sciences	2,034	2,108	2,759	3,205		
Economics	730	670	1,146	1,210		
Political and related sciences	910	1,149	1,372	1,688		
Sociology/anthropology	1,235	1,436	1,547	1,999		
Other social sciences	815	865	1,205	1,589		
Engineering	845	983	1,442	1,605		
Aerospace/aeronautical/astronautical engineering	54	79	130	129		
Chemical engineering	182	189	354	386		
Civil/architectural engineering	182	358	411	489		
Electrical/computer engineering	480	558	813	918		
Industrial engineering	138	171	205	226		
Materials/metallurgical engineering	450	S	S	251		
Mechanical engineering	317	431	616	628		
Other engineering	510	283	544	601		
Health	1,316	1,893	4,571	5,481		

GPA = Grade point average.

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-16. Standard errors for undergraduate grade point average of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Undergraduate GPA			
Major field	recipients	Below 2.75	2.75 to 3.24	3.25 or highe	
All fields	2,906	1,964	3,207	4,377	
Sciences	1,523	817	1,649	1,887	
Biological, agricultural, and environmental life sciences	497	322	570	612	
Agricultural/food sciences	370	S	S	308	
Biological sciences	475	253	466	526	
Environmental life sciences	323	S	S	257	
Computer and information sciences	1,137	S	784	1,235	
Mathematics and statistics	298	S	244	324	
Physical and related sciences	151	S	346	378	
Chemistry, except biochemistry	51	S	S	274	
Earth/atmospheric/ocean sciences	170	S	204	209	
Physics/astronomy	110	S	142	159	
Other physical sciences	S	S	S	S	
Psychology	412	530	900	930	
Social and related sciences	626	334	520	692	
Economics	265	S	186	231	
Political and related sciences	386	S	331	373	
Sociology/anthropology	191	S	245	270	
Other social sciences	292	S	293	437	
Engineering	669	436	903	1,017	
Aerospace/aeronautical/astronautical engineering	49	S	S	77	
Chemical engineering	101	S	140	152	
Civil/architectural engineering	172	S	250	276	
Electrical/computer engineering	416	S	509	590	
Industrial engineering	208	S	205	244	
Materials/metallurgical engineering	619	S	S	S	
Mechanical engineering	208	S	236	295	
Other engineering	671	S	509	603	
Health	2,282	S	2,897	3,936	

GPA = Grade point average.

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-17. Standard errors for community college attendance and associate's degree receipt among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All	Attended com	munity college	Earned associate's degree	
Major field	recipients	Number	Percent	Number	Percent
All fields	3,149	10,961	1	10,203	1
Sciences	2,881	7,657	1	5,689	1
Biological, agricultural, and environmental life sciences	1,263	3,214	2	1,881	1
Agricultural/food sciences	1,170	753	4	586	4
Biological sciences	1,144	2,998	2	1,743	1
Environmental life sciences	1,152	902	5	577	4
Computer and information sciences	1,246	2,561	3	1,896	2
Mathematics and statistics	411	767	3	480	2
Physical and related sciences	551	916	2	592	2
Chemistry, except biochemistry	360	594	3	340	2
Earth/atmospheric/ocean sciences	854	670	5	225	3
Physics/astronomy	294	295	4	S	S
Other physical sciences	866	515	20	495	26
Psychology	1,415	3,070	2	2,289	1
Social and related sciences	2,034	3,729	2	2,668	1
Economics	730	1,253	3	593	1
Political and related sciences	910	1,636	2	697	1
Sociology/anthropology	1,235	2,005	2	1,552	2
Other social sciences	815	1,675	4	1,533	3
Engineering	845	1,780	2	973	1
Aerospace/aeronautical/astronautical engineering	54	120	4	S	S
Chemical engineering	182	381	3	140	1
Civil/architectural engineering	182	557	3	312	2
Electrical/computer engineering	480	1,032	3	593	2
Industrial engineering	138	246	4	139	2
Materials/metallurgical engineering	450	S	S	S	S
Mechanical engineering	317	712	3	387	2
Other engineering	510	488	4	S	S
Health	1,316	5,384	4	7,281	5

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-18. Standard errors for community college attendance and associate's degree receipt among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All	Attended com	munity college	Earned asso	Earned associate's degree	
Major field	recipients	Number	Percent	Number	Percent	
All fields	2,906	4,682	2	2,877	1	
Sciences	1,523	2,028	2	1,026	1	
Biological, agricultural, and environmental life sciences	497	539	3	300	2	
Agricultural/food sciences	370	281	8	S	S	
Biological sciences	475	499	4	S	S	
Environmental life sciences	323	S	S	S	S	
Computer and information sciences	1,137	877	3	411	1	
Mathematics and statistics	298	222	4	S	S	
Physical and related sciences	151	318	3	186	2	
Chemistry, except biochemistry	51	203	5	S	S	
Earth/atmospheric/ocean sciences	170	226	7	S	S	
Physics/astronomy	110	165	6	S	S	
Other physical sciences	S	S	S	S	S	
Psychology	412	1,128	4	716	2	
Social and related sciences	626	676	3	388	1	
Economics	265	186	4	S	S	
Political and related sciences	386	397	5	S	S	
Sociology/anthropology	191	307	5	194	3	
Other social sciences	292	446	5	S	S	
Engineering	669	897	2	387	1	
Aerospace/aeronautical/astronautical engineering	49	S	S	S	S	
Chemical engineering	101	S	S	S	S	
Civil/architectural engineering	172	248	4	S	S	
Electrical/computer engineering	416	544	3	S	S	
Industrial engineering	208	170	4	S	S	
Materials/metallurgical engineering	619	S	S	S	S	
Mechanical engineering	208	222	4	S	S	
Other engineering	671	508	5	S	S	
Health	2,282	3,870	4	2,409	3	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-19. Standard errors for sources of financial support for 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

						Loans from			
			Earnings			college,		Scholar-	
		Assistant-	from		Gifts from	bank,	Loans from	ships,	
	All	ships, work	employ-	Employer	parents/	govern-	parents/	grants,	Other
Major field	recipients	study	ment	assistance	relatives	ment	relatives	fellowships	sources
All fields	3,149	8,743	8,101	6,516	10,146	7,548	4,125	8,321	3,331
Sciences	2,881	6,887	5,752	3,952	6,752	6,387	3,186	6,382	1,706
Biological, agricultural, and environmental life sciences	1,263	2,740	2,883	1,085	2,730	2,813	1,618	2,849	S
Agricultural/food sciences	1,170	438	955	S	934	883	341	1,022	S
Biological sciences	1,144	2,537	2,730	1,060	2,628	2,752	1,526	2,771	S
Environmental life sciences	1,152	703	813	S	937	938	S	840	S
Computer and information sciences	1,246	1,500	1,998	1,611	2,517	3,585	1,297	2,323	S
Mathematics and statistics	411	655	797	289	686	708	368	575	S
Physical and related sciences	551	700	823	537	914	886	416	737	S
Chemistry, except biochemistry	360	477	568	308	629	661	301	496	S
Earth/atmospheric/ocean sciences	854	409	641	203	769	546	S	509	S
Physics/astronomy	294	243	296	S	273	289	148	348	S
Other physical sciences	866	S	789	S	568	739	S	509	S
Psychology	1,415	2,851	3,442	2,077	3,536	3,301	1,624	3,071	S
Social and related sciences	2,034	3,916	2,902	1,730	3,155	3,387	1,749	3,454	1,199
Economics	730	1,045	1,249	549	1,008	1,082	676	1,247	S
Political and related sciences	910	1,876	1,587	S	1,761	1,887	1,115	1,625	S
Sociology/anthropology	1,235	1,739	1,730	982	2,214	1,957	1,130	2,164	S
Other social sciences	815	1,162	1,425	940	1,533	1,350	605	1,293	S
Engineering	845	1,282	1,653	902	1,407	1,749	1,119	1,507	320
Aerospace/aeronautical/astronautical engineering	54	93	158	S	125	136	70	143	S
Chemical engineering	182	227	357	S	314	361	183	365	S
Civil/architectural engineering	182	369	524	285	434	499	325	441	S
Electrical/computer engineering	480	873	904	580	961	1,025	751	1,004	S
Industrial engineering	138	203	268	S	200	218	165	206	S
Materials/metallurgical engineering	450	S	357	S	351	325	S	280	S
Mechanical engineering	317	520	668	424	586	661	410	580	S
Other engineering	510	438	581	S	535	635	342	549	S
Health	1,316	4,634	5,010	5,099	6,626	4,269	2,490	5,403	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-20. Standard errors for sources of financial support for 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

Major field	All recipients	Assistant- ships, work study	Earnings from employ- ment	Employer assistance	Gifts from parents/ relatives	Loans from college, bank, govern- ment	Loans from parents/ relatives	Scholar- ships, grants, fellowships	Other sources
All fields	2,906	3,158	4,677	4,093	4,125	4,682	1,598	4,163	837
Sciences	1,523	1,963	2,306	1,444	1,935	1,563	681	2,189	569
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences	497 370 475 323	621 325 523 245	523 267 504 S	523 S 494 S	551 S 460 S	483 S 434 S	S S S	685 324 581 256	S S S
Computer and information sciences	1,137	840	1,389	825	1,414	722	S	1,430	S
Mathematics and statistics	298	325	294	250	236	175	S	289	S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	151 51 170 110 S	377 275 206 157 S	339 200 212 119 S	268 S S 146 S	264 S S 129 S	306 192 170 S S	S S S S	396 253 224 162 S	S S S S
Psychology	412	1,012	1,077	665	1,023	1,008	S	1,016	S
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	626 265 386 191 292	806 355 390 307 456	767 223 466 303 424	491 227 S 181 337	744 258 452 324 425	718 200 399 321 402	279 S S S S	745 298 436 288 443	\$ \$ \$ \$ \$
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	669 49 101 172 416 208 619 208 671	1,191 84 144 360 715 285 S 383 523	891 75 108 259 571 209 S 280 526	1,031 S S 229 647 281 S 338 559	931 S S 276 651 S S 267 325	681 S 88 211 419 S S 243 366	699 S S S S S S S	1,181 78 125 322 689 278 S 343 639	S S S S S S S S
Health	2,282	1,961	3,608	3,699	3,354	4,399	S	3,408	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-21. Standard errors for amount borrowed for undergraduate education by 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not borrow	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	3,149	7,645	4,998	7,522	7,057
Sciences	2,881	5,738	4,154	5,309	5,281
Biological, agricultural, and environmental life sciences	1,263	2,569	1,910	2,672	2,153
Agricultural/food sciences	1,170	638	441	620	547
Biological sciences	1,144	2,504	1,876	2,459	2,078
Environmental life sciences	1,152	573	292	774	435
Computer and information sciences	1,246	2,542	1,912	1,577	3,148
Mathematics and statistics	411	606	458	602	477
Physical and related sciences	551	808	743	544	735
Chemistry, except biochemistry	360	606	576	460	461
Earth/atmospheric/ocean sciences	854	357	280	281	291
Physics/astronomy	294	281	199	256	163
Other physical sciences	866	S	S	S	S
Psychology	1,415	3,135	2,333	3,418	2,242
Social and related sciences	2,034	3,008	2,053	2,791	2,575
Economics	730	1,158	807	1,110	843
Political and related sciences	910	1,616	1,122	1,772	1,429
Sociology/anthropology	1,235	1,643	1,377	1,771	1,389
Other social sciences	815	1,232	1,006	1,373	941
Engineering	845	1,617	966	1,355	1,293
Aerospace/aeronautical/astronautical engineering	54	121	86	109	105
Chemical engineering	182	368	223	330	220
Civil/architectural engineering	182	450	257	459	385
Electrical/computer engineering	480	1,063	688	839	849
Industrial engineering	138	206	171	183	140
Materials/metallurgical engineering	450	S	S	S	S
Mechanical engineering	317	651	433	665	448
Other engineering	510	566	401	518	446
Health	1,316	4,130	2,233	4,810	4,352

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-22. Standard errors for amount borrowed for undergraduate and graduate education by 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not borrow	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	2,906	4,582	2,417	2,921	3,969
Sciences	1,523	1,676	1,049	1,400	1,241
Biological, agricultural, and environmental life sciences	497	653	399	328	354
Agricultural/food sciences	370	318	S	S	S
Biological sciences	475	589	303	268	333
Environmental life sciences	323	234	S	S	S
Computer and information sciences	1,137	1,076	527	675	S
Mathematics and statistics	298	352	S	S	S
Physical and related sciences	151	290	175	191	S
Chemistry, except biochemistry	51	199	S	S	S
Earth/atmospheric/ocean sciences	170	195	S	S	S
Physics/astronomy	110	159	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	412	930	672	910	874
Social and related sciences	626	756	407	512	480
Economics	265	311	S	S	S
Political and related sciences	386	437	S	S	339
Sociology/anthropology	191	313	210	220	235
Other social sciences	292	439	S	348	S
Engineering	669	1,015	658	602	426
Aerospace/aeronautical/astronautical engineering	49	71	S	S	S
Chemical engineering	101	154	S	S	S
Civil/architectural engineering	172	287	232	S	S
Electrical/computer engineering	416	661	473	S	S
Industrial engineering	208	250	S	S	S
Materials/metallurgical engineering	619	S	S	S	S
Mechanical engineering	208	319	S	S	S
Other engineering	671	672	S	342	S
Health	2,282	3,972	2,058	2,608	3,784

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-23. Standard errors for amount owed for undergraduate loans by 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Did not owe	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	3,149	7,747	5,652	7,404	6,273
Sciences	2,881	5,745	4,317	5,265	4,650
Biological, agricultural, and environmental life sciences	1,263	2,842	2,145	2,384	2,122
Agricultural/food sciences	1,170	735	464	524	S
Biological sciences	1,144	2,648	2,100	2,165	2,055
Environmental life sciences	1,152	674	311	693	S
Computer and information sciences	1,246	2,562	1,870	1,667	2,411
Mathematics and statistics	411	655	527	585	428
Physical and related sciences	551	821	675	749	479
Chemistry, except biochemistry	360	598	475	463	381
Earth/atmospheric/ocean sciences	854	416	274	302	229
Physics/astronomy	294	313	196	250	138
Other physical sciences	866	S	S	S	S
Psychology	1,415	3,050	2,188	3,015	2,000
Social and related sciences	2,034	3,146	2,658	2,771	1,909
Economics	730	1,228	996	830	657
Political and related sciences	910	1,632	1,329	1,574	1,220
Sociology/anthropology	1,235	1,904	1,390	1,761	1,203
Other social sciences	815	1,352	1,095	1,009	719
Engineering	845	1,627	958	1,264	854
Aerospace/aeronautical/astronautical engineering	54	136	94	109	83
Chemical engineering	182	349	212	271	154
Civil/architectural engineering	182	497	311	427	269
Electrical/computer engineering	480	1,041	603	764	605
Industrial engineering	138	216	160	210	108
Materials/metallurgical engineering	450	295	S	S	S
Mechanical engineering	317	639	456	565	385
Other engineering	510	595	373	431	303
Health	1,316	4,273	3,106	4,819	4,216

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-24. Standard errors for amount owed for undergraduate and graduate loans by 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

Major field	All recipients	Did not owe	\$1—\$9,999	\$10,000—\$24,999	\$25,000 or more
All fields	2,906	4,783	2,535	2,706	3,608
Sciences	1,523	1,851	1,111	1,087	1,141
Biological, agricultural, and environmental life sciences Agricultural/food sciences Biological sciences Environmental life sciences Computer and information sciences Mathematics and statistics	497 370 475 323 1,137 298	667 350 577 268 1,456 325	362 S 258 S S S	319 S 265 S S	322 S 294 S S
Physical and related sciences Chemistry, except biochemistry Earth/atmospheric/ocean sciences Physics/astronomy Other physical sciences	151 51 170 110 S	285 184 196 143 S	\$ \$ \$ \$ \$	192 S S S	\$ \$ \$ \$ \$
Psychology	412	943	688	740	815
Social and related sciences Economics Political and related sciences Sociology/anthropology Other social sciences	626 265 386 191 292	739 319 429 297 424	386 S S 212 S	455 S S 186 352	449 S 297 217 S
Engineering Aerospace/aeronautical/astronautical engineering Chemical engineering Civil/architectural engineering Electrical/computer engineering Industrial engineering Materials/metallurgical engineering Mechanical engineering Other engineering	669 49 101 172 416 208 619 208 671	874 72 146 288 524 255 S 292	580 S S 255 404 S S S	376 S S S S S S	206 S S S S S S S
Health	2,282	4,235	2,068	2,515	3,386

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-25. Standard errors for enrollment in college courses since most recent degree and enrollment status among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		Taken additional			
	All	college courses since most recent	Enrolle	nent status October 1,	2003
Major field	recipients	degree	Full-time student	Part-time student	Not student
All fields	3,149	6,799	5,802	3,979	6,502
Sciences	2,881	5,424	5,005	3,031	5,562
Biological, agricultural, and environmental life sciences	1,263	2,957	3,021	1,231	3,029
Agricultural/food sciences	1,170	667	619	S 1.175	985
Biological sciences	1,144	2,842 466	2,889 355	1,175 S	2,890
Environmental life sciences	1,152	400	300	3	1,060
Computer and information sciences	1,246	1,992	1,059	1,297	2,038
Mathematics and statistics	411	750	526	385	687
Physical and related sciences	551	750	750	330	729
Chemistry, except biochemistry	360	616	651	S	589
Earth/atmospheric/ocean sciences	854	426	239	S	696
Physics/astronomy	294	285	285	S	276
Other physical sciences	866	S	S	S	826
Psychology	1,415	3,057	2,653	1,717	2,738
Social and related sciences	2,034	2,608	2,269	1,461	2,869
Economics	730	1,058	799	S	1,070
Political and related sciences	910	1,621	1,606	857	1,675
Sociology/anthropology	1,235	1,708	1,243	992	1,869
Other social sciences	815	1,364	918	539	1,146
Engineering	845	1,632	1,197	804	1,597
Aerospace/aeronautical/astronautical engineering	54	167	133	74	140
Chemical engineering	182	345	306	S	337
Civil/architectural engineering	182	427	223	277	381
Electrical/computer engineering	480	1,091	742	610	1,018
Industrial engineering	138	219	169	98	208
Materials/metallurgical engineering	450	334	S	S	361
Mechanical engineering	317	666	580	365	749
Other engineering	510	564	465	S	532
Health	1,316	4,364	2,731	S	3,798

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-26. Standard errors for enrollment in college courses since most recent degree and enrollment status among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Taken additional				
	All	college courses since most recent	Enrollment status October 1, 2003			
Major field	recipients	degree	Full-time student	Part-time student	Not student	
All fields	2,906	3,093	2,200	1,047	3,517	
Sciences	1,523	1,804	1,735	762	2,279	
Biological, agricultural, and environmental life sciences	497	588	520	253	617	
Agricultural/food sciences	370	224	S	S	347	
Biological sciences	475	492	451	S	547	
Environmental life sciences	323	S	S	S	294	
Computer and information sciences	1,137	1,020	889	S	1,626	
Mathematics and statistics	298	322	278	S	329	
Physical and related sciences	151	362	347	S	350	
Chemistry, except biochemistry	51	273	254	S	260	
Earth/atmospheric/ocean sciences	170	147	S	S	186	
Physics/astronomy	110	145	162	S	159	
Other physical sciences	S	S	S	S	S	
Psychology	412	971	885	358	1,183	
Social and related sciences	626	738	603	S	671	
Economics	265	338	297	S	252	
Political and related sciences	386	338	S	S	411	
Sociology/anthropology	191	315	306	S	317	
Other social sciences	292	458	369	S	447	
Engineering	669	911	874	292	1,010	
Aerospace/aeronautical/astronautical engineering	49	80	S	S	68	
Chemical engineering	101	130	130	S	145	
Civil/architectural engineering	172	278	216	S	282	
Electrical/computer engineering	416	623	607	S	645	
Industrial engineering	208	234	S	S	276	
Materials/metallurgical engineering	619	S	S	S	S	
Mechanical engineering	208	296	250	S	263	
Other engineering	671	451	402	S	722	
Health	2,282	2,062	S	S	2,509	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-27. Standard errors for likelihood of taking additional college courses among 2001 and 2002 S&E bachelor's degree recipients who have not taken college courses since their most recent degree, by major field of degree: October 2003

Total number not taking college courses Likelihood will take additional college courses since most recent Somewhat likely Very likely Very unlikely Major field degree 6,985 7,560 6,402 3,257 All fields 5,894 4,990 2,209 3,902 Sciences 987 3.032 2.405 1.914 Biological, agricultural, and environmental life sciences 571 925 450 531 Agricultural/food sciences 2,821 2,235 1,741 S Biological sciences S Environmental life sciences 953 684 451 2,182 1,927 2,026 1,090 Computer and information sciences 741 499 281 580 Mathematics and statistics 690 518 479 263 Physical and related sciences 528 384 354 S Chemistry, except biochemistry S 584 368 257 Earth/atmospheric/ocean sciences 219 107 S 186 Physics/astronomy S 791 S S Other physical sciences S 2,938 2,771 2,109 Psychology 3,016 2,918 2,168 1,389 Social and related sciences 1.243 993 788 509 **Economics** 1,624 1,663 1,120 750 Political and related sciences 976 1,980 1,792 1,316 Sociology/anthropology Other social sciences 1,306 1,239 954 562 1,710 1,540 1,149 750 Engineering 149 159 75 S Aerospace/aeronautical/astronautical engineering 363 337 256 S Chemical engineering 344 466 436 467 Civil/architectural engineering 439 1,106 1,034 654 Electrical/computer engineering 222 254 193 S Industrial engineering S S S S Materials/metallurgical engineering S 731 593 564 Mechanical engineering S 566 476 462 Other engineering 1,973 4,505 5,397 4,814 Health

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-28. Standard errors for likelihood of taking additional college courses among 2001 and 2002 S&E master's degree recipients who have not taken college courses since their most recent degree, by major field of degree: October 2003

Total number not taking college courses Likelihood will take additional college courses since most recent Somewhat likely Very likely Very unlikely Major field degree 3,701 3,164 3,532 2,369 All fields 2,031 1,400 1,065 1,654 Sciences 338 545 426 438 Biological, agricultural, and environmental life sciences S S 316 S Agricultural/food sciences 477 329 360 S Biological sciences S Environmental life sciences 262 S S 1,475 758 1,167 659 Computer and information sciences 339 233 166 246 Mathematics and statistics 343 260 302 282 Physical and related sciences 272 S S S Chemistry, except biochemistry S S 196 186 Earth/atmospheric/ocean sciences S S 118 S Physics/astronomy S S S S Other physical sciences 507 1,126 936 770 Psychology 691 538 585 487 Social and related sciences 236 S S S **Economics** 391 317 336 311 Political and related sciences 288 S 193 S Sociology/anthropology S Other social sciences 478 340 374 931 786 718 657 Engineering 87 74 S S Aerospace/aeronautical/astronautical engineering 142 S 117 S Chemical engineering 312 254 272 189 Civil/architectural engineering 423 365 545 475 Electrical/computer engineering 314 252 162 S Industrial engineering S S S S Materials/metallurgical engineering 294 302 S 230 Mechanical engineering 405 385 643 256 Other engineering 3,070 2,239 2,898 2,796 Health

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-29. Standard errors for type of degree or certificate sought by 2001 and 2002 S&E bachelor's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Took college courses between completing most recent degree and week of October 1, 2003 Total number Type of degree or certificate sought					
Major field		Total number		t			
	All recipients	who took courses	Ph.D. or prof. degree	Master's degree	Other degree or certificate	No degree or certificate	
All fields	3,149	6,799	3,171	6,506	3,910	3,180	
Sciences	2,881	5,424	3,137	5,031	3,376	2,764	
Biological, agricultural, and environmental life sciences	1,263	2,957	2,082	2,153	2,302	1,678	
Agricultural/food sciences	1,170	667	S	308	400	S	
Biological sciences	1,144	2,842	2,034	2,092	2,329	1,607	
Environmental life sciences	1,152	466	S	303	S	S	
Computer and information sciences	1,246	1,992	S	1,851	737	927	
Mathematics and statistics	411	750	294	645	381	370	
Physical and related sciences	551	750	564	473	592	419	
Chemistry, except biochemistry	360	616	482	325	535	275	
Earth/atmospheric/ocean sciences	854	426	S	269	S	180	
Physics/astronomy	294	285	253	203	S	150	
Other physical sciences	866	S	S	S	S	S	
Psychology	1,415	3,057	1,413	3,065	1,658	1,389	
Social and related sciences	2,034	2,608	978	2,029	2,004	1,676	
Economics	730	1,058	S	661	652	755	
Political and related sciences	910	1,621	S	1,192	1,535	728	
Sociology/anthropology	1,235	1,708	S	1,474	1,103	1,070	
Other social sciences	815	1,364	S	929	694	860	
Engineering	845	1,632	618	1,288	478	613	
Aerospace/aeronautical/astronautical engineering	54	167	S	138	S	S	
Chemical engineering	182	345	190	247	195	181	
Civil/architectural engineering	182	427	S	374	S	S	
Electrical/computer engineering	480	1,091	S	941	S	447	
Industrial engineering	138	219	S	195	S	S	
Materials/metallurgical engineering	450	334	S	S	S	S	
Mechanical engineering	317	666	299	556	S	262	
Other engineering	510	564	S	390	S	S	
Health	1,316	4,364	S	4,126	1,698	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-30. Standard errors for type of degree or certificate sought by 2001 and 2002 S&E master's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Took college courses between completing most recent						
Major field		degree and week of October 1, 2003						
		Total number	Type of degree or certificate sought					
	All recipients	who took courses	Ph.D. or prof. degree	Master's degree	Other degree or certificate	No degree or certificate		
All fields	2,906	3,093	2,172	1,452	1,171	1,841		
Sciences	1,523	1,804	1,623	856	746	897		
Biological, agricultural, and environmental life sciences	497	588	388	S	359	308		
Agricultural/food sciences	370	224	S	S	S	S		
Biological sciences	475	492	357	S	349	287		
Environmental life sciences	323	S	S	S	S	S		
Computer and information sciences	1,137	1,020	648	615	S	S		
Mathematics and statistics	298	322	292	S	S	S		
Physical and related sciences	151	362	350	181	S	199		
Chemistry, except biochemistry	51	273	S	S	S	S		
Earth/atmospheric/ocean sciences	170	147	S	S	S	S		
Physics/astronomy	110	145	157	S	S	S		
Other physical sciences	S	S	S	S	S	S		
Psychology	412	971	937	S	S	472		
Social and related sciences	626	738	599	352	S	320		
Economics	265	338	264	S	S	S		
Political and related sciences	386	338	S	S	S	S		
Sociology/anthropology	191	315	358	S	S	S		
Other social sciences	292	458	367	S	S	S		
Engineering	669	911	869	500	250	661		
Aerospace/aeronautical/astronautical engineering	49	80	S	S	S	S		
Chemical engineering	101	130	134	S	S	S		
Civil/architectural engineering	172	278	215	S	S	S		
Electrical/computer engineering	416	623	528	S	S	532		
Industrial engineering	208	234	S	S	S	S		
Materials/metallurgical engineering	619	S	S	S	S	S		
Mechanical engineering	208	296	257	S	S	S		
Other engineering	671	451	388	S	S	S		
Health	2,282	2,062	S	S	S	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-31. Standard errors for sex and race/ethnicity of 2001 and 2002 S&E bachelor's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Total number		Race/ethnicity			
		who took courses			Asian or	Under-	
	All	since most	S		Pacific	represented	White, non-
Major field	recipients	recent degree	Male	Female	Islander	minority	Hispanic
All fields	3,149	6,799	3,567	6,006	2,668	3,143	5,721
Sciences	2,881	5,424	3,364	4,499	2,800	2,223	4,988
Biological, agricultural, and environmental life sciences	1,263	2,957	2,388	2,765	2,152	1,421	2,998
Agricultural/food sciences	1,170	667	427	491	S	S	607
Biological sciences	1,144	2,842	2,287	2,646	2,156	1,366	2,858
Environmental life sciences	1,152	466	S	367	S	S	462
Computer and information sciences	1,246	1,992	1,801	1,445	1,501	610	1,351
Mathematics and statistics	411	750	574	524	449	247	673
Physical and related sciences	551	750	638	698	522	399	761
Chemistry, except biochemistry	360	616	507	587	482	314	573
Earth/atmospheric/ocean sciences	854	426	274	296	S	S	381
Physics/astronomy	294	285	284	185	S	131	281
Other physical sciences	866	S	S	S	S	S	S
Psychology	1,415	3,057	1,972	2,922	S	1,405	3,047
Social and related sciences	2,034	2,608	2,218	2,463	1,437	1,376	2,434
Economics	730	1,058	891	767	822	385	695
Political and related sciences	910	1,621	1,325	1,359	S	726	1,515
Sociology/anthropology	1,235	1,708	1,186	1,726	S	808	1,677
Other social sciences	815	1,364	1,055	1,150	S	673	1,101
Engineering	845	1,632	1,583	744	1,203	532	1,107
Aerospace/aeronautical/astronautical engineering	54	167	152	56	S	58	130
Chemical engineering	182	345	275	257	S	137	301
Civil/architectural engineering	182	427	390	236	S	155	390
Electrical/computer engineering	480	1,091	1,043	442	831	349	665
Industrial engineering	138	219	189	107	S	87	194
Materials/metallurgical engineering	450	334	S	S	S	S	S
Mechanical engineering	317	666	648	248	S	264	540
Other engineering	510	564	501	384	S	S	491
Health	1,316	4,364	1,413	3,985	S	2,287	3,854

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-32. Standard errors for sex and race/ethnicity of 2001 and 2002 S&E master's degree recipients who have taken college courses since most recent degree, by major field of degree: October 2003

		Total number				Race/ethnicit	.y
		who took courses			Asian or	Under-	
	All	since most	S	ex	Pacific	represented	White, non
Major field	recipients	recent degree	Male	Female	Islander	minority	Hispanic
All fields	2,906	3,093	2,046	2,293	1,941	862	2,388
Sciences	1,523	1,804	1,209	1,298	1,497	488	1,197
Biological, agricultural, and environmental life sciences	497	588	412	468	S	228	475
Agricultural/food sciences	370	224	S	S	S	S	S
Biological sciences	475	492	332	402	S	218	406
Environmental life sciences	323	S	S	S	S	S	S
Computer and information sciences	1,137	1,020	647	756	941	S	S
Mathematics and statistics	298	322	292	173	S	54	209
Physical and related sciences	151	362	345	227	292	143	315
Chemistry, except biochemistry	51	273	S	S	S	S	S
Earth/atmospheric/ocean sciences	170	147	S	S	S	S	S
Physics/astronomy	110	145	169	113	162	S	175
Other physical sciences	S	S	S	S	S	S	S
Psychology	412	971	650	934	S	322	855
Social and related sciences	626	738	567	540	503	277	544
Economics	265	338	237	231	S	S	158
Political and related sciences	386	338	S	S	S	S	S
Sociology/anthropology	191	315	290	277	S	166	294
Other social sciences	292	458	S	326	S	S	400
Engineering	669	911	833	503	864	271	500
Aerospace/aeronautical/astronautical engineering	49	80	S	S	S	S	S
Chemical engineering	101	130	134	S	S	S	S
Civil/architectural engineering	172	278	271	S	S	S	195
Electrical/computer engineering	416	623	547	S	609	S	255
Industrial engineering	208	234	S	S	S	S	S
Materials/metallurgical engineering	619	S	S	S	S	S	S
Mechanical engineering	208	296	284	S	S	S	S
Other engineering	671	451	396	S	383	S	284
Health	2,282	2,062	S	1,835	S	S	2,133

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-33. Standard errors for educational activity since degree completion among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

			Did not comple		
		_	colleg		
	All	Completed	In degree	Not in a degree	Did not take college
Major field	recipients	additional degree	program	program	courses
All fields	3,149	1,006	7,142	2,949	6,985
Sciences	2,881	895	5,666	2,664	5,894
Biological, agricultural, and environmental life sciences	1,263	S	2,991	1,661	3,032
Agricultural/food sciences	1,170	S	649	S	925
Biological sciences	1,144	S	2,872	1,589	2,821
Environmental life sciences	1,152	S	391	S	953
Computer and information sciences	1,246	S	1,920	913	2,182
Mathematics and statistics	411	S	689	361	741
Physical and related sciences	551	S	690	409	690
Chemistry, except biochemistry	360	S	586	275	528
Earth/atmospheric/ocean sciences	854	S	351	180	584
Physics/astronomy	294	S	265	129	219
Other physical sciences	866	S	S	S	791
Psychology	1,415	S	3,209	1,328	2,938
Social and related sciences	2,034	S	2,437	1,582	3,016
Economics	730	S	916	755	1,243
Political and related sciences	910	S	1,625	717	1,624
Sociology/anthropology	1,235	S	1,453	994	1,980
Other social sciences	815	S	1,187	806	1,306
Engineering	845	237	1,532	637	1,710
Aerospace/aeronautical/astronautical engineering	54	S	150	S	149
Chemical engineering	182	S	326	178	363
Civil/architectural engineering	182	S	405	S	466
Electrical/computer engineering	480	S	1,012	461	1,106
Industrial engineering	138	S	207	S	222
Materials/metallurgical engineering	450	S	S	S	S
Mechanical engineering	317	S	670	258	731
Other engineering	510	S	554	S	566
Health	1,316	S	4,207	S	4,505

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-34. Standard errors for educational activity between degree completion and the survey reference week among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	Did not complete degree but took college courses							
	All	Completed	U		_ Did not take college			
Major field	recipients	additional degree	In degree program	Not in a degree program	courses			
All fields	2,906	422	2,748	1,822	3,701			
Sciences	1,523	S	1,758	871	2,031			
Biological, agricultural, and environmental life sciences	497	S	556	289	545			
Agricultural/food sciences	370	S	S	S	316			
Biological sciences	475	S	484	267	477			
Environmental life sciences	323	S	S	S	262			
Computer and information sciences	1,137	S	842	S	1,475			
Mathematics and statistics	298	S	310	S	339			
Physical and related sciences	151	S	353	S	343			
Chemistry, except biochemistry	51	S	253	S	272			
Earth/atmospheric/ocean sciences	170	S	S	S	196			
Physics/astronomy	110	S	157	S	118			
Other physical sciences	S	S	S	S	S			
Psychology	412	S	1,026	474	1,126			
Social and related sciences	626	S	724	291	691			
Economics	265	S	311	S	236			
Political and related sciences	386	S	278	S	391			
Sociology/anthropology	191	S	371	S	288			
Other social sciences	292	S	438	S	478			
Engineering	669	S	920	646	931			
Aerospace/aeronautical/astronautical engineering	49	S	73	S	87			
Chemical engineering	101	S	137	S	142			
Civil/architectural engineering	172	S	258	S	312			
Electrical/computer engineering	416	S	586	510	545			
Industrial engineering	208	S	S	S	314			
Materials/metallurgical engineering	619	S	S	S	S			
Mechanical engineering	208	S	287	S	302			
Other engineering	671	S	398	S	643			
Health	2,282	S	1,653	S	2,898			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-35. Standard errors for selected employment characteristics of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		Employed					
	All		Counting all jobs		Principal job only		
Major field	recipients	Total	Full time	Part time	Full time	Part time	
All fields	3,149	5,948	6,739	4,175	7,356	4,953	
Sciences	2,881	5,627	6,366	3,532	6,490	3,689	
Biological, agricultural, and environmental life sciences	1,263	2,622	2,945	1,827	2,924	1,880	
Agricultural/food sciences	1,170	1,106	1,041	372	997	439	
Biological sciences	1,144	2,592	2,865	1,800	2,837	1,835	
Environmental life sciences	1,152	968	958	S	949	S	
Computer and information sciences	1,246	1,516	1,882	1,066	1,990	1,201	
Mathematics and statistics	411	537	649	450	659	473	
Physical and related sciences	551	809	786	564	790	564	
Chemistry, except biochemistry	360	592	605	410	609	416	
Earth/atmospheric/ocean sciences	854	919	778	223	778	223	
Physics/astronomy	294	317	269	231	269	224	
Other physical sciences	866	846	849	S	847	S	
Psychology	1,415	2,321	3,151	2,137	3,233	2,250	
Social and related sciences	2,034	2,955	3,132	2,210	3,328	2,428	
Economics	730	1,087	1,119	539	1,053	602	
Political and related sciences	910	1,478	1,656	1,381	1,683	1,438	
Sociology/anthropology	1,235	1,525	1,902	1,481	1,857	1,503	
Other social sciences	815	1,220	1,443	871	1,531	958	
Engineering	845	1,294	1,505	794	1,566	823	
Aerospace/aeronautical/astronautical engineering	54	78	133	108	130	107	
Chemical engineering	182	314	328	S	329	S	
Civil/architectural engineering	182	341	406	S	406	S	
Electrical/computer engineering	480	749	854	470	897	509	
Industrial engineering	138	177	199	126	203	130	
Materials/metallurgical engineering	450	466	391	S	391	S	
Mechanical engineering	317	449	623	429	635	435	
Other engineering	510	560	551	S	559	209	
Health	1,316	3,171	3,981	2,621	4,138	2,855	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-36. Standard errors for selected employment characteristics of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Employed					
	All		Countin	g all jobs	Principa	l job only	
Major field	recipients	Total	Full time	Part time	Full time	Part time	
All fields	2,906	3,491	3,951	2,797	4,202	3,197	
Sciences	1,523	1,668	1,794	1,394	1,773	1,431	
Biological, agricultural, and environmental life sciences	497	601	542	316	536	355	
Agricultural/food sciences	370	361	333	S	333	S	
Biological sciences	475	516	470	323	463	338	
Environmental life sciences	323	271	251	S	251	S	
Computer and information sciences	1,137	1,151	1,206	S	1,207	S	
Mathematics and statistics	298	355	356	182	360	186	
Physical and related sciences	151	297	337	217	347	244	
Chemistry, except biochemistry	51	225	248	S	248	S	
Earth/atmospheric/ocean sciences	170	175	179	S	181	S	
Physics/astronomy	110	129	164	S	181	134	
Other physical sciences	S	S	S	S	S	S	
Psychology	412	591	1,205	945	1,205	936	
Social and related sciences	626	667	693	528	727	542	
Economics	265	254	242	252	242	252	
Political and related sciences	386	462	469	S	469	S	
Sociology/anthropology	191	291	330	262	321	264	
Other social sciences	292	392	362	284	375	322	
Engineering	669	837	874	629	880	625	
Aerospace/aeronautical/astronautical engineering	49	58	73	S	73	S	
Chemical engineering	101	125	141	S	141	S	
Civil/architectural engineering	172	227	259	S	259	S	
Electrical/computer engineering	416	539	626	444	631	444	
Industrial engineering	208	230	237	S	237	S	
Materials/metallurgical engineering	619	616	S	S	S	S	
Mechanical engineering	208	311	317	S	321	S	
Other engineering	671	656	668	S	668	S	
Health	2,282	2,816	3,370	S	3,642	2,578	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-37. Standard errors for labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Total	Employed	Unemployed ^a	Not in labor force
All fields	3,149	5,464	5,948	2,840	4,708
Sciences	2,881	5,051	5,627	2,396	3,888
Biological, agricultural, and environmental life sciences	1,263	2,554	2,622	1,086	2,454
Computer and information sciences	1,246	1,580	1,516	771	S
Mathematics and statistics	411	513	537	S	357
Physical and related sciences	551	724	809	356	550
Psychology	1,415	1,927	2,321	1,493	1,741
Social sciences	2,034	2,754	2,955	1,479	1,938
Engineering	845	1,121	1,294	694	832
Health	1,316	3,000	3,171	S	2,871

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-38. Standard errors for labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All				
Major field	recipients	Total	Employed	Unemployed	Not in labor force
All fields	2,906	3,069	3,491	1,557	1,944
Sciences	1,523	1,458	1,668	800	1,016
Biological, agricultural, and environmental life sciences	497	597	601	S	327
Computer and information sciences	1,137	977	1,151	700	S
Mathematics and statistics	298	357	355	S	263
Physical and related sciences	151	243	297	S	214
Psychology	412	607	591	S	S
Social sciences	626	661	667	229	477
Engineering	669	725	837	455	522
Health	2,282	2,483	2,816	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-39. Standard errors for labor force status of 2001 and 2002 S&E bachelor's degree recipients not studying full time, by major field of degree: October 2003

	Not studying		In labor force		
Major field	full time	Total	Employed	Unemployed	Not in labor force
All fields	4,511	6,252	6,432	2,837	4,733
Sciences	4,077	5,483	5,749	2,407	3,746
Biological, agricultural, and environmental life sciences	1,846	2,686	2,724	1,057	2,454
Computer and information sciences	1,655	1,821	1,635	759	S
Mathematics and statistics	553	597	630	S	358
Physical and related sciences	661	759	833	351	532
Psychology	2,110	2,227	2,430	1,414	1,636
Social sciences	2,371	2,989	3,174	1,450	1,912
Engineering	1,076	1,302	1,447	657	810
Health	2,816	3,522	3,660	S	2,593

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-40. Standard errors for labor force status of 2001 and 2002 S&E master's degree recipients not studying full time, by major field of degree: October 2003

	Not studying		In labor force		
Major field	full time	Total	Employed	Unemployed	Not in labor force
All fields	2,965	2,973	3,438	1,549	1,946
Sciences	1,715	1,541	1,727	784	1,025
Biological, agricultural, and environmental life sciences	494	580	575	S	329
Computer and information sciences	1,290	1,043	1,220	694	S
Mathematics and statistics	323	370	368	S	263
Physical and related sciences	200	273	313	S	214
Psychology	596	657	631	S	S
Social sciences	701	732	749	S	477
Engineering	720	770	861	454	520
Health	2,320	2,449	2,787	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-41. Standard errors for labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and sex: October 2003

	All		In labor force		
Major field and sex	recipients	Total	Employed	Unemployed	Not in labor force
All fields	3,149	5,464	5,948	2,840	4,708
Sciences	2,881	5,051	5,627	2,396	3,888
Male	2,435	3,370	3,646	1,697	2,610
Female	2,400	3,885	4,304	1,776	3,022
Biological, agricultural, and environmental life sciences	1,263	2,554	2,622	1,086	2,454
Male	2,528	2,113	2,145	S	1,988
Female	2,655	2,735	2,771	856	1,864
Computer and information sciences	1,246	1,580	1,516	771	S
Male	2,022	2,112	2,002	709	S
Female	1,530	1,418	1,367	S	S
Mathematics and statistics	411	513	537	S	357
Male	644	635	607	S	269
Female	610	598	586	S	230
Physical and related sciences	551	724	809	356	550
Male	749	727	763	S	379
Female	760	771	789	200	405
Psychology	1,415	1,927	2,321	1,493	1,741
Male	2,458	2,309	2,135	S	S
Female	2,726	2,785	2,896	1,221	1,643
Social sciences	2,034	2,754	2,955	1,479	1,938
Male	2,764	2,664	2,452	1,104	1,339
Female	2,803	2,967	3,020	854	1,497
Engineering	845	1,121	1,294	694	832
Male	1,282	1,289	1,326	624	802
Female	1,058	1,041	1,030	306	343
Health	1,316	3,000	3,171	S	2,871
Male	781	917	933	S	S
Female	1,244	3,124	3,279	S	2,924

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-42. Standard errors for labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and sex: October 2003

	All		In labor force		
Major field and sex	recipients	Total	Employed	Unemployed	Not in labor force
All fields	2,906	3,069	3,491	1,557	1,944
Sciences	1,523	1,458	1,668	800	1,016
Male	1,110	1,105	1,202	513	689
Female	1,243	1,250	1,314	470	718
Biological, agricultural, and environmental life sciences	497	597	601	S	327
Male	500	480	480	S	S
Female	557	572	555	S	241
Computer and information sciences	1,137	977	1,151	700	S
Male	1,247	961	1,109	S	S
Female	918	836	807	S	S
Mathematics and statistics	298	357	355	S	263
Male	330	335	329	S	S
Female	241	224	220	S	S
Physical and related sciences	151	243	297	S	214
Male	345	363	381	S	S
Female	324	317	308	S	S
Psychology	412	607	591	S	S
Male	808	786	786	S	S
Female	933	987	961	S	S
Social sciences	626	661	667	229	477
Male	727	707	690	S	316
Female	676	609	627	S	423
Engineering	669	725	837	455	522
Male	930	904	950	372	477
Female	647	620	636	S	208
Health	2,282	2,483	2,816	S	S
Male	839	839	839	S	S
Female	2,162	2,452	2,581	S	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-43. Standard errors for labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force	ı labor force				
Major field and race/ethnicity	recipients	Total	Employed	Unemployed	Not in labor force			
All science and engineering fields	3,149	5,464	5,948	2,840	4,708			
Sciences	2,881	5,051	5,627	2,396	3,888			
Asian	2,378	2,467	2,409	628	1,883			
Underrepresented minority	1,525	1,698	1,609	926	1,090			
White, non-Hispanic	2,895	4,429	4,750	2,049	3,461			
Other	1,877	1,624	1,549	S	S			
Biological, agricultural, and environmental life sciences	1,263	2,554	2,622	1,086	2,454			
Asian	1,986	1,873	1,704	S	1,502			
Underrepresented minority	1,603	1,378	1,289	S	764			
White, non-Hispanic	2,492	2,403	2,520	974	2,062			
Other	1,132	S	S	S	S			
Computer and information sciences	1,246	1,580	1,516	771	S			
Asian	1,938	1,933	1,821	S	S			
Underrepresented minority	1,569	1,565	1,313	S	S			
White, non-Hispanic	2,422	2,555	2,500	S	S			
Other	S	S	S	S	S			
Mathematics and related sciences	411	513	537	S	357			
Asian	571	546	554	S	S			
Underrepresented minority	247	252	247	S	S			
White, non-Hispanic	731	746	752	S	251			
Other	S	S	S	S	S			
Physical and related sciences	551	724	809	356	550			
Asian	587	473	436	S	S			
Underrepresented minority	378	360	354	S	164			
White, non-Hispanic	810	760	794	278	433			
Other	271	255	249	S	S			
Psychology	1,415	1,927	2,321	1,493	1,741			
Asian	S	S	S	S	S			
Underrepresented minority	1,715	1,682	1,535	S	577			
White, non-Hispanic	2,774	2,625	2,575	S	1,767			
Other	S	S	S	S	S			
Social and related sciences	2,034	2,754	2,955	1,479	1,938			
Asian	2,103	1,726	1,593	S	1,124			
Underrepresented minority	1,614	1,550	1,465	459	583			
White, non-Hispanic	2,996	3,086	3,066	1,295	1,676			
Other	1,218	1,172	1,070	S	S			
Engineering	845	1,121	1,294	694	832			
Asian	1,456	1,432	1,438	S	604			
Underrepresented minority	908	824	760	170	202			
White, non-Hispanic	1,640	1,715	1,717	509	496			
Other	602	613	601	S	S			

TABLE B-43. Standard errors for labor force status of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force					
Major field and race/ethnicity	recipients	Total	Employed	Unemployed	Not in labor force			
Health	1,316	3,000	3,171	S	2,871			
Asian	S	S	S	S	S			
Underrepresented minority	2,998	2,938	2,906	S	S			
White, non-Hispanic	3,905	3,940	3,858	S	2,735			
Other	S	S	S	S	S			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-44. Standard errors for labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force		_	
Major field and race/ethnicity	recipients	Total	Employed	Unemployed	Not in labor force	
All science and engineering fields	2,906	3,069	3,491	1,557	1,944	
Sciences	1,523	1,458	1,668	800	1,016	
Asian	1,648	1,326	1,490	709	864	
Underrepresented minority	457	476	471	S	205	
White, non-Hispanic	1,077	1,200	1,210	295	523	
Other	501	454	442	S	S	
Biological, agricultural, and environmental life sciences	497	597	601	S	327	
Asian	557	489	482	S	S	
Underrepresented minority	193	190	184	S	S	
White, non-Hispanic	566	561	560	S	247	
Other	S	S	S	S	S	
Computer and information sciences	1,137	977	1,151	700	S	
Asian	1,601	1,186	1,365	S	S	
Underrepresented minority	317	305	256	S	S	
White, non-Hispanic	772	741	696	S	S	
Other	S	S	S	S	S	
Mathematics and related sciences	298	357	355	S	263	
Asian	357	321	326	S	S	
Underrepresented minority	74	72	71	S	S	
White, non-Hispanic	288	266	257	S	S	
Other	S	S	S	S	S	
Physical and related sciences	151	243	297	S	214	
Asian	336	337	347	S	S	
Underrepresented minority	151	150	150	S	S	
White, non-Hispanic	339	323	326	S	S	
Other	S	S	S	S	S	
Psychology	412	607	591	S	S	
Asian	S	S	S	S	S	
Underrepresented minority	491	491	492	S	S	
White, non-Hispanic	1,066	1,167	1,186	S	S	
Other	S	S	S	S	S	
Social and related sciences	626	661	667	229	477	
Asian	658	567	522	S	S	
Underrepresented minority	375	364	342	S	S	
White, non-Hispanic	713	749	730	S	320	
Other	S	S	S	S	S	
Engineering	669	725	837	455	522	
Asian	1,090	1,063	1,149	S	449	
Underrepresented minority	314	301	282	S	S	
White, non-Hispanic	847	812	810	S	241	
Other	299	296	S	S	S	

TABLE B-44. Standard errors for labor force status of 2001 and 2002 S&E master's degree recipients, by major field of degree and race/ethnicity: October 2003

	All		In labor force					
Major field and race/ethnicity	recipients	Total	Employed	Unemployed	Not in labor force			
Health	2,282	2,483	2,816	S	S			
Asian	S	S	S	S	S			
Underrepresented minority	1,790	1,601	1,601	S	S			
White, non-Hispanic	3,353	3,476	3,577	S	S			
Other	S	S	S	S	S			

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-45. Standard errors for relation of occupation to field of degree among 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

		S&E	occupation	
Major field	All employed	Occupation in same broad field as degree	Occupation in different broad S&E or S&E-related field than degree	Non-S&E occupation
ll fields	5,948	5,479	3,021	6,720
Sciences	5,627	3,655	3,024	5,952
Biological, agricultural, and environmental life sciences	2,622	1,984	2,055	2,648
Agricultural/food sciences	1,106	417	490	882
Biological sciences	2,592	1,948	2,012	2,603
Environmental life sciences	968	461	495	711
Computer and information sciences	1,516	2,398	S	2,074
Mathematics and statistics	537	388	432	632
Physical and related sciences	809	679	633	643
Chemistry, except biochemistry	592	510	485	445
Earth/atmospheric/ocean sciences	919	448	297	429
Physics/astronomy	317	257	198	221
Other physical sciences	846	S	S	745
Psychology	2,321	S	2,016	3,163
Social and related sciences	2,955	1,312	1,170	3,099
Economics	1,087	542	461	1,253
Political and related sciences	1,478	848	S	1,552
Sociology/anthropology	1,525	824	712	1,688
Other social sciences	1,220	S	656	1,308
Engineering	1,294	1,458	833	1,096
Aerospace/aeronautical/astronautical engineering	78	163	S	157
Chemical engineering	314	332	S	211
Civil/architectural engineering	341	453	S	358
Electrical/computer engineering	749	905	613	733
Industrial engineering	177	236	S	217
Materials/metallurgical engineering	466	398	S	S
Mechanical engineering	449	541	S	493
Other engineering	560	572	361	368
Health	3,171	3,789	S	2,558

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-46. Standard errors for relation of occupation to field of degree among 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Occupation in	Occupation in	
ajor field fields	All employed	same broad field as degree	different broad S&E or S&E-related field than degree	Non-S&E occupation
II fields	3,491	4,273	1,716	3,239
Sciences	1,668	1,784	1,006	1,650
Biological, agricultural, and environmental life sciences	601	638	405	414
Agricultural/food sciences	361	330	S	S
Biological sciences	516	539	354	334
Environmental life sciences	271	S	S	S
Computer and information sciences	1,151	1,061	737	637
Mathematics and statistics	355	335	S	193
Physical and related sciences	297	351	307	256
Chemistry, except biochemistry	225	271	S	S
Earth/atmospheric/ocean sciences	175	200	S	S
Physics/astronomy	129	170	S	S
Other physical sciences	S	S	S	S
Psychology	591	1,099	S	1,218
Social and related sciences	667	490	411	741
Economics	254	255	S	240
Political and related sciences	462	S	S	462
Sociology/anthropology	291	245	S	302
Other social sciences	392	S	S	463
Engineering	837	981	693	539
Aerospace/aeronautical/astronautical engineering	58	75	S	S
Chemical engineering	125	144	S	S
Civil/architectural engineering	227	261	S	S
Electrical/computer engineering	539	649	538	S
Industrial engineering	230	265	S	S
Materials/metallurgical engineering	616	S	S	S
Mechanical engineering	311	331	S	S
Other engineering	656	601	345	279
Health	2,816	3,584	S	2,571

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-47. Standard errors for satisfaction with selected job factors among employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

			Very satisfied or somewhat satisfied with job factor							
	'		Contri-	Degree of			Level of		Opportunities	
	All		bution to	independ-	Intellectual	Job	responsi-		for advance-	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	5,948	9,170	6,732	6,255	7,445	7,138	6,530	7,019	8,172	7,471
Sciences	5,627	6,740	5,945	5,598	6,233	5,776	5,810	5,778	5,769	5,828
Biological, agricultural, and environmental life sciences	2,622	3,036	2,835	2,766	2,830	2,881	2,723	2,787	3,025	2,606
Agricultural/food sciences	1,106	887	1,083	1,117	1,032	990	1,090	998	974	989
Biological sciences	2,592	3,027	2,789	2,668	2,720	2,824	2,609	2,795	2,919	2,601
Environmental life sciences	968	796	897	919	821	786	947	945	693	768
Computer and information sciences	1,516	1,984	2,006	1,745	1,882	1,625	1,801	1,946	1,881	1,702
Mathematics and statistics	537	691	625	631	635	748	622	617	681	672
Physical and related sciences	809	775	888	888	783	971	825	948	1,044	814
Chemistry, except biochemistry	592	568	637	615	621	664	597	684	655	600
Earth/atmospheric/ocean sciences	919	632	757	832	697	750	831	827	678	649
Physics/astronomy	317	254	329	354	322	325	334	304	311	277
Other physical sciences	846	615	557	674	577	508	628	632	447	521
Psychology	2,321	3,003	2,730	2,537	3,084	2,605	2,737	2,404	2,543	2,693
Social and related sciences	2,955	3,557	3,339	3,209	3,369	3,163	3,157	3,263	2,979	3,284
Economics	1,087	1,245	1,100	1,244	1,068	1,161	1,082	1,329	1,071	1,183
Political and related sciences	1,478	1,712	1,537	1,640	1,500	1,620	1,534	1,633	1,559	1,450
Sociology/anthropology	1,525	1,813	1,675	1,765	1,896	1,847	1,652	1,747	1,940	1,897
Other social sciences	1,220	1,580	1,497	1,319	1,529	1,393	1,353	1,351	1,258	1,303
Engineering	1,294	1,456	1,457	1,423	1,429	1,491	1,346	1,427	1,500	1,487
Aerospace/aeronautical/astronautical engineering	78	102	124	84	128	90	105	110	119	118
Chemical engineering	314	320	337	316	328	347	361	369	336	330
Civil/architectural engineering	341	413	452	367	438	393	378	380	485	402
Electrical/computer engineering	749	910	868	878	858	891	816	838	976	882
Industrial engineering	177	213	224	199	225	190	196	210	242	214
Materials/metallurgical engineering	466	374	436	403	418	428	453	414	S	366
Mechanical engineering	449	517	466	508	562	507	477	597	518	515
Other engineering	560	607	603	506	509	613	532	531	592	545
Health	3,171	4,613	3,330	3,502	3,453	3,702	3,708	4,146	4,980	4,168

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-48. Standard errors for satisfaction with selected job factors among employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

				Very s	satisfied or so	mewhat sa	tisfied with jo	ob factor		
			Contri-	Degree of			Level of	(Opportunities	S
	All		bution to	independ-	Intellectual	Job	responsi-		for advance-	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	3,491	3,945	3,662	3,550	3,745	3,979	3,794	3,507	3,772	3,619
Sciences	1,668	1,674	1,936	1,684	1,867	1,825	1,769	1,678	1,621	1,714
Biological, agricultural, and environmental life sciences	601	593	641	619	632	647	545	628	583	551
Agricultural/food sciences	361	364	366	363	362	352	359	361	338	348
Biological sciences	516	498	532	546	541	531	491	540	475	463
Environmental life sciences	271	265	267	271	269	271	268	261	270	267
Computer and information sciences	1,151	1,122	1,179	1,089	1,102	1,172	1,130	1,076	1,051	1,142
Mathematics and statistics	355	358	350	362	386	330	369	366	358	398
Physical and related sciences	297	359	354	324	334	351	331	347	368	359
Chemistry, except biochemistry	225	294	257	251	237	254	279	264	255	277
Earth/atmospheric/ocean sciences	175	196	194	197	196	183	206	190	226	205
Physics/astronomy	129	141	140	145	143	139	131	139	161	161
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	591	1,033	736	651	825	736	667	725	873	989
Social and related sciences	667	716	745	737	774	752	793	749	745	689
Economics	254	267	294	288	300	289	284	269	287	305
Political and related sciences	462	480	467	482	502	480	520	506	505	472
Sociology/anthropology	291	298	319	305	307	313	321	323	279	246
Other social sciences	392	413	477	447	525	405	457	397	393	430
Engineering	837	944	916	940	920	979	863	891	888	922
Aerospace/aeronautical/astronautical engineering	58	78	63	67	80	73	71	72	77	92
Chemical engineering	125	132	131	130	131	130	133	140	125	138
Civil/architectural engineering	227	292	276	250	263	308	259	266	324	290
Electrical/computer engineering	539	597	603	562	607	571	546	595	588	634
Industrial engineering	230	251	284	218	259	294	265	275	302	247
Materials/metallurgical engineering	616	S	S	S	S	S	S	S	S	S
Mechanical engineering	311	329	300	313	332	332	320	334	324	336
Other engineering	656	631	636	639	588	653	599	629	522	639
Health	2,816	3,539	2,821	2,849	3,088	3,404	3,104	3,040	3,262	2,876

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-49. Standard errors for relation of job to highest degree among employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

, ,	All			
Major field	employed	Closely related	Somewhat related	Not related
All fields	5,948	6,155	5,798	4,210
Sciences	5,627	5,305	5,278	4,162
Biological, agricultural, and environmental life sciences	2,622	2,786	2,019	2,140
Agricultural/food sciences	1,106	853	447	413
Biological sciences	2,592	2,763	2,027	2,107
Environmental life sciences	968	577	570	466
Computer and information sciences	1,516	2,158	1,682	1,316
Mathematics and statistics	537	650	610	499
Physical and related sciences	809	819	511	664
Chemistry, except biochemistry	592	596	440	486
Earth/atmospheric/ocean sciences	919	581	253	277
Physics/astronomy	317	307	196	192
Other physical sciences	846	S	S	S
Psychology	2,321	2,725	3,123	2,573
Social and related sciences	2,955	2,609	2,749	2,559
Economics	1,087	950	1,367	1,076
Political and related sciences	1,478	1,188	1,243	1,542
Sociology/anthropology	1,525	1,531	1,630	1,724
Other social sciences	1,220	1,267	1,017	1,091
Engineering	1,294	1,430	1,417	835
Aerospace/aeronautical/astronautical engineering	78	138	112	92
Chemical engineering	314	323	318	187
Civil/architectural engineering	341	437	415	S
Electrical/computer engineering	749	805	873	578
Industrial engineering	177	232	237	166
Materials/metallurgical engineering	466	S	S	S
Mechanical engineering	449	598	597	397
Other engineering	560	547	405	237
Health	3,171	3,821	2,077	2,257

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-50. Standard errors for relation of job to highest degree among employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	All			
Major field	employed	Closely related	Somewhat related	Not related
All fields	3,491	3,763	2,136	1,622
Sciences	1,668	1,796	1,290	835
Biological, agricultural, and environmental life sciences	601	624	337	289
Agricultural/food sciences	361	337	S	S
Biological sciences	516	539	255	286
Environmental life sciences	271	250	S	S
Computer and information sciences	1,151	1,195	718	S
Mathematics and statistics	355	356	219	S
Physical and related sciences	297	367	248	S
Chemistry, except biochemistry	225	246	S	S
Earth/atmospheric/ocean sciences	175	203	S	S
Physics/astronomy	129	169	S	S
Other physical sciences	S	S	S	S
Psychology	591	805	661	S
Social and related sciences	667	609	534	496
Economics	254	256	194	S
Political and related sciences	462	382	358	323
Sociology/anthropology	291	281	186	S
Other social sciences	392	430	347	297
Engineering	837	982	637	355
Aerospace/aeronautical/astronautical engineering	58	86	S	S
Chemical engineering	125	110	89	S
Civil/architectural engineering	227	262	197	S
Electrical/computer engineering	539	648	388	S
Industrial engineering	230	296	245	S
Materials/metallurgical engineering	616	S	S	S
Mechanical engineering	311	334	262	S
Other engineering	656	525	403	S
Health	2,816	2,962	1,710	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-51. Standard errors for occupation of employed 2001 and 2002 S&E bachelor's degree recipients, by sex and race/ethnicity: October 2003

						Race/ethni	city		
	All	S	ex		American Indian/ Alaska	Black, non-		White, non-	
Occupation	employed	Male	Female	Asian	Native	Hispanic	Hispanic	Hispanic	Other
All occupations	5,948	3,771	5,079	2,568	1,281	3,937	2,886	6,176	2,541
Scientists	4,177	3,570	2,747	2,174	S	723	1,085	3,531	858
Biological, agricultural, and environmental life scientist	2,131	1,506	1,868	S	S	S	270	1,884	S
Computer and information scientist	2,994	2,610	1,503	1,801	S	500	801	2,607	S
Mathematical scientist	704	583	396	S	S	S	S	561	S
Physical scientist	1,233	698	979	S	S	223	241	1,065	S
Psychologist	1,041	S	S	S	S	S	S	S	S
Social scientist	1,541	1,363	1,163	S	S	S	274	1,340	S
Engineers	1,619	1,505	1,061	1,174	S	364	448	1,546	652
Science and engineering-related occupations	4,454	2,225	4,095	1,749	S	2,596	1,421	4,688	1,878
Health-related occupation	4,331	1,735	3,814	S	S	2,508	1,302	4,851	1,769
S&E manager	1,605	276	S	S	S	S	S	1,494	S
S&E precollege teacher	1,584	855	1,396	S	S	340	295	1,355	S
S&E technician/technologist	1,808	1,210	1,209	S	S	S	223	1,354	S
Other S&E-related occupation	551	S	S	S	S	S	S	S	S
Non-science and engineering occupations	6,522	3,971	5,064	2,469	654	2,377	1,788	5,825	1,140
Arts/humanities-related occupation	1,193	706	945	S	S	S	S	1,160	S
Management-related occupation	2,677	1,898	1,776	902	S	571	445	2,167	S
Non-S&E manager	331	S	S	S	S	S	S	S	S
Non-S&E postsecondary teacher	848	S	725	S	S	S	S	747	S
Non-S&E precollege/other teacher	2,800	1,033	2,567	S	S	940	698	2,290	S
Sales/marketing occupation	3,199	2,120	2,402	1,112	S	580	822	2,578	S
Social service-related occupation	3,122	1,103	2,929	S	S	1,084	814	2,793	S
Other non-S&E occupation	5,186	3,200	3,675	2,040	S	1,162	1,095	4,756	801

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-52. Standard errors for occupation of employed 2001 and 2002 S&E master's degree recipients, by sex and race/ethnicity: October 2003

				Race/ethnicity					
					American				
		6			Indian/	D			
Occupation	All employed	Male	ex Female	Asian	Alaska Native	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other
· ·							'	-	
All occupations	3,491	1,536	2,982	2,186	S	1,760	882	3,656	1,326
Scientists	2,299	1,686	1,678	1,472	S	413	513	1,513	983
Biological, agricultural, and environmental life scientist	1,195	603	1,025	613	S	S	285	946	S
Computer and information scientist	1,340	1,269	907	1,377	S	200	S	615	S
Mathematical scientist	491	448	240	378	S	S	S	282	S
Physical scientist	502	465	313	403	S	S	S	395	S
Psychologist	1,090	666	957	S	S	S	S	976	S
Social scientist	1,166	1,027	648	S	S	S	S	675	S
Engineers	1,054	1,114	656	1,087	S	153	233	802	S
Science and engineering-related occupations	3,780	1,976	2,932	1,573	S	1,064	602	3,515	S
Health-related occupation	3,649	1,884	2,793	S	S	S	S	3,349	S
S&E manager	497	S	S	S	S	S	S	S	S
S&E precollege teacher	483	269	395	S	S	S	S	345	S
S&E technician/technologist	687	S	S	S	S	S	S	S	S
Other S&E-related occupation	S	S	S	S	S	S	S	S	S
Non-science and engineering occupations	2,884	2,211	1,777	723	S	955	506	2,721	S
Arts/humanities-related occupation	303	S	S	S	S	S	S	S	S
Management-related occupation	1,073	711	656	S	S	541	S	817	S
Non-S&E manager	S	S	S	S	S	S	S	S	S
Non-S&E postsecondary teacher	458	S	S	S	S	S	S	S	S
Non-S&E precollege/other teacher	691	S	491	S	S	S	S	460	S
Sales/marketing occupation	670	S	584	S	S	S	S	598	S
Social service-related occupation	1,687	616	1,459	S	S	387	240	1,575	S
Other non-S&E occupation	1,834	1,454	865	S	S	232	394	1,768	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-53. Standard errors for occupation of employed 2001 and 2002 S&E bachelor's degree recipients, by age: October 2003

	All	Less than 25	25-29	30-34	35 years
Occupation	employed	years	years	years	or more
All occupations	5,948	10,599	6,845	3,630	7,488
Scientists	4,177	3,254	3,160	1,323	1,154
Biological, agricultural, and environmental life scientist	2,131	1,881	1,536	S	S
Computer and information scientist	2,994	2,243	2,009	1,119	995
Mathematical scientist	704	404	563	S	S
Physical scientist	1,233	1,239	489	224	275
Psychologist	1,041	S	S	S	S
Social scientist	1,541	1,302	835	S	S
Engineers	1,619	1,283	1,561	593	554
Science and engineering-related occupations	4,454	6,332	5,177	2,523	6,017
Health-related occupation	4,331	6,562	4,849	3,024	5,727
S&E manager	1,605	S	S	S	S
S&E precollege teacher	1,584	1,081	996	464	551
S&E technician/technologist	1,808	1,252	1,105	S	S
Other S&E-related occupation	551	514	S	S	S
Non-science and engineering occupation	6,522	6,009	4,384	1,967	3,347
Arts/humanities-related occupation	1,193	877	S	S	S
Management-related occupation	2,677	1,885	1,625	S	1,146
Non-S&E manager	331	S	S	S	S
Non-S&E postsecondary teacher	848	709	S	S	S
Non-S&E precollege/other teacher	2,800	2,197	1,112	S	933
Sales/marketing occupation	3,199	2,492	1,763	593	789
Social service-related occupation	3,122	2,136	1,235	849	1,408
Other non-S&E occupation	5,186	4,034	3,291	1,400	1,515

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-54. Standard errors for occupation of employed 2001 and 2002 S&E master's degree recipients, by age: October 2003

	All	Less than 25	25-29	30-34	35 years
Occupation	employed	years	years	years	or more
All occupations	3,491	993	4,504	3,062	4,145
Scientists	2,299	335	1,583	1,295	1,515
Biological, agricultural, and environmental life scientist	1,195	S	636	469	898
Computer and information scientist	1,340	S	925	955	568
Mathematical scientist	491	S	294	312	208
Physical scientist	502	S	343	387	259
Psychologist	1,090	S	859	655	487
Social scientist	1,166	S	721	377	S
Engineers	1,054	234	1,007	634	498
Science and engineering-related occupations	3,780	S	3,480	2,380	3,400
Health-related occupation	3,649	S	3,418	2,376	3,368
S&E manager	497	S	S	S	S
S&E precollege teacher	483	S	328	S	S
S&E technician/technologist	687	S	648	S	S
Other S&E-related occupation	S	S	S	S	S
Non-science and engineering occupations	2,884	S	1,535	865	2,099
Arts/humanities-related occupation	303	S	S	S	S
Management-related occupation	1,073	S	676	331	652
Non-S&E manager	S	S	S	S	S
Non-S&E postsecondary teacher	458	S	S	S	S
Non-S&E precollege/other teacher	691	S	S	S	532
Sales/marketing occupation	670	S	S	S	S
Social service-related occupation	1,687	S	929	518	1,075
Other non-S&E occupation	1,834	S	640	719	1,463

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-55. Standard errors for primary work activity of employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

			Management,			
Major field	All employed	Computer applications	sales, adminis- tration	Research and development	Teaching	Other
All fields	5,948	3,152	6,197	4,679	4,568	6,720
Sciences	5,627	2,844	5,296	4,076	3,247	5,186
Biological, agricultural, and environmental life sciences	2,622	S	2,431	2,393	1,373	2,072
Agricultural/food sciences	1,106	S	705	562	S	501
Biological sciences	2,592	S	2,259	2,281	1,269	1,964
Environmental life sciences	968	S	390	593	S	493
Computer and information sciences	1,516	2,369	2,103	1,550	801	924
Mathematics and statistics	537	457	487	415	638	459
Physical and related sciences	809	282	466	778	475	656
Chemistry, except biochemistry	592	S	381	528	396	516
Earth/atmospheric/ocean sciences	919	S	332	453	211	233
Physics/astronomy	317	S	164	235	186	117
Other physical sciences	846	S	S	S	S	S
Psychology	2,321	S	3,007	1,579	1,925	2,886
Social and related sciences	2,955	1,273	2,969	1,858	2,071	2,609
Economics	1,087	574	1,309	641	392	831
Political and related sciences	1,478	615	1,512	1,074	733	1,347
Sociology/anthropology	1,525	S	2,005	1,093	1,355	1,548
Other social sciences	1,220	S	1,001	602	1,322	1,102
Engineering	1,294	915	1,152	1,505	475	807
Aerospace/aeronautical/astronautical engineering	78	110	81	116	S	108
Chemical engineering	314	S	278	284	S	296
Civil/architectural engineering	341	S	453	451	S	261
Electrical/computer engineering	749	705	684	997	343	384
Industrial engineering	177	114	219	186	S	159
Materials/metallurgical engineering	466	S	S	S	S	S
Mechanical engineering	449	328	580	677	S	315
Other engineering	560	418	444	445	S	346
Health	3,171	S	3,540	S	2,600	4,876

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-56. Standard errors for primary work activity of employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	Management,						
	All	Computer	sales, adminis-	Research and			
Major field	employed	applications	tration	development	Teaching	Other	
All fields	3,491	1,604	2,537	2,440	2,351	4,374	
Sciences	1,668	1,229	1,114	1,516	1,008	1,382	
Biological, agricultural, and environmental life sciences	601	S	408	590	336	408	
Agricultural/food sciences	361	S	S	296	S	S	
Biological sciences	516	S	313	486	276	292	
Environmental life sciences	271	S	S	S	S	S	
Computer and information sciences	1,151	1,144	474	910	S	S	
Mathematics and statistics	355	211	S	265	225	S	
Physical and related sciences	297	S	S	432	241	S	
Chemistry, except biochemistry	225	S	S	307	S	S	
Earth/atmospheric/ocean sciences	175	S	S	202	S	S	
Physics/astronomy	129	S	S	185	119	S	
Other physical sciences	S	S	S	S	S	S	
Psychology	591	S	623	655	736	1,006	
Social and related sciences	667	276	583	480	488	488	
Economics	254	S	167	202	S	S	
Political and related sciences	462	S	333	S	S	318	
Sociology/anthropology	291	S	227	205	S	247	
Other social sciences	392	S	417	S	309	301	
Engineering	837	717	678	1,008	343	410	
Aerospace/aeronautical/astronautical engineering	58	S	S	81	S	S	
Chemical engineering	125	S	S	139	S	S	
Civil/architectural engineering	227	S	229	283	S	S	
Electrical/computer engineering	539	526	S	574	S	S	
Industrial engineering	230	S	247	270	S	S	
Materials/metallurgical engineering	616	S	S	S	S	S	
Mechanical engineering	311	S	204	338	S	S	
Other engineering	656	S	416	463	S	S	
Health	2,816	S	2,211	S	2,050	3,784	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-57. Standard errors for work-related training taken by employed 2001 and 2002 S&E bachelor's degree recipients, by occupation: October 2003

Occupation	All employed	Any type of work- related training	General professional training	Management training	Training in occupational field	Other training
All occupations	5,948	6,888	5,687	6,130	6,529	3,040
Scientists	4,177	3,069	2,017	1,514	2,648	818
Biological, agricultural, and environmental life scientist	2,131	1,567	792	S	1,488	S
Computer and information scientist	2,994	2,339	1,266	1,085	2,040	522
Mathematical scientist	704	389	312	S	385	S
Physical scientist	1,233	593	316	250	584	256
Psychologist	1,041	S	S	S	S	S
Social scientist	1,541	1,386	1,037	S	1,043	S
Engineers	1,619	1,463	1,004	970	1,464	576
Science and engineering-related occupations	4,454	4,424	4,165	4,828	4,322	2,080
Health-related occupation	4,331	4,301	4,097	4,820	4,167	1,888
S&E manager	1,605	1,005	S	S	1,001	S
S&E precollege teacher	1,584	1,422	970	729	1,455	540
S&E technician/technologist	1,808	1,167	450	S	1,149	S
Other S&E-related occupation	551	442	S	S	442	S
Non-science and engineering occupations	6,522	5,609	3,795	3,219	5,202	1,966
Arts/humanities-related occupation	1,193	866	S	S	622	S
Management-related occupation	2,677	2,058	1,400	1,520	2,001	735
Non-S&E manager	331	S	S	S	S	S
Non-S&E postsecondary teacher	848	S	S	S	S	S
Non-S&E precollege/other teacher	2,800	2,174	1,077	866	2,179	614
Sales/marketing occupation	3,199	1,962	1,298	1,085	1,950	532
Social service-related occupation	3,122	2,429	1,566	1,483	2,330	1,274
Other non-S&E occupation	5,186	3,011	2,635	1,584	2,935	1,307

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-58. Standard errors for work-related training taken by employed 2001 and 2002 S&E master's degree recipients, by occupation: October 2003

Occupation	All employed	Any type of work- related training	General professional training	Management training	Training in occupational field	Other training
All occupations	3,491	3,873	2,967	2,877	3,819	1,585
Scientists ^a	2,299	2,018	1,506	1,056	2,128	816
Biological, agricultural, and environmental life scientist	1,195	1,092	888	811	1,031	S
Computer and information scientist	1,340	1,215	776	412	1,303	S
Mathematical scientist	491	365	224	S	323	S
Physical scientist	502	385	285	S	360	S
Psychologist	1,090	878	458	S	897	S
Social scientist	1,166	896	879	S	878	S
Engineers ^a	1,054	859	546	549	805	285
Science and engineering-related occupations	3,780	4,409	2,114	1,711	4,339	S
Health-related occupation	3,649	4,280	1,996	1,518	4,208	S
S&E manager	497	S	S	S	S	S
S&E precollege teacher	483	371	S	S	353	S
S&E technician/technologist	687	S	S	S	S	S
Other S&E-related occupation	S	S	S	S	S	S
Non-science and engineering occupations	2,884	2,890	1,181	1,616	2,814	1,024
Arts/humanities-related occupation	303	S	S	S	S	S
Management-related occupation	1,073	838	544	733	724	S
Non-S&E manager	S	S	S	S	S	S
Non-S&E postsecondary teacher	458	S	S	S	S	S
Non-S&E precollege/other teacher	691	558	S	S	558	S
Sales/marketing occupation	670	S	S	S	S	S
Social service-related occupation	1,687	1,638	750	492	1,697	S
Other non-S&E occupation	1,834	1,719	337	679	1,702	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-59. Standard errors for work-related training taken by employed 2001 and 2002 S&E bachelor's degree recipients, by employment sector: October 2003

Sector of employment	All employed	Any type of work- related training	General professional training	Management training	Training in occupational field	Other training
All sectors	5,948	6,888	5,687	6,130	6,529	3,040
Educational institution	6,556	4,445	2,764	1,531	4,210	1,602
4-year college and university	5,572	3,170	1,961	1,136	3,161	1,058
Other educational	3,586	2,953	1,845	1,030	2,786	1,265
Government	5,382	3,993	2,575	2,049	3,768	1,555
Federal government	3,670	2,564	1,750	1,809	2,334	416
State or local government	3,961	3,136	1,709	762	3,065	1,476
Private industry and business (non-educational)	7,784	7,152	4,762	4,836	6,720	2,572
Private, for profit company	7,948	6,201	4,183	3,014	6,015	2,368
Nonprofit organizations	5,262	5,026	2,882	3,637	4,880	895
Self-employed	2,190	1,317	554	S	1,252	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-60. Standard errors for work-related training taken by employed 2001 and 2002 S&E master's degree recipients, by employment sector: October 2003

Sector of employment	All employed	Any type of work- related training	General professional training	Management training	Training in occupational field	Other training
All sectors	3,491	3,873	2,967	2,877	3,819	1,585
Educational institution	3,242	2,394	1,424	838	2,430	491
4-year college and university	2,702	1,648	1,022	640	1,646	352
Other educational	2,050	1,927	1,068	572	1,910	S
Government	3,188	3,038	1,314	1,602	2,972	555
Federal government	1,696	1,516	950	1,014	1,428	505
State or local government	2,338	2,257	944	1,287	2,255	S
Private industry and business (non-educational)	4,786	4,450	2,321	2,126	4,365	1,392
Private, for profit company	4,363	3,923	1,884	1,851	3,809	1,331
Nonprofit organizations	2,593	2,552	1,049	774	2,525	S
Self-employed	1,209	790	S	S	790	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-61. Standard errors for importance of selected job factors to employed 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	Considered job factor to be very important or somewhat important									
			Contri-	Degree of			Level of		Opportunities	
	All		bution to	independ-	Intellectual	Job	responsi-		for advance-	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	5,948	6,286	6,543	6,203	5,935	5,934	5,849	6,303	6,706	5,660
Sciences	5,627	5,644	5,571	5,668	5,597	5,741	5,599	5,773	6,050	5,559
Biological, agricultural, and environmental life sciences	2,622	2,677	2,600	2,745	2,681	2,494	2,597	2,568	2,638	2,593
Agricultural/food sciences	1,106	1,085	1,047	1,105	1,101	1,106	1,113	1,034	1,095	1,064
Biological sciences	2,592	2,664	2,571	2,685	2,643	2,463	2,598	2,593	2,642	2,607
Environmental life sciences	968	961	936	930	927	942	909	958	970	959
Computer and information sciences	1,516	1,638	1,805	1,393	1,500	1,710	1,532	1,638	1,561	1,571
Mathematics and statistics	537	550	570	594	509	553	587	563	543	550
Physical and related sciences	809	814	849	845	811	789	858	764	805	791
Chemistry, except biochemistry	592	604	606	610	614	589	621	584	609	583
Earth/atmospheric/ocean sciences	919	919	785	890	911	904	881	889	918	898
Physics/astronomy	317	303	304	307	313	323	318	314	309	305
Other physical sciences	846	842	677	800	846	846	846	819	843	846
Psychology	2,321	2,274	2,448	2,426	2,374	2,396	2,635	2,584	2,374	2,446
Social and related sciences	2,955	3,046	3,079	3,103	3,043	3,257	3,053	3,009	3,065	2,891
Economics	1,087	1,061	1,287	1,102	1,140	1,068	1,096	1,117	1,082	1,075
Political and related sciences	1,478	1,525	1,558	1,576	1,460	1,632	1,551	1,515	1,454	1,494
Sociology/anthropology	1,525	1,560	1,706	1,557	1,627	1,658	1,700	1,729	1,640	1,647
Other social sciences	1,220	1,229	1,360	1,271	1,263	1,264	1,217	1,326	1,258	1,217
Engineering	1,294	1,339	1,402	1,311	1,294	1,364	1,340	1,300	1,324	1,354
Aerospace/aeronautical/astronautical engineering	78	90	107	81	82	88	87	86	79	82
Chemical engineering	314	349	339	312	297	324	317	328	325	328
Civil/architectural engineering	341	384	351	366	358	356	342	404	354	367
Electrical/computer engineering	749	763	865	728	735	776	778	747	736	775
Industrial engineering	177	206	203	193	167	192	171	216	182	178
Materials/metallurgical engineering	466	434	440	456	456	466	461	344	389	466
Mechanical engineering	449	500	607	558	458	456	480	527	468	483
Other engineering	560	574	505	610	527	615	529	541	544	564
Health	3,171	3,646	3,333	3,286	3,222	3,207	3,203	3,655	3,784	3,077

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-62. Standard errors for importance of selected job factors to employed 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

	Considered job factor to be very important or somewhat important									
	'		Contri-	Degree of			Level of		Opportunities	;
	All		bution to	independ-	Intellectual	Job	responsi-		for advance-	
Major field	employed	Benefits	society	ence	challenge	security	bility	Location	ment	Salary
All fields	3,491	3,503	3,502	3,495	3,509	3,516	3,419	3,531	3,739	3,474
Sciences	1,668	1,692	1,712	1,750	1,611	1,629	1,642	1,557	1,722	1,693
Biological, agricultural, and environmental life sciences	601	551	594	581	552	527	598	567	617	609
Agricultural/food sciences	361	361	361	351	361	361	351	357	361	361
Biological sciences	516	471	525	509	476	447	537	520	505	518
Environmental life sciences	271	271	257	272	271	271	268	271	247	271
Computer and information sciences	1,151	1,183	1,132	1,272	1,126	1,221	1,125	1,075	1,175	1,149
Mathematics and statistics	355	356	350	357	352	358	353	349	344	372
Physical and related sciences	297	312	361	335	311	300	333	323	296	302
Chemistry, except biochemistry	225	245	299	263	243	231	268	262	232	235
Earth/atmospheric/ocean sciences	175	183	177	176	174	184	175	175	179	181
Physics/astronomy	129	129	135	140	131	131	133	152	133	131
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	591	622	643	573	593	636	694	659	686	591
Social and related sciences	667	688	645	685	665	683	708	675	646	693
Economics	254	255	240	247	256	252	244	257	256	254
Political and related sciences	462	462	432	460	470	453	446	460	463	446
Sociology/anthropology	291	294	294	313	291	300	311	291	295	288
Other social sciences	392	370	428	396	392	368	406	426	398	381
Engineering	837	812	924	799	814	835	876	914	798	807
Aerospace/aeronautical/astronautical engineering	58	56	66	65	58	59	62	55	56	61
Chemical engineering	125	151	122	155	155	133	151	142	151	151
Civil/architectural engineering	227	243	325	285	239	236	262	288	227	245
Electrical/computer engineering	539	521	575	588	549	562	558	639	551	521
Industrial engineering	230	215	241	227	225	230	225	220	230	230
Materials/metallurgical engineering	616	616	S	616	616	616	616	S	S	616
Mechanical engineering	311	312	337	335	306	328	333	335	323	311
Other engineering	656	641	665	641	658	654	647	624	656	646
Health	2,816	2,860	2,923	2,834	2,978	2,882	2,985	2,854	3,225	2,932

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-63. Standard errors for employment sector of 2001 and 2002 S&E bachelor's degree recipients, by occupation: October 2003

		Sector				
Occupation	All employed	Educational institution	Government	Private industry and business		
All occupations	5,948	6,556	5,382	7,784		
Scientists	4,177	3,113	1,731	3,397		
Biological, agricultural, and environmental life scientist	2,131	1,919	975	1,439		
Computer and information scientist	2,994	1,129	1,082	2,636		
Mathematical scientist	704	529	S	S		
Physical scientist	1,233	948	350	906		
Psychologist	1,041	S	S	S		
Social scientist	1,541	928	794	1,290		
Engineers	1,619	948	907	1,426		
Science and engineering-related occupations	4,454	3,588	2,737	5,084		
Health-related occupation	4,331	3,050	2,723	4,870		
S&E manager	1,605	S	S	1,604		
S&E precollege teacher	1,584	1,584	S	S		
S&E technician/technologist	1,808	1,201	683	1,228		
Other S&E-related occupation	551	S	S	548		
Non-science and engineering occupations	6,522	3,482	3,672	5,889		
Arts/humanities-related occupation	1,193	S	S	1,023		
Management-related occupation	2,677	653	1,130	2,453		
Non-S&E manager	331	S	S	280		
Non-S&E postsecondary teacher	848	738	S	S		
Non-S&E precollege/other teacher	2,800	2,479	S	1,094		
Sales/marketing occupation	3,199	S	S	3,196		
Social service-related occupation	3,122	1,252	1,523	2,483		
Other non-S&E occupation	5,186	1,881	2,446	4,103		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-64. Standard errors for employment sector of 2001 and 2002 S&E master's degree recipients, by occupation: October 2003

		Sector				
Occupation	All employed	Educational institution	Government	Private industry and business		
All occupations	3,491	3,242	3,188	4,786		
Scientists	2,299	1,516	1,089	2,004		
Biological, agricultural, and environmental life scientist	1,195	738	855	561		
Computer and information scientist	1,340	758	S	1,599		
Mathematical scientist	491	290	S	352		
Physical scientist	502	317	229	395		
Psychologist	1,090	1,012	S	500		
Social scientist	1,166	470	373	940		
Engineers	1,054	676	397	1,116		
Science and engineering-related occupations	3,780	2,382	2,276	3,960		
Health-related occupation	3,649	2,347	2,283	3,827		
S&E manager	497	S	S	486		
S&E precollege teacher	483	483	S	S		
S&E technician/technologist	687	S	S	S		
Other S&E-related occupation	S	S	S	S		
Non-science and engineering occupations	2,884	972	1,369	2,476		
Arts/humanities-related occupation	303	S	S	S		
Management-related occupation	1,073	S	778	616		
Non-S&E manager	S	S	S	S		
Non-S&E postsecondary teacher	458	457	S	S		
Non-S&E precollege/other teacher	691	613	S	S		
Sales/marketing occupation	670	S	S	669		
Social service-related occupation	1,687	596	890	1,274		
Other non-S&E occupation	1,834	427	897	1,477		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

TABLE B-65. Standard errors for employment sector of 2001 and 2002 S&E bachelor's degree recipients, by major field of degree: October 2003

	_		Sector	
	_	Educational		Private industry
Major field	All employed	institution	Government	and business
All fields	5,948	6,556	5,382	7,784
Sciences	5,627	5,035	4,101	6,084
Biological, agricultural, and environmental life sciences	2,622	2,685	1,391	2,911
Agricultural/food sciences	1,106	496	S	809
Biological sciences	2,592	2,569	1,253	2,784
Environmental life sciences	968	368	400	877
Computer and information sciences	1,516	1,358	1,208	2,006
Mathematics and statistics	537	690	325	728
Physical and related sciences	809	754	382	832
Chemistry, except biochemistry	592	504	S	628
Earth/atmospheric/ocean sciences	919	413	193	544
Physics/astronomy	317	288	122	208
Other physical sciences	846	S	S	791
Psychology	2,321	2,353	2,031	3,142
Social and related sciences	2,955	2,195	1,938	2,908
Economics	1,087	629	533	1,141
Political and related sciences	1,478	1,042	1,206	1,768
Sociology/anthropology	1,525	1,431	1,038	1,708
Other social sciences	1,220	1,231	1,241	1,213
Engineering	1,294	873	1,179	1,713
Aerospace/aeronautical/astronautical engineering	78	107	184	158
Chemical engineering	314	198	190	349
Civil/architectural engineering	341	S	455	488
Electrical/computer engineering	749	509	697	961
Industrial engineering	177	156	S	211
Materials/metallurgical engineering	466	S	S	S
Mechanical engineering	449	447	357	751
Other engineering	560	349	487	616
Health	3,171	3,203	2,708	4,789

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-66. Standard errors for employment sector of 2001 and 2002 S&E master's degree recipients, by major field of degree: October 2003

		Sector				
		Educational		Private industry		
Major field	All employed	institution	Government	and business		
All fields	3,491	3,242	3,188	4,786		
Sciences	1,668	1,540	1,379	2,137		
Biological, agricultural, and environmental life sciences	601	507	356	605		
Agricultural/food sciences	361	S	S	S		
Biological sciences	516	441	240	511		
Environmental life sciences	271	S	S	S		
Computer and information sciences	1,151	931	S	1,403		
Mathematics and statistics	355	271	S	323		
Physical and related sciences	297	380	209	375		
Chemistry, except biochemistry	225	225	S	253		
Earth/atmospheric/ocean sciences	175	169	S	192		
Physics/astronomy	129	150	S	127		
Other physical sciences	S	S	S	S		
Psychology	591	1,025	807	933		
Social and related sciences	667	574	587	576		
Economics	254	255	S	225		
Political and related sciences	462	272	318	362		
Sociology/anthropology	291	256	235	221		
Other social sciences	392	375	345	337		
Engineering	837	714	416	1,025		
Aerospace/aeronautical/astronautical engineering	58	S	S	84		
Chemical engineering	125	112	S	138		
Civil/architectural engineering	227	S	211	285		
Electrical/computer engineering	539	504	S	606		
Industrial engineering	230	S	S	234		
Materials/metallurgical engineering	616	S	S	S		
Mechanical engineering	311	220	S	323		
Other engineering	656	418	S	691		
Health	2,816	2,512	2,842	3,891		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. S&E = science and engineering.

TABLE B-67. Standard errors for median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sex, race/ethnicity, and major field of degree: October 2003

	All			Race/ethnicity					
	employed	S	ex		Black, non-		White, non-		
Major field	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other	
All fields	S	S	\$1,600	\$2,700	\$1,500	S	S	\$3,500	
Sciences	S	S	S	2,300	S	S	S	1,100	
Biological, agricultural, and environmental life sciences	S	S	S	S	1,200	2,200	S	S	
Agricultural/food sciences	S	2,900	3,400	S	S	S	S	S	
Biological sciences	S	2,900	S	S	1,700	2,300	S	S	
Environmental life sciences	2,100	S	S	S	S	S	2,400	S	
Computer and information sciences	1,200	3,600	2,000	1,100	1,900	1,500	2,100	S	
Mathematics and statistics	1,400	1,100	S	1,000	1,600	S	1,000	S	
Physical and related sciences	S	S	1,900	S	S	S	S	S	
Chemistry, except biochemistry	1,400	S	1,400	S	S	2,300	1,100	S	
Earth/atmospheric/ocean sciences	S	3,100	1,300	S	S	S	S	S	
Physics/astronomy	1,200	3,600	2,700	S	S	S	2,200	S	
Other physical sciences	1,800	S	S	S	S	S	S	S	
Psychology	2,400	S	S	S	3,200	1,500	1,400	S	
Social and related sciences	S	3,500	S	2,700	S	S	S	2,800	
Economics	1,300	1,500	S	4,400	1,300	1,400	S	S	
Political and related sciences	S	S	S	S	4,700	1,400	S	S	
Sociology/anthropology	S	S	1,600	S	S	S	1,600	S	
Other social sciences	S	1,400	1,100	S	S	1,800	S	S	
Engineering	S	S	1,500	S	S	1,300	S	5,500	
Aerospace/aeronautical/astronautical engineering	2,400	1,700	S	S	S	3,800	1,900	S	
Chemical engineering	S	1,900	S	S	3,400	2,100	S	S	
Civil/architectural engineering	S	S	2,400	S	S	S	S	S	
Electrical/computer engineering	S	S	1,400	1,100	3,500	2,200	S	S	
Industrial engineering	2,900	1,300	1,500	S	1,800	S	S	S	
Materials/metallurgical engineering	S	S	S	S	S	S	S	S	
Mechanical engineering	S	S	S	S	4,900	2,900	S	S	
Other engineering	S	1,300	1,800	S	S	S	1,000	S	
Health	1,900	3,100	2,200	S	5,600	S	2,700	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-68. Standard errors for median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sex, race/ethnicity, and major field of degree: October 2003

	All			Race/ethnicity					
	employed	S	ex		Black, non-		White, non-		
Major field	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other	
All fields	\$1,600	\$1,900	\$1,900	S	\$4,000	\$7,700	S	\$11,200	
Sciences	S	S	S	4,500	2,400	1,400	1,700	8,200	
Biological, agricultural, and environmental life sciences	2,300	1,300	3,000	S	S	S	1,900	S	
Agricultural/food sciences	2,300	4,200	S	S	S	S	2,400	S	
Biological sciences	4,900	5,900	1,400	S	S	S	4,900	S	
Environmental life sciences	S	S	S	S	S	S	S	S	
Computer and information sciences	4,300	1,800	6,700	1,200	S	S	9,700	S	
Mathematics and statistics	10,100	9,100	1,900	14,800	S	S	4,800	S	
Physical and related sciences	1,700	4,500	4,000	4,400	S	S	2,100	S	
Chemistry, except biochemistry	2,400	2,200	10,200	S	S	S	S	S	
Earth/atmospheric/ocean sciences	S	4,600	4,200	S	S	S	1,700	S	
Physics/astronomy	1,100	S	S	S	S	S	1,600	S	
Other physical sciences	S	S	S	S	S	S	S	S	
Psychology	2,200	5,900	2,200	S	1,400	9,400	1,600	S	
Social and related sciences	S	S	2,200	S	3,800	S	1,700	S	
Economics	1,900	6,500	6,600	S	S	S	7,200	S	
Political and related sciences	2,800	2,800	5,300	S	S	S	2,700	S	
Sociology/anthropology	3,500	5,100	10,500	S	S	S	1,200	S	
Other social sciences	1,900	2,200	2,300	S	S	S	3,100	S	
Engineering	S	S	S	4,400	S	2,200	S	S	
Aerospace/aeronautical/astronautical engineering	5,700	21,700	S	S	S	S	7,200	S	
Chemical engineering	5,500	3,500	2,300	S	S	S	4,900	S	
Civil/architectural engineering	S	S	5,500	2,000	S	S	S	S	
Electrical/computer engineering	S	S	2,800	S	S	S	3,100	S	
Industrial engineering	9,900	7,700	1,900	S	S	S	2,600	S	
Materials/metallurgical engineering	S	S	S	S	S	S	S	S	
Mechanical engineering	4,400	4,100	2,800	2,600	S	S	1,600	S	
Other engineering	4,100	1,800	2,800	5,900	S	S	3,700	S	
Health	3,900	3,900	1,000	S	3,100	S	3,700	S	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-69. Standard errors for median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sex, race/ethnicity, and occupation: October 2003

	All					Race/ethnicity		
	employed	S	ex		Black, non-		White, non-	
Occupation	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other
All occupations	S	S	\$1,600	\$2,700	\$1,500	S	S	\$3,500
Scientists	S	2,000	1,400	2,000	3,300	3,700	S	2,700
Biological, agricultural, and environmental life scientist	S	S	S	S	S	S	1,100	S
Computer and information scientist	2,600	S	S	2,000	S	6,000	1,400	S
Mathematical scientist	5,000	10,800	S	S	S	S	14,200	S
Physical scientist	1,800	1,600	1,300	S	S	S	1,700	S
Psychologist	S	S	S	S	S	S	S	S
Social scientist	2,000	4,800	6,200	S	S	S	1,900	S
Engineers	S	S	S	S	S	3,200	S	7,000
Science and engineering-related occupations	S	S	3,200	1,700	3,300	3,300	S	1,900
Health-related occupation	6,000	S	2,600	S	2,800	2,600	5,500	2,900
S&E manager	6,200	2,900	S	S	S	S	2,200	S
S&E precollege teacher	S	S	2,100	S	1,900	2,200	S	S
S&E technician/technologist	S	3,000	2,400	S	S	2,900	2,100	S
Other S&E-related occupation	1,700	S	S	S	S	S	S	S
Non-science and engineering occupations	S	1,000	S	4,700	1,200	1,900	S	2,600
Arts/humanities-related occupation	2,500	2,100	4,000	S	S	S	2,000	S
Management-related occupation	S	2,100	S	1,700	2,300	S	1,600	S
Non-S&E manager	5,100	S	S	S	S	S	S	S
Non-S&E postsecondary teacher	S	S	S	S	S	S	S	S
Non-S&E precollege/other teacher	S	S	S	S	2,800	2,500	S	S
Sales/marketing occupation	1,400	S	S	1,400	1,100	2,000	S	S
Social service-related occupation	1,900	1,100	S	S	1,600	1,300	1,700	S
Other non-S&E occupation	S	S	S	2,200	2,700	S	S	2,100

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-70. Standard errors for median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sex, race/ethnicity, and occupation: October 2003

	All				Race/ethnicity					
	employed	S	ex		Black, non-		White, non-			
Occupation	recipients	Male	Female	Asian	Hispanic	Hispanic	Hispanic	Other		
All occupations	\$1,600	\$1,900	\$1,900	S	\$4,000	\$7,700	S	\$11,200		
Scientists	S	4,000	1,700	S	1,800	3,000	6,300	6,700		
Biological, agricultural, and environmental life scientist	4,200	3,300	9,200	2,100	S	S	5,500	S		
Computer and information scientist	S	1,100	1,600	5,100	14,000	S	8,200	S		
Mathematical scientist	6,900	6,500	3,700	S	S	S	4,700	S		
Physical scientist	4,200	8,000	3,900	S	S	S	3,400	S		
Psychologist	S	1,500	S	S	S	S	1,100	S		
Social scientist	2,300	11,700	2,400	S	S	S	6,800	S		
Engineers	S	2,300	4,300	2,400	2,100	4,000	S	S		
Science and engineering-related occupations	3,500	4,600	S	S	1,900	S	4,300	S		
Health-related occupation	5,000	3,700	S	S	S	S	6,200	S		
S&E manager	8,500	S	S	S	S	S	S	S		
S&E precollege teacher	4,300	6,000	1,200	S	S	S	1,500	S		
S&E technician/technologist	15,300	S	S	S	S	S	S	S		
Other S&E-related occupation	S	S	S	S	S	S	S	S		
Non-science and engineering occupations	S	2,200	S	2,500	4,000	S	1,900	S		
Arts/humanities-related occupation	S	S	S	S	S	S	S	S		
Management-related occupation	9,800	4,400	1,900	S	S	S	6,200	S		
Non-S&E manager	S	S	S	S	S	S	S	S		
Non-S&E postsecondary teacher	S	S	S	S	S	S	S	S		
Non-S&E precollege/other teacher	S	S	1,200	S	S	S	S	S		
Sales/marketing occupation	1,200	S	1,700	S	S	S	S	S		
Social service-related occupation	2,400	S	2,300	S	3,900	S	2,700	S		
Other non-S&E occupation	3,100	3,000	S	S	9,400	S	2,700	S		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-71. Standard errors for median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sector of employment and major field of degree: October 2003

		Sector				
	_	Educational		Private industry		
Major field	All employed	institution	Government	and business		
All fields	S	\$3,200	S	S		
Sciences	S	S	1,100	S		
Biological, agricultural, and environmental life sciences	S	S	1,900	S		
Agricultural/food sciences	S	S	S	2,100		
Biological sciences	S	S	3,400	1,200		
Environmental life sciences	2,100	S	1,400	S		
Computer and information sciences	1,200	1,100	2,500	S		
Mathematics and statistics	1,400	1,600	S	3,400		
Physical and related sciences	S	1,200	3,800	S		
Chemistry, except biochemistry	1,400	S	S	2,800		
Earth/atmospheric/ocean sciences	S	S	2,300	2,000		
Physics/astronomy	1,200	2,600	S	4,500		
Other physical sciences	1,800	S	S	S		
Psychology	2,400	S	1,800	S		
Social and related sciences	S	S	2,000	2,600		
Economics	1,300	2,200	2,300	1,500		
Political and related sciences	S	1,000	3,000	S		
Sociology/anthropology	S	1,100	S	2,700		
Other social sciences	S	S	3,900	S		
Engineering	S	S	1,500	S		
Aerospace/aeronautical/astronautical engineering	2,400	S	4,000	S		
Chemical engineering	S	S	S	S		
Civil/architectural engineering	S	S	S	S		
Electrical/computer engineering	S	S	1,300	S		
Industrial engineering	2,900	S	S	S		
Materials/metallurgical engineering	S	S	S	S		
Mechanical engineering	S	S	1,600	S		
Other engineering	S	S	4,200	1,300		
Health	1,900	3,700	4,500	1,100		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-72. Standard errors for median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sector of employment and major field of degree: October 2003

	_	Sector				
	_	Educational		Private industry		
Major field	All employed	institution	Government	and business		
All fields	\$1,600	S	\$5,100	\$3,300		
Sciences	S	S	S	3,300		
Biological, agricultural, and environmental life sciences	2,300	3,300	4,400	2,400		
Agricultural/food sciences	2,300	S	S	S		
Biological sciences	4,900	2,300	5,600	4,200		
Environmental life sciences	S	S	S	S		
Computer and information sciences	4,300	11,400	S	3,000		
Mathematics and statistics	10,100	2,700	S	5,500		
Physical and related sciences	1,700	1,300	S	S		
Chemistry, except biochemistry	2,400	S	S	1,000		
Earth/atmospheric/ocean sciences	S	S	S	4,000		
Physics/astronomy	1,100	S	S	S		
Other physical sciences	S	S	S	S		
Psychology	2,200	S	S	3,500		
Social and related sciences	S	5,000	1,500	1,800		
Economics	1,900	S	S	3,000		
Political and related sciences	2,800	S	3,200	1,200		
Sociology/anthropology	3,500	S	1,700	2,600		
Other social sciences	1,900	1,700	2,500	S		
Engineering	S	6,900	2,800	S		
Aerospace/aeronautical/astronautical engineering	5,700	S	S	2,100		
Chemical engineering	5,500	S	S	5,700		
Civil/architectural engineering	S	S	3,400	S		
Electrical/computer engineering	S	S	S	1,300		
Industrial engineering	9,900	S	S	8,300		
Materials/metallurgical engineering	S	S	S	S		
Mechanical engineering	4,400	S	S	1,800		
Other engineering	4,100	S	S	1,100		
Health	3,900	1,300	6,300	1,400		

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

S&E = science and engineering.

TABLE B-73. Standard errors for median salary of full-time employed 2001 and 2002 S&E bachelor's degree recipients, by sector of employment and occupation: October 2003

	•		Sector	
Occupation	All employed	Educational institution	Government	Private industry and business
All occupations	S	\$3,200	S	S
Scientists	S	S	S	S
Biological, agricultural, and environmental life scientist	S	S	3,100	1,100
Computer and information scientist	2,600	3,200	3,700	S
Mathematical scientist	5,000	S	S	S
Physical scientist	1,800	S	1,600	1,700
Psychologist	S	S	S	S
Social scientist	2,000	S	S	2,700
Engineers	S	1,800	3,100	S
Science and engineering-related occupations	S	2,500	1,300	S
Health-related occupation	6,000	6,300	2,400	S
S&E manager	6,200	S	S	9,800
S&E precollege teacher	S	S	S	S
S&E technician/technologist	S	S	8,300	2,100
Other S&E-related occupation	1,700	S	S	1,800
Non-science and engineering occupations	S	S	1,300	S
Arts/humanities-related occupation	2,500	S	S	1,500
Management-related occupation	S	S	7,000	S
Non-S&E manager	5,100	S	S	S
Non-S&E postsecondary teacher	S	S	S	S
Non-S&E precollege/other teacher	S	2,000	S	S
Sales/marketing occupation	1,400	S	S	2,900
Social service-related occupation	1,900	4,000	S	S
Other non-S&E occupation	S	S	1,900	S

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

S&E = science and engineering.

TABLE B-74. Standard errors for median salary of full-time employed 2001 and 2002 S&E master's degree recipients, by sector of employment and occupation: October 2003

			Sector of employmen	t	
	_	Educational		Private industry	
Occupation	All employed	institution	Government	and business	
All occupations	\$1,600	S	\$5,100	\$3,300	
Scientists	S	S	10,500	3,500	
Biological, agricultural, and environmental life scientist	4,200	4,200	6,500	2,400	
Computer and information scientist	S	S	S	2,600	
Mathematical scientist	6,900	2,100	S	1,700	
Physical scientist	4,200	S	S	3,500	
Psychologist	S	1,700	S	S	
Social scientist	2,300	S	4,000	11,600	
Engineers	S	1,100	2,800	1,400	
Science and engineering-related occupations	3,500	S	6,700	3,400	
Health-related occupation	5,000	1,900	6,400	4,100	
S&E manager	8,500	S	S	12,100	
S&E precollege teacher	4,300	4,300	S	S	
S&E technician/technologist	15,300	S	S	S	
Other S&E-related occupation	S	S	S	S	
Non-science and engineering occupations	S	2,500	S	1,700	
Arts/humanities-related occupation	S	S	S	S	
Management-related occupation	9,800	S	4,200	1,400	
Non-S&E manager	S	S	S	S	
Non-S&E postsecondary teacher	S	S	S	S	
Non-S&E precollege/other teacher	S	S	S	S	
Sales/marketing occupation	1,200	S	S	1,100	
Social service-related occupation	2,400	4,500	5,600	4,200	
Other non-S&E occupation	3,100	S	5,400	3,800	

S = data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. Median salary standard errors of less than \$1,000 are also suppressed for reasons of data reliability.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 2003.

S&E = science and engineering.

APPENDIX C. SURVEY INSTRUMENT-2003 MAIL QUESTIONNAIRE



National Survey of Recent College Graduates

Conducted by
Mathematica Policy Research, Inc.



This information is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the Confidential Information Protection and Statistical Efficiency Act of 2002. These laws require that the survey sponsor (the National Science Foundation) treat all information you provide as confidential. The information you provide will be used only for research and statistical purposes by the survey sponsor, their contractors, and collaborating researchers for the purpose of analyzing data and preparing scientific reports and articles. Any information publicly released (such as statistical summaries) will be in a form that does not personally identify you. Your response is voluntary and failure to provide some or all of the requested information will not in any way adversely affect you. Actual time to complete the questionnaire may vary depending on your circumstances but on average, it will take about 25 minutes. If you have any comments on the time required for this survey, please send them to the National Science Foundation, 4201 Wilson Boulevard, Suite 295, Arlington, VA 22230, Attention: NSF Reports Clearance Officer.

Please make any nameladdress chan	nges below:
First Name M.I.	
Last Name	
Number and Street	
City/Town	
State ZIP Code	
OMB No.: 3145-0077 Approval Expires: 09/30/2005	

- * Thank you for taking the time to complete this questionnaire.
- ♣ If you have any questions, please call us toll free at 1-888-633-8329 or e-mail us at questions@gradsurvey.org. Our mailing address is: 2003 National Survey of Recent College Graduates, Mathematica Policy Research, Inc., 7161 Columbia Gateway Drive, Columbia, MD 21046.
- * Results of the National Survey of Recent College Graduates can be found on the National Science Foundation's Web site at http://www.nsf.gov/sbe/srs/nsrcg.
- An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this survey is 3145-0077.
- * Follow all appropriate skip instructions after marking a box. If no skip instruction is provided, you should continue to the next question.

	Part A - Education Background	A5.	When you <u>first</u> entered college to begin working on a <u>bachelor's</u> degree, what was your intended major field of study?
A 1.	In what year did you receive your high school diploma or high school equivalency certificate?		
	YEAR		FIRST INTENDED MAJOR
	□ DID NOT FINISH HIGH SCHOOL		
		A6.	Using the FIELD OF STUDY list on pages 18-19, choose the code that <u>best</u> describes your first intended major.
A2.	In what U.S. state, U.S. territory, or foreign country did you last attend high school?		CODE
	STATE/TERRITORY		NOTE: Education codes range from 601 to 995
	FOREIGN COUNTRY	A7.	Using a 4-point scale, what was your overall
	FOREIGN COUNTRY		undergraduate grade point average (GPA)?
			If you have <u>more than one</u> bachelor's degree, give your overall grade point average for your <u>first</u> bachelor's degree.
			Mark (X) one answer.
A3.	Have you <u>ever</u> taken courses at a community college?		1 ☐ 3.75 – 4.00 GPA (Mostly A's) 2 ☐ 3.25 – 3.74 GPA (About half A's/half B's)
	Use an X to mark your answer.		3 ☐ 2.75 – 3.24 GPA (Mostly B's)
	₁ ☐ Yes		4 ☐ 2.25 – 2.74 GPA (About half B's/half C's)
	2 □ No		5 ☐ 1.75 – 2.24 GPA (Mostly C's)
			6 ☐ 1.25 – 1.74 GPA (About half C's/half D's)
			⁷ ☐ Less than 1.25 (Mostly D's or below)
			B Have not taken courses for which grades were given
A4.	Do you have a 2-year associate's degree?	AO	
	₁ ☐ Yes	A8.	How many college or university degrees do you have at the bachelor's level or higher?
	₂ □ No		NUMBER

A9.	<u>During the week of October 1, 2003</u> , were you enrolled in or taking courses at a college or university?	A14. For which of the following reasons were you taking courses or enrolled?				
	-1□ Yes	Ма	ark (X) Yes or No for each item. Yes No			
	2 ☐ No → Go to question A16	1	To gain further education before beginning a career 1 2			
A10.	(If Yes) Were you taking courses or enrolled as	2	or further education1 2			
	Mark (X) one answer.	3	To change your academic or occupational field1			
	₁ ☐ A full-time student in a degree program	4	To gain <u>further</u> skills or knowledge in your academic or			
	² A part-time student in a degree program		occupational field1			
	Not enrolled in a degree program, but taking	5	For licensure or certification 1			
	courses	6	To increase opportunities for promotion, advancement or higher salary 1 2			
A11.	Toward what degree were you working?	7	Required or expected by employer . 1 2			
	If you were working toward more than one degree,	8	For leisure or personal interest 1 2			
	mark the level for the highest degree. Mark (X) one answer.	9	Other – Specify 1 2			
	□ No specific degree → Go to question A14					
	¹ ☐ Bachelor's degree (e.g., BS, BA, AB)					
	² ☐ Master's degree (e.g., MS, MA, MBA)					
	³ □ Doctorate (e.g., PhD, DSc, EdD, etc.)					
	Other professional degree (e.g., JD, LLB, MD, DDS, etc.) − Specify					
	5 ☐ Other – Specify ☑		ere <u>any</u> of your school-related costs for taking urses paid for by an employer? Yes No			
♦ A12.	What was the primary field of study for this degree? PRIMARY FIELD OF STUDY					
A13.	Using the FIELD OF STUDY list on pages 18-19, choose the code that best describes the field of study for this degree. CODE NOTE: Education codes range from 601 to 995	1	ow likely is it that you will one day take ditional college or university courses? Very likely Somewhat likely Very unlikely			

A17. The next few questions ask about the degrees you received before October 1, 2003. Starting with your most recent college or university degree, please provide the following information for each degree you have at the bachelor's level or higher. If you have more than three degrees, report your two most recent degrees and your first bachelor's degree. MOST RECENT DEGREE SECOND MOST RECENT DEGREE FIRST BACHELOR'S DEGREE a. From which school did you receive your From which school did you receive your From which school did you receive your most recent degree? second most recent degree? first bachelor's degree, if not previously reported on this page? College or University Name College or University Name College or University Name Department Department Department City/Town City/Town City/Town State/Foreign Country State/Foreign Country State/Foreign Country b. In what month and year was this degree In what month and year was this degree In what month and year was this degree awarded? awarded? awarded? Month Month Month Year Year Year c. What type of degree did you receive? c. What type of degree did you receive? c. What type of degree did you receive? Mark (X) one answer. Mark (X) one answer. Mark (X) one answer. 1 Bachelor's degree (e.g., BS, BA, AB) 1 Bachelor's degree (e.g., BS, BA, AB) 1 Bachelor's degree (e.g., BS, BA, AB) 2 Master's degree (e.g., MS, MA, MBA) 2 Master's degree (e.g., MS, MA, MBA) 2 Master's degree (e.g., MS, MA, MBA) 3 L Doctorate (e.g., PhD, DSc, EdD, etc.) 3 Doctorate (e.g., PhD, DSc, EdD, etc.) 3 Doctorate (e.g., PhD, DSc, EdD, etc.) 4 Other professional degree (e.g., JD, 4 Other professional degree (e.g., JD, 4 Other professional degree (e.g., JD, LLB, MD, DDS, etc.) - Specify 7 LLB, MD, DDS, etc.) - Specify 7 LLB, MD, DDS, etc.) - Specify Z 5 ☐ Other – Specify ¬ 5 ☐ Other – Specify ¬ 5 ☐ Other – Specify d. What is the primary field of study and What is the primary field of study and What is the primary field of study and second major (if applicable) for this second major (if applicable) for this second major (if applicable) for this PRIMARY FIELD OF STUDY PRIMARY FIELD OF STUDY PRIMARY FIELD OF STUDY SECOND MAJOR SECOND MAJOR **SECOND MAJOR** e. Using the FIELD OF STUDY list on e. Using the FIELD OF STUDY list on Using the FIELD OF STUDY list on pages 18-19, choose the code that best pages 18-19, choose the code that best pages 18-19, choose the code that best describes the primary field of study and describes the primary field of study and describes the primary field of study and second major (if applicable) for this second major (if applicable) for this second major (if applicable) for this dearee. Code for Primary Field of Study Code for Primary Field of Study Code for Primary Field of Study Code for Second Major Code for Second Major Code for Second Major

NOTE: Education codes range from 601-995

NOTE: Education codes range from 601-995

NOTE: Education codes range from 601-995

Mar	rk (X) all that apply for <u>each</u> undergradua	ate and graduate	e column.		
				Undergraduate	Graduate
1	Did not earn a degree at this level			1 □	∀
2	Financial support from parents, spouse,				
	other relatives, not to be repaid Loans from the school you attended, ba			2	2
	federal or state government			3	3
4	Loans from parents or other relatives			4 🔲	4
5	Financial assistance from your employe	r		5	5
6	Tuition waivers, fellowships, grants, sch	olarships		6 🗌	6
7	Assistantships or work study			7	7
	Earnings from employment			8	8
9	Other – Specify			9 🗌	9
grad 200	e next question asks about the TOTAL duate degrees you completed <u>before (</u> 3. rk (X) one answer in <u>each</u> undergraduate	October 1, 200	3, and how mud		
grad 200	duate degrees you completed <u>before (</u> 3.	October 1, 200	3, and how mud	ch you <u>still owed</u>	
grad 200	duate degrees you completed <u>before (</u> 3.	e and graduate of UNDER Total Amount	3, and how muc	ch you <u>still owed</u> Gf Total Amou	as of October RADUATE Amount Stil
grad 200	duate degrees you completed <u>before (</u> 3.	e and graduate of UNDER Total Amount	3, and how much column. GRADUATE Amount Still Owed as of	ch you <u>still owed</u> Gf Total Amou	RADUATE Amount Stil Owed as of
grad 200	duate degrees you completed before (s). The first state of the state	October 1, 200 e and graduate of UNDER Total Amount Borrowed	3, and how much column. GRADUATE Amount Still Owed as of	ch you <u>still owed</u> Gf Total Amou	RADUATE Amount Stil Owed as of
9rac 2003 Mar 1 2	duate degrees you completed before (13. rk (X) one answer in each undergraduate Did not earn a degree at this level	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003	GF Total Amount Borrowed	Amount Stil Amount Stil Owed as of October 1, 20
9rad 2000: Marr 1 2 3	duate degrees you completed before (13.) rk (X) one answer in each undergraduate Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003	GF Total Amount Borrowed	Amount Stil Oved as of October 1, 20
9 grad 2000: Marr 1 2 3 4	Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003	GF Total Amour Borrowed 1	Amount Still Owed as of October 1, 20
1 2 3 4 5	Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003	GF Total Amount Borrowed 1	Amount Stil October Amount Stil Owed as of October 1, 20
1 2 3 4 5 6	Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1 □ 2 □ 3 □ 4 □ 5 □ 6 □	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003 1	GF Total Amount Borrowed 1	Amount Stil Oved as of October 1, 20 1
9 mar 2003 Mar 1 2 3 4 5 6 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Did not earn a degree at this level	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003 1	GF Total Amount Borrowed 1	Amount Stil Owed as of October 1, 20
9 200: Mar 1 2 3 4 5 6 7 8	Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003 1	GF Total Amount Borrowed 3	Amount Stil October Amount Stil Owed as of October 1, 20 1
9 mar 2003 Mar 1 2 3 4 5 6 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Did not earn a degree at this level None	October 1, 200 e and graduate of UNDER Total Amount Borrowed 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □	3, and how much column. GRADUATE Amount Still Owed as of October 1, 2003 1	GF Total Amount Borrowed 1	Amount Stil Owed as of October 1, 20 Amount Stil Owed as of October 1, 20

A20.	Between the most recent degree you earned prior to October 1, 2003 and October 1, 2003, did you enroll in or take any courses at a college or university?		Part B - Employment Situation
	Yes 2 □ No → Go to question B1 on this page	B1.	Were you working for pay or profit during the week of October 1, 2003?
			This includes being a student on paid work-study, self-employed, or on any type of paid or unpaid temporary leave.
A21.	Toward what degree were you working? If you were working toward more than one degree, mark the level for the highest degree. □ □ No specific degree → Go to question B1 on this page □ □ Bachelor's degree (e.g., BS, BA, AB) □ □ Master's degree (e.g., MS, MA, MBA) □ □ Doctorate (e.g., PhD, DSc, EdD, etc.) □ Other professional degree (e.g., JD, LLB, MD, DDS, etc.) − Specify □	₩ B2.	Use an X to mark your answer. 1 ☐ Yes → Go to page 6, question B7 2 ☐ No (If No) Did you look for work during the four weeks preceding October 1, 2003? This would be between September 3 rd and October 1 st .
A22.	S ☐ Other – Specify ☐ What was your primary field of study for this degree?	В3.	1 ☐ Yes 2 ☐ No What were your reasons for not working during the week of October 1?
	PRIMARY FIELD OF STUDY		Mark (X) all that apply. Year retired Petired On layoff from a job Student Family responsibilities
A23.	Using the FIELD OF STUDY list on pages 18-19, choose the code that best describes the field of study for this degree. CODE NOTE: Education codes range from 601 to 995		 Chronic illness or permanent disability Suitable job not available Did not need or want to work Other − Specify

Prior to the week of October 1, 2003, when did you last work for pay or profit?	B7.	(If you worked during week of October 1 st) Counting <u>all</u> jobs held during the week of October 1, 2003, did you <u>usually</u> work
		A total of 35 or more hours per week → Go to page 7, question B10
Month Year LAST WORKED		− 2 ☐ Fewer than 35 hours per week
	₩ B8.	(If you worked fewer than 35 hours) During the week of October 1, did you want to work a full-time work week of 35 or more hours?
What kind of work were you doing on this last job — that is, what was your occupation? Please be as specific as possible, including any area of specialization.		1 ☐ Yes 2 ☐ No
Example: High school teacher - Math		
	В9.	For which of the following reasons were you working for less than 35 hours during the week of October 1?
		Mark (X) all that apply.
		Year retired 1 Retired or
		semi-retired
		₃ ☐ Student
		₄ ☐ Family responsibilities
Haliand a IOD OATTOODY!!		₅ ☐ Chronic illness or permanent disability
Using the JOB CATEGORY list on pages 20-21, choose the code that <u>best</u> describes the work		G ☐ Suitable job not available☐ ☐ Suitable job not available
you were doing on this last job.		7 Did not need or want to work
CODE Go to page 11, question B36		8 ☐ Other – Specify ⊋
NOTE: Job codes range from 010 to 500		
	you last work for pay or profit? o	you last work for pay or profit? □

Principal Employer	B12. Counting all locations where this employer operates, how many people work for your principal employer? Your best estimate is fine.
Who was your principal employer during the week of October 1, 2003? If you had more than one job, report the one for which you worked the most hours that week. If your employer had more than one location, report the location where you usually worked. Employer Name Department/Division	Mark (X) one answer. 1 □ 10 or fewer employees 2 □ 11 - 24 employees 3 □ 25 - 99 employees 4 □ 100 - 499 employees 5 □ 500 - 999 employees 6 □ 1,000 - 4,999 employees 7 □ 5,000 - 24,999 employees
Street City/Town	B13. Did your principal employer come into being as a new business within the past 5 years?
State ZIP Code	¹ ☐ Yes ² ☐ No
What was that employer's main business or industry; that is, what did that employer make or do? If your principal employer had more than one type of business, report the type of business primarily performed at the location where you work. Example: Production of microprocessor chips EMPLOYER'S MAIN BUSINESS	B14. Which one of the following best describes your principal employer during the week of October 1? Mark (X) one answer. 1 □ SELF-EMPLOYED in own NOT INCORPORATED business, professional practice or farm 2 □ SELF-EMPLOYED in own INCORPORATED business, professional practice or farm 3 □ A PRIVATE FOR-PROFIT organization or individual working for wages, salary or commissions 4 □ A PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization 5 □ Local GOVERNMENT (e.g., city, county) 6 □ State GOVERNMENT 7 □ U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA) 8 □ U.S. GOVERNMENT (e.g., civilian employee) 9 □ Other - Specify □

B15.	Was your principal employer an educational institution?	B18. What was your faculty rank?
		Mark (X) one answer.
	Yes	Not applicable: no ranks designated at this
	2 □ No → Go to page 9, question B20	institution
		Not applicable: no ranks designated for my position
		₃ ☐ Professor
	Yes) Was the educational institution where	4 ☐ Associate Professor
₩ B16.		5 ☐ Assistant Professor
	you worked a	6 ☐ Instructor
	Mark (X) one answer.	⁷ ☐ Lecturer
	Preschool, elementary, middle, or secondary school or system question B20	₃ ☐ Other – <i>Specify</i> ⊋
	 ² ☐ Two-year college, community college, or technical institute 	
	3 ☐ Four-year college or university, other than a medical school	
	 Medical school (including university-affiliated hospital or medical center) 	
	₅ ☐ University-affiliated research institute	
	6 ☐ Other – Specify ☑	B19. What was your tenure status?
		Mark (X) one answer.
		Not applicable: no tenure system at this
		institution
		Not applicable: no tenure system for my position
B17.	During the week of October 1, 2003, what type	₃ ☐ Tenured
	of academic position(s) did you hold at this	^₄ ☐ On tenure track but not tenured
	institution?	5 ☐ Not on tenure track
	Mark (X) all that apply.	
	President, Provost or Chancellor (any level)	
	² Dean (any level), department head or chair	
	₃ ☐ Research faculty, scientist, associate or fellow	
	₄ ☐ Teaching faculty	
	5 Adjunct faculty	
	Postdoc (e.g., postdoctoral fellow or associate)	
	¬ □ Research assistant	
	□ Teaching assistant □	
	Other − Specify ✓	

	Principal Job		During v job (that week of	is, yo	ur pr	incip	al job				
pr 20 Pl	hat kind of work were you doing on your incipal job held during the week of October 1, 003 — that is, what was your occupation? ease be as specific as possible, including any ea of specialization.		JOB STAI	RTED	Мо	nth		Ye	ar		
Ex	xample: High school teacher - Math	↓ ↓ B25.	To what job relat Mark (X) Closs Som Not	one are sely related at the sely related at the self a	your nswe ated relat	higher. ed	⇒ G qu	o to puestion	? W	/as it • 10, • 27	/our
			decision your hig Mark (X) 1 Pav.	hest d	l <mark>egre</mark> r No i	<u>e</u> ? for ea	ch ite	m.	١	Yes	No
ch yo	sing the JOB CATEGORY list on pages 20-21, noose the code that <u>best</u> describes the work bu were doing on your principal job during the eek of October 1.		2 Worl equip	king co oment, ocation	nditic work	ons (e. king er	.g., ho	ours, nmen	t) 1		2
	DDE		inter 5 Fam	nge in d ests ily-relat	ted re	eason	s (e.g	 J.,	1	_	2
NO	OTE: Job codes range from 010 to 500		6 Job i avail	ren, sp n highe able e other	est de	egree	field	not	1		2
ex	d your duties on this job require the technical expertise of a bachelor's degree or higher in										_
	ark (X) Yes or No for each item. Yes No		Which <u>tv</u> most im outside	po rtan	t rea	sons	for w	orkii/	ng in	an a	
2	Engineering, computer science, math, or the natural sciences		Enter nu B25 abo	mber o			_				stion
3	Some other field (e.g., health, business, or education) – Specify 21 2		1	Mos	<u>st</u> imp	oortan	it reas	son			
			2			most i					

B27.	27. The next question is about your work activities on your principal job. Which of the following work activities occupied at least 10 percent of your time during a typical work week on this job?			B29. Did you supervise the work of others as part of your principal job held during the week of October 1? Mark "Yes" if you assigned duties to workers and recommended or initiated personnel actions such as					
	Ма	rk (X) Yes or No for each item. Yes No		hiring, firing or promoting	1.		s sucn as		
	1	Accounting, finance, contracts 2		Teachers should <u>not</u> cou	nt studen	its.			
	2	Basic research – study directed toward gaining scientific knowledge primarily for its own sake		-1 ☐ Yes 2 ☐ No → Go to ques t	ion B31				
	3	Applied research – study directed toward gaining scientific knowledge to meet a recognized need	₩ B30). (If Yes) How many peo	ple did v	ou typica	nllv		
	4	Development – using knowledge gained from research for the production of materials, devices1 2 2		. (166) 11 6 11 11611 1	p.o a.a ,	Numbe Supervis	r		
	5	Design of equipment, processes, structures, models1 2							
	6	Computer applications, programming, systems development		 Supervise <u>directly</u>?. Supervise through 	(If I	 none, ente	er "0")		
	7	Employee relations – including recruiting, personnel development, internal training 2		subordinate supervis		 none, ente	er "0")		
	8	Managing or supervising people or projects 2							
	9	Production, operations, maintenance (e.g., chip production, operating lab equipment)	B31	. Thinking about your pr week of October 1, plea with that job's					
	10	Professional services (e.g., health care, counseling, financial services, legal services)		Mark (X) one answer for		n. Somewhat	Very		
	11	Sales, purchasing, marketing, customer service, public relations1		Satisfied	Satisfied		Dissatisfied		
		Quality or productivity management1 2	1	Salary1	2 🔲	3 🗌	4 🗌		
		Teaching1 2	2	Benefits	2	3 🔲	4		
	14	Other – Specify 1 2	3	Job security1 □	2	3 🗌	4		
			4	Job location1 □	2	3	4		
B28.		which <u>two</u> activities in question B27 did you rk the <u>most</u> hours during a typical week on	5	Opportunities for advancement1	2	3	4 🔲		
		s job?	6	Intellectual challenge1	2	3 🔲	4 🗆		
		er number of appropriate activity from question 7 above.	7	Level of responsibility1	2	3 🗌	4 🔲		
	1 .	Activity most hours	8	Degree of independence1	2	3 🔲	4		
	2	Activity <u>second most</u> hours (Enter "0" if no second most)	9	Contribution to society	2 🔲	3 🗌	4		

B32.	How would you rate your overall satisfaction with your principal job held during the week of October 1?	B36. Thinking back now to 2002, was any of your work during 2002 supported by contracts or grants from the U.S. government?
	Mark (X) one answer.	₀ ☐ ← Mark (X) this box if you did not work in 2002 and then go to page 12,
	1 ☐ Very satisfied	question C1
	2 Somewhat satisfied	FEDERAL EMPLOYEES: Please answer "No."
	₃ ☐ Somewhat dissatisfied	Mark (X) one answer.
	₄ ☐ Very dissatisfied	_ ` `
		1 ☐ Yes 2 ☐ No 3 ☐ Don't know Go to question B38
B33.	Before deductions, what was your <u>basic annual</u> <u>salary</u> on this job as of the week of October 1, 2003?	B37. (If Yes) Which Federal agencies or departments were supporting your work?
	Do not include bonuses, overtime or additional	Mark (X) all that apply.
	compensation for summertime teaching or research.	₁ ☐ Agriculture Department (USDA)
	If you are not salaried, please estimate your earned	2 ☐ Defense Department (DOD)
	income, excluding business expenses.	□ Department of Education (including NCES, OERI, FIPSE, FIRST)
	\$	₄ ☐ Energy Department (DOE)
	ANNUAL SALARY OR EARNED INCOME	5 ☐ Environmental Protection Agency (EPA)
		 7 National Aeronautics and Space Administration (NASA)
		8 National Institutes of Health (NIH)
B34.	During a typical week on this job, how many	9 National Science Foundation (NSF)
	hours did you usually work?	10 ☐ Transportation Department (DOT)
		11 ☐ Other – Specify ⊋
	NUMBER OF HOURS PER WEEK	
		DON'T KNOW SOURCE AGENCY
		B38. <u>Counting all jobs held</u> in 2002, what was your total earned income for 2002, <u>before</u> deductions?
B35.	Upon how many weeks was your salary based?	Include all wages, salaries, bonuses, overtime,
	Include paid vacation and sick leave.	commissions, consulting fees, net income from businesses, summertime teaching or research, or other work associated with scholarships.
	NUMBER OF WEEKS PER YEAR	\$, .00 TOTAL 2002 EARNED INCOME

	Part C - Other Work-Related Experiences	C4. During the past year, did you attend any professional society or association meetings or professional conferences?
C1.	Since October 1998, how many Number	Include regional, national, or international meetings. 1 Yes
	1 Papers have you (co)authored for presentation at regional, national or international conferences? (Do not count presentations of the same work more than once)	2 □ No C5. To how many regional, national or international
	2 Articles, (co)authored by you, have been accepted for publication in a refereed professional journal?	professional societies or associations do you currently belong? NUMBER
	3 Books or monographs, (co)authored by you, have been published or accepted for publication?	(If none, enter "0")
		C6. During the past year, did you take any work-related training, such as workshops or seminars?
C2.	Since October 1998, have you been named as an inventor on any application for a U.S. patent?	Do <u>not</u> include professional meetings unless you attended a special training session conducted at the meeting/conference.
	-1 ☐ Yes 2 ☐ No → Go to question C4	Do <u>not</u> include college coursework for which you were enrolled as a student. 1 ☐ Yes 2 ☐ No → Go to page 13, question C10
C3.	(If Yes) Since October 1998 Number	C7. (If Yes) During the past year, in which of the following areas did you receive training?
	How many applications for U.S. patents have named you as an inventor?	Mark (X) Yes or No for each item. Yes No
	2 How many U.S. patents have been	1 Management or supervisor training1 2
	granted to you as an inventor? (If none, enter "0")	2 Training in your occupational field1 □ 2 □ 3 General professional training (e.g.,
	3 How many of the patents recorded as granted (in category 2 above) have resulted in commercialized	3 General professional training (e.g., public speaking, business writing, word processing, spreadsheet use, etc.)
	products or processes or have been licensed?(If none, enter "0")	4 Other work-related training – Specify. _ℤ 1 □ 2 □

C8.		r which of the follow ining during the pas		ons did y	ou take	Part D - Demographic Information
	Ма	ork (X) Yes or No for e	ach item	Ye	s No	
	1	To facilitate a chang occupational field		\downarrow	2 🗆	D1. On October 1, 2003, were you Mark (X) one answer.
	2	To gain further skills in your occupational For licensure or cert	field	1		1 ☐ Married
	4	To increase opportu promotion, advance salary	nities for ment, or h	higher _		Living in a marriage-like relationship Widowed Go to page 14,
	5	To learn skills or known for a recently acquire			2	5 Divorced question D4
	6	Required or expecte	d by emp	oloyer1	2	6 □ Never Married □
	7	Other – Specify ₽		1	2	
C9.	qu	nat was your most in estion C8 for taking ter number of approp	training	?		D2. (If Married or Living in a marriage-like relationship) During the week of October 1, was your spouse or partner working for pay or profit at a full-time
	C8	above.				or part-time job?
	МО	ST IMPORTANT REAS	SON	_		r 1 ☐ Yes, full-time
						Yes, part-time
C10		nen thinking about a ch of the following f			nt is	₃ □ No → Go to page 14, question D4
	Ма	ork (X) one answer fo	r each itei	m.		
		Very Important		Somewhat Unimportant	á. au	
1		ry 1 🗍	2 📗	3 □	4 🗆	D3. (If Yes) Did your spouse's or partner's duties on this job require the technical expertise of a bachelor's degree or higher in
2		efits 1 🗌	2	3	4	
3		security1	2 🗌	3 🗌	4 🗆	Mark (X) Yes or No for each item. Yes No
4		location1	2	3 🗌	4	\downarrow \downarrow
5	adva	ortunities for ancement 1	2	3 🔲	4 🔲	1 Engineering, computer science, math, or the natural sciences
6		lectual lenge 1 🏻	2	3	4	2 The social sciences 1 □ 2 □ 3 Some other field (e.g., health,
7	Leve		2 🗆	3	4	business, or education) - Specify 1 2
8	inde	ree of pendence 1 🏻	2 🗆	3 🗆	4 🔲	
9		tribution to ety1	2 🗌	3 🗌	4	

D4.		October 1, 2003, did you hing with you as part of you		<u>hildren</u>	D7.	On October 1, 2003, were you living in the United States, Puerto Rico, or other U.S. territories, or were you living in another country?
		nly count children who lived w percent of the time.	rith you at I	least		□ United States, Puerto Rico,
	- 1 🗀	Yes				or other U.S. territories -> Go to question D9
	2	No → Go to question D6				-2 ☐ Another country
D5.		Yes) How many of these cluster as part of your family we		ing with		
	If r	no children in a category, ente			D8.	In the next five years, how likely is it that you will return to the United States to live or work?
				umber of Children		Mark (X) one answer.
	1	Under age 2				
	2	Ageu 2-5				1 ☐ Very likely
	3	Aged 6-11				2 ☐ Somewhat likely
						₃ Not very likely
	4	Aged 12-18				₄ ☐ Not likely at all
	5	Aged 19 or older				₅ □ Don't know
D6.		nat is the highest level of ed your parents or guardians		ompleted	D9.	On October 1, 2003, were you a
	Ma	ark (X) one for each parent or	guardian.			U.S. citizen 2 ☐ Non-U.S. citizen → Go to page 15, question D11
			a. Mother or female guardian	b. Father or male guardian		quodion 2 1 1
	1	Less than high school completed	1 🗆	1 🗆	↓ D10	. (If U.S. citizen) Were you a U.S. citizen
	2	High school diploma or equivalent	2 🔲	2		Mark (X) one answer.
	3	Some college, vocational, or trade school (including 2-year degrees)		3 🔲		Born in the United States, Puerto Rico, or other U.S. territories Go to page 16,
		Bachelor's degree (e.g., BS BA, AB)		4		2 ☐ Born abroad of American parent(s) — question D18
	5	Master's degree (e.g., MS, MA, MBA)	5	5 🗌		₃ ☐ By naturalization → Go to page 15, question D14
		Professional degree (e.g., JD, LLB, MD, DDS, etc.)	6	6		,
	7	Doctorate (e.g., PhD, DSc, EdD, etc.)	7 🗆	7 🗍		
	8	Not applicable		8 🗌		
		, ,	· · · · · · · · · · · · · · · · · · ·	_		

D11.	(If Non-U.S. citizen) Were you a non-U.S. citizen	D15. What kind of visa did you hold when you first came to the United States for six months or longer?
	With a Permanent U.S. Resident Visa (Green Card)	Mark (X) one answer.
	Year	□ Permanent U.S. Resident Visa (Green Card)
	OBTAINED IN → question D13	² ☐ Temporary U.S. Resident Visa for temporary work (e.g., H-1B, L-1A, L-1B, etc.)
	-₂☐ With a Temporary	₃ ☐ Temporary U.S. Resident Visa for study or training (e.g., F-1, J-1, H-3, etc.)
	U.S. Resident Visa	⁴ ☐ Temporary U.S. Resident Visa as the dependent of another person (e.g., F-2, H-4, J-2, K-2, L-2, etc.)
		5 ☐ Other Temporary U.S. Resident Visa – Specify visa type ⊋
▼ D12.	(If a Temporary U.S. Resident Visa Holder) On October 1, 2003, did you hold a visa	
	issued	D16. Which factors were important in your decision
	Mark (X) one answer.	to first come to the United States for six months or longer?
	For temporary work (e.g., H-1B, L-1A, L-1B, etc.)	Mark (X) Yes or No for each item. Yes No
	² ☐ For study or training (e.g., F-1, J-1, H-3, etc.)	↓ ↓ ↓
	To you as the dependent of another person (e.g., F-2, H-4, J-2, K-2, L-2, etc.)	1 Family-related reasons 1 2 2 2 2
	For any other reason – Specify visa type $\overline{\mathcal{L}}$	2 Educational opportunities in the United States 1 2
		3 Job or economic opportunities 1 2
		4 Scientific or professional infrastructure in my field
		5 Other – Specify. _Z 1 2 2
D13.	(If Non-U.S. citizen) Of which country are you a citizen?	
		D47 Which two feetons in according D46 were the
	COUNTRY	D17. Which <u>two</u> factors in question D16 were the <u>most</u> important reasons in your decision to come to the United States?
		Enter number of appropriate reason from question D16 above.
D14.	In what year did you first come to the United States for six months or longer?	1 Most important reason
		2 Second most important reason
	YEAR	(Enter "0" if no second reason)

D18. Are you a citizen of more than one country?	D21. Are you Hispanic or Latino?
1 ☐ Yes 2 ☐ No	1 ☐ Yes 2 ☐ No → Go to question D23
	D22. (If Yes) Which of the following best describes your Hispanic origin or descent?
D19. In what U.S. state, U.S. territory, or foreign	Mark (X) one answer.
country were you born?	₂ ☐ Puerto Rican
	₃ ☐ Cuban
STATE/TERRITORY	$_4\square$ Other Hispanic – Specify $_{\overline{\mathcal{U}}}$
FOREIGN COUNTRY	
	D23. What is your racial background? Mark (X) one or more. □ American Indian or Alaska Native - Specify tribal affiliation(s) □
D20. Are you	Native Hawaiian or other Pacific Islander 2 □ Native Hawaiian or other Pacific Islander
₁ ☐ Male	₃ ☐ Asian
₂□ Female	₄ ☐ Black or African-American
	₅ White
	D24. What is your birthdate? Month Day Year 19

question D28. D27. What is the earliest age at which you <u>first</u> began experiencing <u>any</u> difficulties in <u>any</u> of these areas? AGE OR □ ← SINCE BIRTH			t several que t physical ab		re design	ed to h	elp us	better	undei	stand	the ca	areer	paths o	f ind	lividua	als with	
1 SEEING words or letters in ordinary newsprint (with glasses/contact lenses if you usually wear them)	D25.	Wł	nat is the USI	UAL degr	ree of diff	iculty y	ou hav	e with									
2 HEARING what is normally said in conversation with another person (with hearing aid, if you usually wear one)			SEEING wor	ds or lette	rs in ordin	ary new				\bigvee	Sligl	ht ,	Moderate —	S	evere		
3 WALKING without human or mechanical assistance or using stairs		2	HEARING w	hat is norr	nally said i	in conve	ersation	with							_		
or using stairs		3	•	`		•	•		e)	ı	2	J	3 🔲	4	. 🗀	5 🗔	
Such as a bag of groceries		1	or using stair	's							2]	3 🗌	4		5	
D27. What is the earliest age at which you <u>first</u> began experiencing <u>any</u> difficulties in <u>any</u> of these areas? AGE OR ○ SINCE BIRTH D28. In case we need to clarify some of the information you have provided, please list a phone number (and an e-mail address if applicable) where you can be reached. Daytime Phone Number Area Code Number Evening Phone Number Area Code Number E-mail Address	D 00		such as a ba	g of groce	eries				······································			-				_	
D28. In case we need to clarify some of the information you have provided, please list a phone number (and an e-mail address if applicable) where you can be reached. Daytime Phone Number Evening Phone Number Cell Phone Number E-mail Address ② D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street	D26.	0 L			t if you ar	iswere	d "Non	e" to <u>a</u>	II the	activit	<u>iies</u> in	quest	ion D2	5, an	d go t	0	
Daytime Phone Number Evening Phone Number Cell Phone Number E-mail Address Daytime er interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street	D27.	Wł	nat is the ear	liest age	at which	you <u>fir</u>	<u>st</u> bega	n expe	erienc	ing <u>an</u>	<u>y</u> diffi	cultie	s in <u>an</u> y	<u>/</u> of t	hese	areas?	
an e-mail address if applicable) where you can be reached. Daytime Phone Number Evening Phone Number Cell Phone Number E-mail Address © D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street		AG	SE	OR ₀□	← SINO	CE BIR	TH										
Evening Phone Number Area Code Number Cell Phone Number E-mail Address © D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street	D28.										ided, _ا	pleas	e list a _l	phor	ne nun	nber (an	ıd
Cell Phone Number E-mail Address © D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street		Da	ytime Phone	Number	Area Code	-	Numbe	er									
E-mail Address © D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street		Ev	ening Phone	Number	Area Code		Numbe	er									
D29. Since we are interested in how education and employment change over time, we may be recontacting you in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name Number and Street Number and Street		Се	ll Phone Num	ber	Area Code	-	Numbe	er	_								
in 2005. To help us contact you, please provide the name and contact information for two people who are likely to know where you can be reached. As with all the information provided in this questionnaire, complete confidentiality will be provided. These people will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name First Name MI Last Name Number and Street Number and Street		E-r	mail Address				@)									
will only be contacted if we have trouble contacting you in 2005. First Name MI Last Name First Name MI Last Name Number and Street Number and Street	D29.	in 2	2005. To hel	p us con	tact you,	please	provid										
Number and Street Number and Street											nfident	tiality	will be p	rovic	ded. T	hese pe	ople
		Fire	st Name	MI	Last Nam	e			First N	lame		MI	Last N	lame			
City/Town State ZIP Code City/Town State ZIP Code		Nu	mber and Street						Numb	er and S	Street						
		City	y/Town		State	ZIP Co	ode		City/T	own			Si	tate	ZIP Co	ode	
Country (if outside of U.S.) Country (if outside of U.S.)		Со	untry (if outside o	of U.S.)					Count	ry (if ou	tside of l	J.S.)					
			-								-			-			
Area Code Number Area Code Number D30. PLEASE TURN TO THE BACK COVER FOR THE LAST QUESTION (D31).	D30				HE BA	ר רר)VED I	EOP 1						1)			

601

FIELD OF STUDY

If you cannot find the code that <u>best</u> describes your field of study, use the "OTHER" code under the most appropriate broad category. If none of the codes fit your field of study, use Code 995.

Agriculture Busines	s and Production
Agricultural economics	(Also see 655 and 923)

602 OTHER agricultural business and production

Agricultural Sciences

605 Animal sciences

606 Food sciences and technology (Also see 638)

607 Plant sciences (Also see 633)

608 OTHER agricultural sciences

610 **Architecture/Environmental Design** (For architectural engineering, see 723)

Biological/Life Sciences

631 Biochemistry and biophysics

632 Biology, general

633 Botany (Also see 607)

634 Cell and molecular biology

635 Ecology

636 Genetics, animal and plant

637 Microbiological sciences and immunology

638 Nutritional sciences (Also see 606)

639 Pharmacology, human and animal (Also see 788)

640 Physiology and pathology, human and animal

641 Zoology, general

642 OTHER biological sciences

Business Management/Administrative Services

651 Accounting

652 Actuarial science

653 Business administration and management

654 Business, general

655 Business and managerial economics (Also see 601 and 923)

656 Business marketing/marketing management

657 Financial management

658 Marketing research

843 Operations research

659 OTHER business management/administrative services

Communications

661 Communications, general

662 Journalism

663 OTHER communications

Computer and Information Sciences

671 Computer and information sciences, general

672 Computer programming

673 Computer science (Also see 727)

674 Computer systems analysis

675 Data processing

676 Information services and systems

677 OTHER computer and information sciences

Conservation and Natural Resources

680 Environmental science or studies

681 Forestry sciences

682 OTHER natural resources and conservation

690 Criminal Justice/Protective Services

(Also see 922)

Education

701 Education administration

702 Computer teacher education

703 Counselor education and guidance

704 Educational psychology

705 Elementary teacher education

706 Mathematics teacher education

707 Physical education and coaching

708 Pre-school/kindergarten/early childhood teacher education

709 Science teacher education

710 Secondary teacher education

711 Special education

712 Social science teacher education

713 OTHER education

Engineering

721 Aerospace, aeronautical and astronautical engineering

722 Agricultural engineering

723 Architectural engineering

724 Bioengineering and biomedical engineering

725 Chemical engineering

726 Civil engineering

727 Computer and systems engineering

728 Electrical, electronics and communications engineering

729 Engineering sciences, mechanics and physics

730 Environmental engineering

731 Engineering, general

732 Geophysical and geological engineering

733 Industrial and manufacturing engineering (Also see 752)

734 Materials engineering, including ceramics and textiles

735 Mechanical engineering

736 Metallurgical engineering

737 Mining and minerals engineering

738 Naval architecture and marine engineering

739 Nuclear engineering

740 Petroleum engineering

741 OTHER engineering

Engineering-Related Technologies

751 Electrical and electronics technologies

752 Industrial production technologies

753 Mechanical engineering-related technologies

754 OTHER engineering-related technologies

FIELD OF STUDY (Continued)

Languages, Linguistics, Literature/Letters

- 760 English language, literature and letters
- 771 Linguistics
- 772 OTHER foreign languages and literature

Health and Related Sciences

- 781 Audiology and speech pathology
- 782 Health services administration
- 783 Health/medical assistants
- 784 Health/medical technologies
- 785 Medical preparatory programs (e.g., pre-dentistry, premedical, pre-veterinary)
- 786 Medicine (e.g., dentistry, optometry, osteopathic, podiatry, veterinary)
- 787 Nursing (4 years or longer program)
- 788 Pharmacy (Also see 639)
- 789 Physical therapy and other rehabilitation/therapeutic services
- 790 Public health (including environmental health and epidemiology)
- 791 OTHER health/medical sciences
- 800 Home Economics
- 810 Law/Prelaw/Legal Studies
- 820 Liberal Arts/General Studies
- 830 Library Science

Mathematics and Statistics

- 841 Applied mathematics (Also see 843 and 652)
- 842 Mathematics, general
- 843 Operations research
- 844 Statistics
- 845 OTHER mathematics
- 850 Parks, Recreation, Leisure, and Fitness Studies

Philosophy, Religion, and Theology

- 861 Philosophy of science
- 862 OTHER philosophy, religion, theology

Physical Sciences

- 871 Astronomy and astrophysics
- 872 Atmospheric sciences and meteorology
- 631 Biochemistry and biophysics
- 873 Chemistry, except biochemistry
- 874 Earth sciences
- 875 Geology
- 876 Geological sciences, other
- 877 Oceanography
- 878 Physics
- 879 OTHER physical sciences

Psychology

- 891 Clinical
- 892 Counseling
- 704 Educational
- 893 Experimental
- 894 General
- 895 Industrial/Organizational
- 896 Social
- 897 OTHER psychology

Public Affairs

- 901 Public administration
- 902 Public policy studies
- 903 OTHER public affairs
- 910 Social Work

Social Sciences and History

- 921 Anthropology and archaeology
- 922 Criminology (Also see 690)
- 923 Economics (Also see 601 and 655)
- 924 Geography
- 925 History of science
- 926 History, other
- 927 International relations
- 928 Political science and government
- 929 Sociology
- 620 Area and ethnic studies
- 910 Social work
- 930 OTHER social sciences

Visual and Performing Arts

- 941 Dramatic arts
- 942 Fine arts, all fields
- 943 Music, all fields
- 944 OTHER visual and performing arts

995 OTHER FIELDS (Not Listed)

087 Computer engineers - hardware

088 Computer engineers - software

090 Environmental engineers091 Industrial engineers

089 Electrical and electronics engineers

JOB CATEGORY

If you cannot find the code that <u>best</u> describes your job, use the "OTHER" code under the most appropriate broad category. If none of the codes fit your job, use Code 500.

010	Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers	092	Engineers (Continued) (Also see 100-104) Marine engineers and naval architects
	Biological/Life Scientists	093	Materials and metallurgical engineers
021	Agricultural and food scientists	094	Mechanical engineers
022	Biochemists and biophysicists	095	Mining and geological engineers
023	Biological scientists (e.g., botanists, ecologists,	096	Nuclear engineers
0_0	zoologists)	097	Petroleum engineers
024	Forestry and conservation scientists	098	Sales engineers
025	Medical scientists (excluding practitioners)	099	OTHER engineers
026	Technologists and technicians in the biological/life sciences		Engineering Technologists, Technicians, and Surveyors
027	OTHER biological and life scientists	100	Electrical, electronic, industrial, and mechanical technicians
	Clerical/Administrative Support Occupations	101	Drafting occupations, including computer drafting
031	Accounting clerks and bookkeepers	102	Surveying and mapping technicians
032	Secretaries, receptionists, typists	103	OTHER engineering technologists and technicians
033	OTHER administrative (e.g., record clerks, telephone	104	Surveyors, cartographers, photogrammetrists
	operators)		
040	Clergy and Other Religious Workers	110	Farmers, Foresters and Fishermen
0.10	Clorgy and Caron Ronglode Horicold		Health Occupations
	Computer Occupations (Also see 173)	111	Diagnosing/treating practitioners (e.g., dentists,
***	Computer engineers (See 087, 088 under Engineers)		optometrists, physicians, psychiatrists, podiatrists,
051	Computer and information scientists, research		surgeons, veterinarians)
052	Computer programmers (business, scientific, process control)	112	physician assistants
053	Computer support specialists	236	Psychologists, including clinical (Also see 070)
054	Computer system analysts	113	Health technologists and technicians (e.g., dental
055	Database administrators		hygienists, health record technologist/technicians, licensed practical nurses, medical or laboratory
056	Network and computer systems administrators		technicians, radiological technicians)
057	Network systems and data communications analysts	114	- '
058	OTHER computer and information science occupations	120	Lawyers, Judges
***	Consultants (Select the code that comes closest to your usual area of consulting)	130	Librarians, Archivists, Curators
070	Counselors (Educational, vocational, mental health,	***	Managers/Supervisors, First Line (Select the code that comes closest to the field you manage)
	and substance abuse) (Also see 236) Engineers and Architects		Managers, Top-Level Executives, Administrators (People who manage other managers)
081	Architects	141	Top-level managers, executives, administrators (e.g.,
***	Engineers (Also see 100-104)		CEO/COO/CFO, president, district manager, general
082	Aeronautical, aerospace, and astronautical engineers		manager, legislator, chancellor, provost)
083	Agricultural engineers		Managers, Other (Also see 151-153)
084	Bioengineers and biomedical engineers	142	Computer and information systems managers
085	Chemical engineers	143	Engineering managers
086	Civil, including architectural and sanitary engineers	144	Medical and health services managers
	z, zidanig araintaatararana barintary originadia		

145 Natural sciences managers

147 OTHER mid-level managers

146 Education administrators (e.g., registrar, dean, principal)

JOB CATEGORY (Continued)

Management-Related Occupations 240 Social Workers (Also see 141-147) 151 Accountants, auditors, and other financial specialists **Teachers and Professors** 152 Personnel, training, and labor relations specialists Precollegiate Teachers 153 OTHER management related occupations 251 Pre-Kindergarten and kindergarten 252 Elementary **Mathematical Scientists** 253 Secondary - computer, math, or sciences 171 Actuaries 254 Secondary - social sciences 172 Mathematicians 255 Secondary - other subjects 173 Operations research analysts, including modeling 256 Special education - primary and secondary 174 Statisticians 257 OTHER precollegiate area 175 Technologists/technicians in the mathematical sciences 176 OTHER mathematical scientists Postsecondary Professors 271 Agriculture **Physical Scientists** 272 Art, Drama, and Music 191 Astronomers **Biological Sciences** 192 Atmospheric and space scientists 274 Business, Commerce and Marketing 193 Chemists, except biochemists 275 Chemistry 194 Geologists, including earth scientists Computer Science 195 Oceanographers Earth, Environmental, and Marine Sciences 196 Physicists 278 **Economics** 197 Technologists and technicians in the physical sciences 279 Education 198 OTHER physical scientists 280 Engineering 281 English Research Associates/Assistants (Select the code 282 Foreign Languages that comes closest to your field) 283 History Sales and Marketing Occupations 286 Mathematics and Statistics 200 Insurance, securities, real estate, and business services Health and Related Sciences 287 Sales occupations - commodities except retail (e.g., 288 Physical Education industrial machinery/equipment/supplies, medical and 289 Physics dental equipment/supplies) 290 Political Science 202 Sales occupations – retail (e.g., furnishings, clothing, 291 Psychology motor vehicles, cosmetics) 293 Sociology 203 OTHER marketing and sales occupations 297 OTHER Natural Sciences Service Occupations, Except Health 298 OTHER Social Sciences (Also see 111-114) OTHER Postsecondary fields 299 221 Food preparation and services (e.g., cooks, waitresses, OTHER teachers and instructors (e.g., private tutors, bartenders) dance or flying instructors, martial arts instructors) 222 Protective services (e.g., fire fighters, police, guards, wardens, park rangers) Other Professions 223 OTHER service occupations, except health (e.g., 401 Construction and extraction occupations probation officers, human services workers) 402 Installation, maintenance, and repair occupations **Social Scientists** Precision/production occupations (e.g., metal workers, woodworkers, butchers, bakers, assemblers, printing 231 Anthropologists occupations, tailors, shoemakers, photographic 232 Economists process) 233 Historians Transportation and material moving occupations 235 Political scientists 236 Psychologists, including clinical (Also see 070) 500 OTHER OCCUPATIONS (Not Listed)

237 Sociologists

238 OTHER social scientists

,	ou like to comp					
Mark (X) one	answer.					
☐ A questic	onnaire sent in th	ne mail				
☐ A question	onnaire that you	can fill out on th	e World Wide	Web		
☐ A telepho	one interview					
☐ No prefe	rence					
THANK	YOU FOR C	OMPLETII	NG THE C	UESTIO	NNAIRE.	
Please ret	urn the comple	eted form in t	he envelope	provided.		
If you canr	not find the en	velope and w	ant another	, call 1-888-	-633-8329.	
Our mailin	g address is:					
2003 Natio	nal Survey of	Recent Colle	ge Graduate	s		
Mathemati	ca Policy Res	earch, Inc.				
	mbia Gateway MD 21046	Drive				
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