

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
All degree levels and fields <sup>b</sup>	84,000	7,000	24,000	20,000	21,000	79,000	13,000
Male	63,000	6,000	17,000	12,000	15,000	58,000	10,000
Female	56,000	5,000	16,000	16,000	13,000	53,000	9,000
S&E fields	73,000	5,000	19,000	16,000	16,000	68,000	9,000
Male	57,000	4,000	13,000	11,000	11,000	52,000	7,000
Female	46,000	4,000	13,000	12,000	11,000	41,000	7,000
Sciences	69,000	5,000	17,000	16,000	14,000	64,000	9,000
Male	49,000	4,000	10,000	11,000	9,000	44,000	6,000
Female	45,000	4,000	13,000	12,000	11,000	41,000	7,000
Biological/agricultural/environmental life sciences	31,000	1,000	8,000	5,000	7,000	28,000	4,000
Male	22,000	1,000	5,000	3,000	4,000	22,000	3,000
Female	20,000	1,000	6,000	5,000	5,000	19,000	2,000
Agricultural/food sciences	13,000	1,000	3,000	1,000	2,000	13,000	2,000
Male	10,000	S	2,000	1,000	2,000	10,000	1,000
Female	8,000	S	2,000	1,000	1,000	8,000	1,000
Biological sciences	28,000	1,000	8,000	5,000	7,000	25,000	3,000
Male	20,000	1,000	5,000	3,000	4,000	18,000	2,000
Female	18,000	1,000	6,000	5,000	5,000	17,000	2,000
Environmental life sciences	10,000	1,000	2,000	1,000	1,000	9,000	1,000
Male	8,000	500	1,000	1,000	1,000	8,000	1,000
Female	6,000	1,000	2,000	500	500	5,000	1,000
Computer/mathematical sciences	26,000	3,000	9,000	7,000	5,000	24,000	3,000
Male	19,000	2,000	6,000	5,000	4,000	19,000	3,000
Female	19,000	2,000	7,000	5,000	3,000	16,000	1,000
Computer/information sciences	19,000	3,000	8,000	6,000	5,000	16,000	3,000
Male	15,000	2,000	5,000	4,000	4,000	14,000	3,000
Female	13,000	2,000	6,000	4,000	3,000	10,000	1,000
Mathematical sciences	19,000	500	5,000	4,000	2,000	18,000	2,000
Male	14,000	S	3,000	3,000	2,000	14,000	2,000
Female	13,000	S	4,000	3,000	1,000	12,000	1,000
Physical/related sciences	18,000	1,000	6,000	3,000	3,000	16,000	4,000
Male	16,000	1,000	4,000	2,000	2,000	14,000	1,000
Female	11,000	1,000	4,000	2,000	2,000	9,000	4,000
Chemistry, except biochemistry	14,000	1,000	5,000	2,000	2,000	12,000	3,000
Male	11,000	*	3,000	1,000	2,000	10,000	1,000
Female	8,000	1,000	3,000	2,000	1,000	7,000	3,000
Earth/atmospheric/ocean sciences	10,000	*	1,000	1,000	1,000	10,000	500
Male	9,000	*	1,000	500	1,000	9,000	500
Female	4,000	S	1,000	S	1,000	4,000	*
Physics/astronomy	7,000	1,000	2,000	1,000	1,000	6,000	500
Male	6,000	S	2,000	1,000	1,000	6,000	500
Female	4,000	*	2,000	500	500	3,000	*
Other physical sciences	6,000	S	1,000	2,000	1,000	5,000	S
Male	4,000	S	500	1,000	*	4,000	S
Female	4,000	S	1,000	1,000	1,000	3,000	S
Social/related sciences	56,000	4,000	10,000	14,000	11,000	54,000	6,000
Male	35,000	3,000	7,000	8,000	6,000	35,000	4,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Female	40,000	3,000	8,000	10,000	9,000	37,000	5,000
Economics	21,000	S	7,000	3,000	4,000	20,000	2,000
Male	20,000	S	5,000	3,000	3,000	19,000	2,000
Female	11,000	S	5,000	2,000	2,000	9,000	1,000
Political/related sciences	27,000	2,000	5,000	6,000	5,000	24,000	3,000
Male	21,000	1,000	3,000	4,000	3,000	20,000	3,000
Female	16,000	1,000	4,000	4,000	3,000	14,000	2,000
Psychology	34,000	2,000	6,000	8,000	6,000	33,000	4,000
Male	18,000	2,000	3,000	4,000	3,000	17,000	2,000
Female	28,000	1,000	5,000	7,000	5,000	27,000	3,000
Sociology/anthropology	24,000	2,000	4,000	7,000	4,000	23,000	3,000
Male	14,000	1,000	2,000	4,000	2,000	13,000	2,000
Female	21,000	2,000	3,000	6,000	3,000	19,000	2,000
Other social sciences	19,000	2,000	3,000	5,000	5,000	16,000	2,000
Male	13,000	1,000	1,000	3,000	3,000	12,000	1,000
Female	14,000	2,000	3,000	4,000	5,000	12,000	2,000
Engineering	33,000	1,000	10,000	5,000	7,000	30,000	5,000
Male	32,000	1,000	9,000	4,000	6,000	29,000	4,000
Female	10,000	500	5,000	2,000	3,000	9,000	1,000
Aerospace/related engineering	8,000	500	1,000	1,000	1,000	7,000	1,000
Male	7,000	S	1,000	1,000	1,000	7,000	1,000
Female	2,000	S	1,000	*	*	2,000	S
Chemical engineering	9,000	1,000	3,000	1,000	2,000	8,000	1,000
Male	8,000	1,000	3,000	1,000	1,000	7,000	500
Female	3,000	S	1,000	1,000	1,000	3,000	1,000
Civil/architectural engineering	13,000	500	4,000	2,000	4,000	11,000	3,000
Male	13,000	500	3,000	2,000	4,000	11,000	3,000
Female	4,000	S	1,000	1,000	1,000	3,000	500
Electrical/computer engineering	16,000	500	6,000	3,000	3,000	14,000	3,000
Male	15,000	500	6,000	3,000	3,000	13,000	3,000
Female	6,000	S	3,000	2,000	1,000	4,000	1,000
Industrial engineering	10,000	S	2,000	2,000	3,000	10,000	500
Male	10,000	S	2,000	1,000	3,000	9,000	500
Female	4,000	S	2,000	1,000	1,000	3,000	S
Mechanical engineering	16,000	1,000	4,000	2,000	2,000	16,000	1,000
Male	16,000	1,000	4,000	2,000	2,000	15,000	1,000
Female	4,000	S	1,000	500	1,000	4,000	500
Other engineering	13,000	500	3,000	1,000	3,000	12,000	1,000
Male	12,000	S	3,000	1,000	2,000	11,000	1,000
Female	4,000	S	2,000	1,000	1,000	3,000	500
S&E-related fields	42,000	3,000	13,000	10,000	11,000	41,000	7,000
Male	28,000	2,000	8,000	6,000	6,000	25,000	4,000
Female	33,000	3,000	11,000	9,000	8,000	33,000	6,000
Health	36,000	3,000	11,000	9,000	9,000	34,000	6,000
Male	20,000	1,000	6,000	4,000	5,000	18,000	3,000
Female	31,000	3,000	10,000	8,000	7,000	29,000	6,000
Science/mathematics teacher education	17,000	1,000	3,000	3,000	3,000	16,000	1,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Male	10,000	S	1,000	2,000	1,000	10,000	1,000
Female	13,000	1,000	3,000	3,000	2,000	12,000	1,000
Technology/technical fields	15,000	1,000	5,000	3,000	3,000	13,000	2,000
Male	14,000	S	4,000	3,000	3,000	13,000	1,000
Female	5,000	S	3,000	1,000	1,000	4,000	S
Other S&E-related fields	15,000	S	3,000	3,000	3,000	14,000	1,000
Male	12,000	S	3,000	3,000	3,000	12,000	1,000
Female	8,000	S	2,000	1,000	2,000	8,000	S
Non-S&E fields	52,000	4,000	11,000	12,000	8,000	47,000	6,000
Male	35,000	3,000	8,000	7,000	6,000	33,000	6,000
Female	35,000	3,000	7,000	9,000	6,000	32,000	4,000
Arts/humanities	16,000	S	3,000	2,000	2,000	16,000	1,000
Male	12,000	S	2,000	1,000	2,000	12,000	500
Female	12,000	S	3,000	1,000	1,000	12,000	1,000
Education, except science/mathematics teacher education	28,000	2,000	3,000	7,000	4,000	27,000	2,000
Male	17,000	1,000	2,000	3,000	2,000	17,000	2,000
Female	22,000	2,000	2,000	6,000	4,000	21,000	1,000
Management/administration	30,000	3,000	8,000	7,000	5,000	28,000	5,000
Male	22,000	2,000	6,000	5,000	4,000	22,000	5,000
Female	16,000	1,000	6,000	5,000	3,000	14,000	2,000
Sales/marketing	10,000	S	2,000	2,000	2,000	10,000	1,000
Male	8,000	S	1,000	1,000	1,000	8,000	S
Female	6,000	S	1,000	1,000	1,000	6,000	S
Social services/related	13,000	S	2,000	4,000	2,000	13,000	2,000
Male	9,000	S	1,000	2,000	1,000	9,000	1,000
Female	10,000	S	1,000	3,000	1,000	9,000	1,000
Other non-S&E fields	24,000	2,000	4,000	5,000	4,000	23,000	3,000
Male	18,000	1,000	3,000	3,000	3,000	17,000	2,000
Female	17,000	1,000	3,000	5,000	4,000	16,000	2,000
Bachelor's degrees	73,000	6,000	20,000	17,000	17,000	68,000	11,000
Male	55,000	5,000	13,000	11,000	11,000	51,000	8,000
Female	50,000	5,000	15,000	13,000	11,000	46,000	9,000
S&E fields	66,000	5,000	16,000	15,000	15,000	63,000	9,000
Male	53,000	4,000	11,000	10,000	10,000	48,000	6,000
Female	41,000	4,000	11,000	11,000	10,000	38,000	7,000
Sciences	64,000	5,000	14,000	15,000	13,000	60,000	8,000
Male	48,000	4,000	9,000	10,000	8,000	43,000	6,000
Female	41,000	4,000	11,000	11,000	10,000	38,000	7,000
Biological/agricultural/environmental life sciences	29,000	1,000	7,000	5,000	7,000	27,000	4,000
Male	21,000	1,000	5,000	3,000	4,000	21,000	3,000
Female	20,000	1,000	6,000	4,000	5,000	19,000	2,000
Agricultural/food sciences	13,000	S	3,000	1,000	2,000	12,000	2,000
Male	10,000	S	2,000	1,000	2,000	10,000	1,000
Female	8,000	S	2,000	1,000	1,000	8,000	S
Biological sciences	27,000	1,000	7,000	5,000	7,000	25,000	3,000
Male	19,000	1,000	4,000	3,000	4,000	18,000	2,000
Female	18,000	500	5,000	4,000	5,000	17,000	2,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Environmental life sciences	9,000	1,000	2,000	1,000	1,000	8,000	1,000
Male	7,000	S	S	1,000	1,000	7,000	S
Female	5,000	S	2,000	S	*	4,000	1,000
Computer/mathematical sciences	24,000	3,000	7,000	7,000	5,000	22,000	3,000
Male	18,000	2,000	5,000	5,000	4,000	18,000	3,000
Female	17,000	2,000	6,000	4,000	3,000	14,000	1,000
Computer/information sciences	17,000	3,000	6,000	6,000	4,000	14,000	2,000
Male	13,000	2,000	4,000	4,000	3,000	12,000	2,000
Female	11,000	2,000	5,000	4,000	3,000	9,000	1,000
Mathematical sciences	18,000	S	5,000	3,000	2,000	17,000	2,000
Male	13,000	S	3,000	3,000	2,000	13,000	2,000
Female	12,000	S	4,000	2,000	1,000	11,000	1,000
Physical/related sciences	16,000	1,000	4,000	3,000	3,000	14,000	4,000
Male	14,000	500	3,000	2,000	2,000	13,000	1,000
Female	10,000	1,000	3,000	2,000	2,000	8,000	4,000
Chemistry, except biochemistry	13,000	1,000	4,000	2,000	2,000	11,000	3,000
Male	10,000	S	3,000	1,000	2,000	9,000	1,000
Female	8,000	S	3,000	2,000	1,000	7,000	3,000
Earth/atmospheric/ocean sciences	9,000	S	1,000	1,000	1,000	9,000	500
Male	8,000	S	1,000	500	1,000	8,000	500
Female	4,000	S	S	S	1,000	3,000	S
Physics/astronomy	7,000	*	2,000	1,000	1,000	6,000	500
Male	5,000	S	2,000	1,000	1,000	5,000	500
Female	4,000	S	1,000	500	500	3,000	S
Other physical sciences	6,000	S	1,000	1,000	1,000	5,000	S
Male	4,000	S	S	1,000	S	4,000	S
Female	4,000	S	1,000	1,000	1,000	3,000	S
Social/related sciences	52,000	4,000	10,000	13,000	10,000	50,000	6,000
Male	33,000	3,000	6,000	8,000	6,000	32,000	4,000
Female	36,000	3,000	7,000	9,000	8,000	34,000	5,000
Economics	20,000	S	7,000	3,000	4,000	18,000	2,000
Male	19,000	S	5,000	3,000	3,000	18,000	2,000
Female	10,000	S	5,000	1,000	2,000	8,000	1,000
Political/related sciences	25,000	2,000	4,000	6,000	4,000	23,000	3,000
Male	20,000	S	3,000	4,000	3,000	19,000	3,000
Female	15,000	1,000	3,000	4,000	3,000	14,000	2,000
Psychology	31,000	2,000	5,000	7,000	5,000	30,000	3,000
Male	17,000	S	3,000	4,000	3,000	16,000	2,000
Female	25,000	1,000	4,000	6,000	5,000	24,000	3,000
Sociology/anthropology	24,000	2,000	4,000	7,000	4,000	24,000	3,000
Male	14,000	1,000	1,000	4,000	2,000	13,000	2,000
Female	21,000	2,000	3,000	6,000	3,000	19,000	2,000
Other social sciences	18,000	2,000	3,000	4,000	5,000	15,000	2,000
Male	12,000	S	1,000	3,000	2,000	11,000	1,000
Female	13,000	2,000	3,000	3,000	4,000	11,000	1,000
Engineering	31,000	1,000	8,000	5,000	6,000	28,000	4,000
Male	29,000	1,000	7,000	4,000	6,000	26,000	4,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Female	9,000	500	4,000	2,000	2,000	8,000	1,000
Aerospace/related engineering	7,000	500	1,000	1,000	1,000	7,000	1,000
Male	7,000	S	1,000	1,000	1,000	6,000	1,000
Female	2,000	S	1,000	S	*	2,000	S
Chemical engineering	8,000	1,000	2,000	1,000	2,000	7,000	1,000
Male	7,000	1,000	2,000	500	1,000	6,000	500
Female	3,000	S	1,000	1,000	1,000	2,000	1,000
Civil/architectural engineering	12,000	500	3,000	2,000	3,000	10,000	3,000
Male	11,000	500	3,000	2,000	3,000	10,000	3,000
Female	3,000	S	1,000	500	1,000	2,000	500
Electrical/computer engineering	14,000	500	5,000	3,000	2,000	12,000	3,000
Male	13,000	S	4,000	3,000	2,000	12,000	3,000
Female	5,000	S	2,000	2,000	1,000	4,000	1,000
Industrial engineering	10,000	S	2,000	1,000	2,000	9,000	500
Male	10,000	S	1,000	1,000	2,000	9,000	S
Female	4,000	S	2,000	1,000	1,000	3,000	S
Mechanical engineering	15,000	500	4,000	2,000	2,000	15,000	1,000
Male	14,000	500	4,000	2,000	2,000	14,000	1,000
Female	4,000	S	1,000	500	1,000	4,000	500
Other engineering	11,000	S	3,000	1,000	2,000	10,000	1,000
Male	11,000	S	2,000	1,000	2,000	10,000	500
Female	4,000	S	2,000	1,000	1,000	3,000	S
S&E-related fields	40,000	3,000	11,000	9,000	8,000	37,000	6,000
Male	23,000	1,000	6,000	5,000	4,000	20,000	3,000
Female	32,000	2,000	10,000	8,000	7,000	30,000	6,000
Health	34,000	2,000	9,000	7,000	6,000	31,000	6,000
Male	14,000	1,000	4,000	3,000	3,000	12,000	2,000
Female	30,000	2,000	9,000	7,000	6,000	28,000	6,000
Science/mathematics teacher education	14,000	S	3,000	3,000	2,000	13,000	500
Male	8,000	S	1,000	2,000	1,000	8,000	S
Female	10,000	S	2,000	2,000	2,000	10,000	S
Technology/technical fields	14,000	1,000	4,000	3,000	3,000	13,000	1,000
Male	14,000	S	3,000	3,000	3,000	12,000	1,000
Female	5,000	S	3,000	1,000	1,000	4,000	S
Other S&E-related fields	13,000	S	3,000	2,000	3,000	12,000	1,000
Male	11,000	S	2,000	2,000	2,000	10,000	1,000
Female	7,000	S	2,000	1,000	2,000	7,000	S
Non-S&E fields	29,000	3,000	5,000	7,000	4,000	27,000	3,000
Male	21,000	1,000	4,000	4,000	3,000	20,000	2,000
Female	21,000	2,000	4,000	5,000	3,000	19,000	2,000
Arts/humanities	15,000	S	2,000	1,000	2,000	15,000	1,000
Male	10,000	S	1,000	1,000	2,000	10,000	500
Female	10,000	S	1,000	1,000	1,000	10,000	1,000
Education, except science/mathematics teacher education	11,000	2,000	1,000	2,000	2,000	11,000	1,000
Male	8,000	S	1,000	1,000	1,000	7,000	1,000
Female	10,000	S	1,000	2,000	1,000	10,000	1,000
Management/administration	19,000	1,000	4,000	5,000	3,000	17,000	2,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Male	14,000	S	3,000	3,000	2,000	14,000	2,000
Female	11,000	S	3,000	3,000	2,000	9,000	1,000
Sales/marketing	5,000	S	S	1,000	1,000	5,000	S
Male	4,000	S	S	S	1,000	3,000	S
Female	4,000	S	S	S	S	4,000	S
Social services/related	5,000	S	1,000	2,000	500	5,000	S
Male	4,000	S	1,000	1,000	S	4,000	S
Female	3,000	S	S	1,000	S	3,000	S
Other non-S&E fields	11,000	S	2,000	3,000	2,000	10,000	1,000
Male	7,000	S	1,000	1,000	1,000	7,000	1,000
Female	8,000	S	1,000	2,000	2,000	8,000	S
Master's degrees	50,000	3,000	13,000	12,000	9,000	42,000	7,000
Male	34,000	3,000	9,000	6,000	7,000	30,000	6,000
Female	34,000	2,000	8,000	10,000	6,000	30,000	4,000
S&E fields	33,000	2,000	9,000	6,000	6,000	29,000	3,000
Male	24,000	1,000	7,000	4,000	5,000	22,000	3,000
Female	20,000	1,000	7,000	5,000	4,000	17,000	2,000
Sciences	30,000	2,000	9,000	6,000	5,000	26,000	3,000
Male	20,000	1,000	5,000	3,000	3,000	18,000	2,000
Female	19,000	1,000	7,000	5,000	3,000	16,000	2,000
Biological/agricultural/environmental life sciences	11,000	500	3,000	1,000	2,000	9,000	1,000
Male	8,000	S	2,000	1,000	1,000	7,000	1,000
Female	7,000	500	2,000	1,000	1,000	7,000	1,000
Agricultural/food sciences	4,000	S	1,000	1,000	1,000	4,000	1,000
Male	3,000	S	500	1,000	S	3,000	S
Female	3,000	S	1,000	S	1,000	3,000	S
Biological sciences	9,000	500	3,000	1,000	2,000	8,000	1,000
Male	6,000	S	2,000	1,000	1,000	6,000	S
Female	6,000	S	2,000	1,000	1,000	5,000	500
Environmental life sciences	5,000	S	1,000	500	*	5,000	S
Male	4,000	S	1,000	S	S	4,000	S
Female	3,000	S	S	500	*	3,000	S
Computer/mathematical sciences	12,000	S	6,000	2,000	2,000	10,000	1,000
Male	10,000	S	4,000	1,000	2,000	9,000	1,000
Female	8,000	S	5,000	2,000	1,000	5,000	1,000
Computer/information sciences	11,000	S	6,000	2,000	2,000	9,000	1,000
Male	9,000	S	4,000	1,000	2,000	8,000	1,000
Female	7,000	S	5,000	1,000	500	5,000	1,000
Mathematical sciences	7,000	S	2,000	1,000	1,000	6,000	1,000
Male	6,000	S	1,000	500	1,000	5,000	500
Female	4,000	S	2,000	1,000	500	3,000	S
Physical/related sciences	7,000	1,000	3,000	1,000	1,000	7,000	500
Male	6,000	S	2,000	1,000	1,000	6,000	500
Female	4,000	S	2,000	500	500	3,000	*
Chemistry, except biochemistry	5,000	S	2,000	1,000	500	4,000	S
Male	4,000	S	2,000	1,000	500	3,000	S
Female	2,000	S	2,000	*	500	2,000	S

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Earth/atmospheric/ocean sciences	5,000	S	1,000	S	500	4,000	500
Male	4,000	S	1,000	S	500	4,000	500
Female	2,000	S	1,000	S	*	2,000	S
Physics/astronomy	4,000	S	1,000	500	1,000	3,000	*
Male	3,000	S	1,000	500	1,000	3,000	S
Female	1,000	S	1,000	S	S	1,000	S
Other physical sciences	2,000	S	S	S	S	2,000	S
Male	1,000	S	S	S	S	1,000	S
Female	1,000	S	S	S	S	1,000	S
Social/related sciences	22,000	1,000	4,000	5,000	4,000	20,000	2,000
Male	14,000	1,000	2,000	3,000	3,000	13,000	2,000
Female	15,000	1,000	3,000	4,000	3,000	14,000	2,000
Economics	7,000	S	2,000	2,000	1,000	7,000	*
Male	6,000	S	2,000	1,000	1,000	6,000	S
Female	4,000	S	2,000	1,000	500	3,000	S
Political/related sciences	9,000	S	2,000	2,000	1,000	8,000	1,000
Male	7,000	S	1,000	1,000	1,000	7,000	1,000
Female	5,000	S	2,000	2,000	1,000	4,000	S
Psychology	16,000	1,000	2,000	4,000	3,000	15,000	2,000
Male	9,000	S	1,000	1,000	2,000	8,000	2,000
Female	13,000	1,000	2,000	4,000	2,000	12,000	1,000
Sociology/anthropology	6,000	S	1,000	1,000	1,000	6,000	1,000
Male	4,000	S	500	1,000	1,000	4,000	S
Female	4,000	S	1,000	1,000	1,000	4,000	S
Other social sciences	7,000	S	1,000	2,000	2,000	6,000	1,000
Male	4,000	S	500	2,000	1,000	4,000	S
Female	5,000	S	1,000	1,000	1,000	5,000	500
Engineering	13,000	S	5,000	2,000	3,000	12,000	1,000
Male	13,000	S	5,000	1,000	3,000	12,000	1,000
Female	5,000	S	2,000	500	2,000	4,000	500
Aerospace/related engineering	2,000	S	1,000	S	1,000	2,000	500
Male	2,000	S	1,000	S	1,000	2,000	500
Female	500	S	S	S	S	500	S
Chemical engineering	4,000	S	2,000	500	1,000	3,000	S
Male	3,000	S	2,000	500	500	2,000	S
Female	2,000	S	500	*	1,000	1,000	S
Civil/architectural engineering	5,000	S	2,000	1,000	2,000	4,000	1,000
Male	5,000	S	2,000	1,000	2,000	4,000	1,000
Female	2,000	S	1,000	*	500	2,000	S
Electrical/computer engineering	8,000	S	4,000	1,000	1,000	6,000	1,000
Male	7,000	S	3,000	1,000	1,000	6,000	1,000
Female	3,000	S	2,000	500	1,000	2,000	S
Industrial engineering	3,000	S	1,000	1,000	1,000	3,000	S
Male	3,000	S	1,000	1,000	1,000	3,000	S
Female	2,000	S	500	*	500	1,000	S
Mechanical engineering	5,000	S	2,000	500	1,000	5,000	1,000
Male	5,000	S	2,000	500	1,000	5,000	1,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Female	1,000	S	500	*	S	1,000	S
Other engineering	6,000	S	2,000	1,000	1,000	6,000	500
Male	6,000	S	2,000	1,000	1,000	5,000	500
Female	2,000	S	1,000	500	1,000	2,000	500
S&E-related fields	22,000	1,000	5,000	5,000	4,000	20,000	2,000
Male	12,000	S	3,000	3,000	2,000	11,000	2,000
Female	19,000	1,000	4,000	4,000	3,000	17,000	2,000
Health	17,000	1,000	4,000	4,000	3,000	16,000	2,000
Male	7,000	S	2,000	2,000	1,000	7,000	1,000
Female	16,000	1,000	4,000	4,000	3,000	15,000	1,000
Science/mathematics teacher education	9,000	S	1,000	2,000	1,000	9,000	1,000
Male	6,000	S	1,000	1,000	1,000	6,000	S
Female	8,000	S	1,000	2,000	1,000	7,000	S
Technology/technical fields	4,000	S	2,000	1,000	1,000	4,000	1,000
Male	4,000	S	2,000	1,000	1,000	3,000	1,000
Female	3,000	S	1,000	S	S	2,000	S
Other S&E-related fields	7,000	S	1,000	1,000	1,000	7,000	1,000
Male	6,000	S	1,000	1,000	1,000	6,000	S
Female	3,000	S	1,000	S	S	3,000	S
Non-S&E fields	40,000	3,000	8,000	10,000	7,000	36,000	5,000
Male	28,000	3,000	6,000	5,000	5,000	26,000	5,000
Female	25,000	1,000	6,000	8,000	4,000	23,000	3,000
Arts/humanities	9,000	S	3,000	1,000	1,000	9,000	500
Male	7,000	S	1,000	S	1,000	7,000	S
Female	6,000	S	2,000	1,000	1,000	5,000	S
Education, except science/mathematics teacher education	24,000	1,000	2,000	6,000	4,000	23,000	2,000
Male	14,000	1,000	1,000	3,000	2,000	13,000	2,000
Female	19,000	S	2,000	5,000	3,000	17,000	1,000
Management/administration	23,000	2,000	7,000	6,000	5,000	22,000	5,000
Male	18,000	2,000	5,000	3,000	4,000	18,000	4,000
Female	13,000	S	5,000	5,000	2,000	11,000	2,000
Sales/marketing	9,000	S	2,000	1,000	1,000	8,000	S
Male	7,000	S	1,000	1,000	1,000	7,000	S
Female	4,000	S	1,000	1,000	1,000	4,000	S
Social services/related	11,000	S	2,000	4,000	2,000	11,000	2,000
Male	7,000	S	1,000	2,000	1,000	7,000	1,000
Female	9,000	S	1,000	3,000	1,000	8,000	1,000
Other non-S&E fields	13,000	1,000	2,000	4,000	2,000	12,000	2,000
Male	10,000	S	2,000	2,000	1,000	10,000	2,000
Female	9,000	S	2,000	3,000	2,000	8,000	1,000
Doctorate degrees	11,000	500	3,000	2,000	2,000	10,000	1,000
Male	9,000	500	3,000	1,000	1,000	8,000	1,000
Female	6,000	500	2,000	2,000	1,000	6,000	1,000
S&E fields	5,000	500	3,000	2,000	1,000	4,000	1,000
Male	4,000	500	2,000	1,000	1,000	3,000	500
Female	4,000	*	1,000	2,000	1,000	3,000	500
Sciences	5,000	500	3,000	2,000	1,000	4,000	1,000

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Male	4,000	500	2,000	1,000	1,000	3,000	500
Female	4,000	*	1,000	2,000	1,000	3,000	500
Biological/agricultural/environmental life sciences	4,000	*	2,000	1,000	1,000	3,000	500
Male	3,000	*	2,000	1,000	1,000	1,000	500
Female	3,000	*	1,000	1,000	500	3,000	500
Agricultural/food sciences	1,000	S	500	500	1,000	1,000	*
Male	1,000	S	500	500	1,000	500	*
Female	500	S	500	*	*	500	S
Biological sciences	4,000	*	2,000	1,000	1,000	3,000	500
Male	2,000	*	2,000	1,000	500	1,000	500
Female	3,000	*	1,000	1,000	500	3,000	500
Environmental life sciences	500	S	500	*	*	500	S
Male	500	S	*	*	*	500	S
Female	500	S	*	S	*	500	S
Computer/mathematical sciences	2,000	S	1,000	2,000	500	1,000	*
Male	1,000	S	1,000	500	500	1,000	*
Female	2,000	S	500	2,000	*	500	*
Computer/information sciences	1,000	S	500	500	500	1,000	*
Male	1,000	S	500	*	*	1,000	*
Female	500	S	500	*	*	500	S
Mathematical sciences	2,000	S	500	2,000	500	1,000	*
Male	1,000	S	500	500	500	1,000	*
Female	2,000	S	500	2,000	*	500	*
Physical/related sciences	2,000	*	1,000	500	500	2,000	500
Male	2,000	*	1,000	500	500	2,000	500
Female	1,000	S	500	*	500	1,000	*
Chemistry, except biochemistry	2,000	*	1,000	500	500	1,000	500
Male	1,000	*	1,000	500	500	1,000	500
Female	1,000	S	500	*	500	500	*
Earth/atmospheric/ocean sciences	1,000	S	500	*	*	1,000	*
Male	1,000	S	500	*	*	500	*
Female	500	S	500	S	*	500	S
Physics/astronomy	1,000	S	1,000	500	500	1,000	*
Male	1,000	S	500	*	500	1,000	*
Female	1,000	S	500	*	*	500	S
Other physical sciences	1,000	S	*	S	S	1,000	S
Male	1,000	S	*	S	S	1,000	S
Female	500	S	*	S	S	*	S
Social/related sciences	2,000	500	1,000	500	500	2,000	500
Male	1,000	*	1,000	500	500	1,000	500
Female	2,000	*	1,000	500	500	1,000	500
Economics	1,000	S	500	500	500	500	*
Male	1,000	S	500	500	500	500	*
Female	500	S	500	*	*	500	S
Political/related sciences	1,000	S	1,000	500	500	1,000	*
Male	1,000	S	500	500	*	1,000	*
Female	1,000	S	1,000	*	*	500	*

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Psychology	1,000	*	500	500	500	1,000	500
Male	1,000	*	500	500	500	1,000	500
Female	1,000	*	500	500	500	1,000	500
Sociology/anthropology	1,000	*	500	500	500	1,000	*
Male	500	S	500	500	500	500	*
Female	1,000	S	500	500	500	1,000	*
Other social sciences	1,000	*	1,000	500	500	1,000	*
Male	1,000	S	1,000	500	500	500	*
Female	500	*	500	*	*	500	*
Engineering	2,000	S	1,000	500	500	1,000	500
Male	2,000	S	1,000	500	500	1,000	500
Female	500	S	500	*	*	500	*
Aerospace/related engineering	1,000	S	1,000	*	*	500	S
Male	1,000	S	1,000	*	*	500	S
Female	*	S	S	S	S	*	S
Chemical engineering	1,000	S	1,000	*	500	500	*
Male	1,000	S	1,000	*	500	500	*
Female	500	S	500	*	*	500	S
Civil/architectural engineering	1,000	S	500	*	*	500	*
Male	1,000	S	500	*	*	500	*
Female	500	S	*	S	S	*	S
Electrical/computer engineering	1,000	S	1,000	500	500	1,000	*
Male	1,000	S	500	500	500	1,000	*
Female	500	S	500	*	*	500	S
Industrial engineering	500	S	500	*	*	500	S
Male	500	S	500	*	*	500	S
Female	500	S	S	*	S	500	S
Mechanical engineering	1,000	S	500	*	*	500	*
Male	1,000	S	500	*	*	500	*
Female	500	S	*	S	S	*	S
Other engineering	1,000	S	1,000	500	500	1,000	*
Male	1,000	S	1,000	*	500	1,000	*
Female	500	S	500	*	*	500	S
S&E-related fields	5,000	*	1,000	1,000	1,000	4,000	500
Male	4,000	S	1,000	1,000	1,000	4,000	500
Female	3,000	*	1,000	500	1,000	2,000	*
Health	3,000	*	1,000	1,000	1,000	2,000	*
Male	2,000	S	1,000	1,000	1,000	1,000	*
Female	2,000	*	1,000	500	1,000	2,000	*
Science/mathematics teacher education	3,000	S	S	S	S	3,000	S
Male	2,000	S	S	S	S	2,000	S
Female	1,000	S	S	S	S	1,000	S
Technology/technical fields	1,000	S	500	S	S	1,000	S
Male	1,000	S	500	S	S	1,000	S
Female	S	S	S	S	S	S	S
Other S&E-related fields	3,000	S	S	S	S	3,000	S
Male	3,000	S	S	S	S	3,000	S

TABLE A-11. Standard errors for U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree and sex	All scientists and engineers	Race/ethnicity <sup>a</sup>					
		American Indian/ Alaska Native	Asian	Black	Hispanic	White	Other
Female	1,000	S	S	S	S	S	S
Non-S&E fields	8,000	S	1,000	1,000	1,000	8,000	1,000
Male	7,000	S	1,000	1,000	1,000	7,000	S
Female	5,000	S	1,000	1,000	1,000	5,000	1,000
Arts/humanities	2,000	S	S	S	500	2,000	S
Male	2,000	S	S	S	S	2,000	S
Female	1,000	S	S	S	S	1,000	S
Education, except science/mathematics teacher education	7,000	S	500	1,000	1,000	7,000	1,000
Male	6,000	S	S	1,000	1,000	6,000	S
Female	4,000	S	500	1,000	1,000	4,000	1,000
Management/administration	3,000	S	1,000	S	S	2,000	S
Male	2,000	S	1,000	S	S	2,000	S
Female	1,000	S	S	S	S	1,000	S
Sales/marketing	500	S	500	S	S	500	S
Male	500	S	S	S	S	S	S
Female	500	S	S	S	S	S	S
Social services/related	3,000	S	500	1,000	S	3,000	S
Male	3,000	S	S	1,000	S	3,000	S
Female	1,000	S	S	500	S	1,000	S
Other non-S&E fields	4,000	S	1,000	1,000	1,000	3,000	S
Male	2,000	S	1,000	S	S	2,000	S
Female	3,000	S	S	S	S	3,000	S

\* = standard error is not calculated when estimate is less than 500; S = standard error is not calculated when estimate is suppressed for reliability or confidentiality.

S&E = science and engineering.

<sup>a</sup> "Other" includes Native Hawaiian/Other Pacific Islander and non-Hispanic respondents reporting 2 or more races.

<sup>b</sup> Total includes professional degrees not broken out separately.

NOTES: Scientists and engineers include any person who has ever received a bachelor's or higher degree in a science or engineering (S&E) or S&E-related field, plus any person holding a non-S&E bachelor's or higher degree who was employed in a S&E or S&E-related occupation in 2003. See <http://sestat.nsf.gov/docs/ed03maj.html> for a detailed description of the educational field classification. Standard errors of less than 500 are rounded up to 500 and standard errors equal to or greater than 500 are rounded up to the nearest thousand.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT): 2003.