

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
All degree levels and fields <sup>a</sup>	81,000	45,000	44,000	73,500	28,500	56,000
Business/industry	73,000	39,000	27,000	64,000	26,000	52,500
4-year college/university	24,000	14,000	14,000	17,000	7,000	15,500
Other educational institution	34,000	15,500	31,500	23,000	7,500	16,000
Government	37,000	18,000	13,000	31,500	9,000	25,500
S&E fields	63,500	33,000	23,500	57,500	22,500	37,500
Business/industry	58,500	30,000	14,000	51,500	21,500	33,000
4-year college/university	15,500	10,000	7,500	11,500	5,500	8,500
Other educational institution	21,500	9,000	18,000	14,000	5,500	9,000
Government	27,500	14,000	7,000	22,500	7,000	17,000
Sciences	61,000	28,500	22,500	55,500	21,000	35,500
Business/industry	53,500	24,500	13,500	49,000	18,500	30,500
4-year college/university	14,500	9,500	7,000	11,000	5,000	8,500
Other educational institution	21,000	9,000	17,500	13,500	5,000	9,000
Government	26,000	12,500	7,000	21,500	6,500	16,000
Biological/agricultural/environmental life sciences	27,500	14,500	12,000	24,500	6,500	17,500
Business/industry	25,000	11,500	7,500	22,500	5,000	15,500
4-year college/university	8,000	6,500	4,000	6,000	2,500	4,500
Other educational institution	8,500	4,000	7,500	5,000	2,000	3,000
Government	11,500	6,500	3,000	10,000	3,000	7,500
Agricultural/food sciences	12,500	6,500	4,000	11,000	3,000	9,500
Business/industry	11,000	5,000	2,000	10,000	2,500	8,500
4-year college/university	3,000	2,000	1,500	2,500	500	2,000
Other educational institution	3,000	1,500	2,500	2,000	D	S
Government	5,500	3,000	2,000	5,500	S	3,500
Biological sciences	23,500	12,500	11,000	21,500	5,500	14,000
Business/industry	21,000	10,000	7,000	19,000	4,500	12,500
4-year college/university	7,500	6,000	4,000	5,500	2,500	4,000
Other educational institution	7,500	4,000	7,000	4,500	1,000	2,500
Government	8,500	4,500	2,500	7,000	2,000	5,500
Environmental life sciences	10,500	4,000	3,000	9,000	2,500	6,500
Business/industry	8,500	3,000	2,000	8,000	1,500	5,500
4-year college/university	2,000	1,000	1,000	1,500	S	1,500
Other educational institution	2,000	1,000	1,500	1,000	D	S
Government	5,500	3,000	1,000	5,000	2,000	3,500
Computer/mathematical sciences	24,000	14,500	9,000	20,500	16,000	11,500
Business/industry	22,000	13,500	4,500	18,000	15,500	10,000
4-year college/university	6,000	4,000	3,000	3,500	4,000	2,500
Other educational institution	7,500	3,500	7,000	5,000	2,500	2,500
Government	8,000	5,000	2,000	7,000	4,000	4,500
Computer/information sciences	18,000	12,500	5,500	16,000	14,500	9,000
Business/industry	17,500	11,500	3,000	14,500	13,500	7,500
4-year college/university	5,000	3,500	2,000	3,000	3,500	2,000
Other educational institution	4,500	2,500	4,000	3,000	2,000	2,000
Government	6,500	4,000	1,500	5,500	3,500	3,500
Mathematical sciences	17,000	7,500	7,500	13,500	7,500	7,500
Business/industry	13,500	7,000	3,500	11,500	7,000	7,000
4-year college/university	3,500	2,000	2,500	2,500	2,000	1,500
Other educational institution	6,000	3,000	6,000	4,000	2,000	2,000
Government	5,000	2,500	2,000	4,500	2,500	2,500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Physical/related sciences	13,500	8,500	5,000	11,500	6,000	8,000
Business/industry	12,500	7,000	3,000	11,000	5,000	7,000
4-year college/university	4,000	3,000	1,500	3,000	1,500	2,500
Other educational institution	4,500	2,000	4,000	3,000	1,500	2,500
Government	7,000	3,500	1,000	5,000	2,000	4,500
Chemistry, except biochemistry	10,500	6,500	3,500	9,000	3,000	6,500
Business/industry	9,500	5,500	2,000	8,000	3,000	5,500
4-year college/university	3,000	2,500	1,500	2,000	1,000	1,500
Other educational institution	3,000	500	2,500	2,000	S	S
Government	4,000	2,000	500	3,500	500	3,500
Earth/atmospheric/ocean sciences	8,500	4,000	3,000	7,500	2,500	5,000
Business/industry	7,000	3,500	1,500	6,000	1,500	4,000
4-year college/university	2,000	1,000	1,000	1,500	1,000	1,500
Other educational institution	2,500	1,000	2,500	2,000	D	S
Government	4,000	2,500	1,000	3,500	2,000	2,500
Physics/astronomy	6,500	4,000	2,000	5,000	4,000	3,500
Business/industry	6,000	3,500	500	4,500	3,500	3,000
4-year college/university	1,500	1,500	1,000	1,000	1,000	1,000
Other educational institution	2,500	1,500	2,000	1,000	S	S
Government	2,500	1,000	500	2,000	1,000	1,500
Other physical sciences	5,000	3,000	2,000	3,500	1,500	2,500
Business/industry	4,000	2,500	2,000	3,000	1,500	2,500
4-year college/university	2,000	1,000	500	S	*	*
Other educational institution	1,000	*	1,000	S	D	D
Government	2,500	2,000	D	2,000	*	500
Social/related sciences	48,000	19,000	18,000	42,500	11,000	28,000
Business/industry	40,000	15,000	10,500	36,000	9,500	24,000
4-year college/university	10,500	5,000	5,000	8,500	2,500	6,000
Other educational institution	18,000	7,000	15,000	11,500	4,000	8,500
Government	20,500	9,500	6,000	17,000	4,000	13,000
Economics	20,500	7,500	5,500	19,000	5,500	12,000
Business/industry	19,000	7,000	3,500	18,000	5,000	11,000
4-year college/university	3,000	1,500	2,000	3,000	1,000	1,500
Other educational institution	3,500	1,500	3,500	2,500	D	2,000
Government	5,500	3,000	1,000	4,500	2,000	4,000
Political/related sciences	22,000	9,000	6,000	19,500	3,500	12,000
Business/industry	19,500	7,000	4,000	18,000	3,500	10,500
4-year college/university	4,500	2,500	2,000	3,500	1,000	2,000
Other educational institution	5,500	3,500	4,000	4,000	D	1,500
Government	9,000	4,500	3,000	7,500	1,500	6,000
Psychology	27,000	11,500	13,000	23,000	7,000	16,500
Business/industry	21,500	8,500	7,000	19,000	5,500	13,000
4-year college/university	6,000	3,500	3,000	4,500	1,500	4,000
Other educational institution	12,500	5,000	11,000	8,000	2,500	7,000
Government	11,000	4,500	4,000	9,500	2,500	7,000
Sociology/anthropology	21,000	9,500	9,500	19,500	4,000	13,000
Business/industry	16,000	7,500	5,500	14,500	3,500	11,000
4-year college/university	5,000	2,000	2,500	4,000	1,500	3,000
Other educational institution	9,000	3,500	7,000	6,000	S	3,500
Government	11,000	5,000	4,000	9,500	2,000	6,500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Other social sciences	15,500	6,500	6,500	13,500	4,000	9,000
Business/industry	13,500	5,000	2,500	12,000	2,500	7,500
4-year college/university	4,000	2,500	2,500	3,000	1,000	2,000
Other educational institution	6,000	2,500	5,500	3,500	2,500	2,500
Government	6,000	3,000	S	5,500	2,000	4,500
Engineering	26,500	17,500	5,500	22,000	11,000	13,500
Business/industry	25,000	16,500	4,500	21,500	10,500	12,500
4-year college/university	4,000	3,500	2,500	2,000	2,000	1,500
Other educational institution	3,500	1,500	2,500	2,500	1,500	1,500
Government	8,500	5,500	1,500	7,500	3,000	4,500
Aerospace/related engineering	6,000	3,500	1,500	4,500	2,500	3,500
Business/industry	5,500	3,500	1,500	4,500	2,500	3,000
4-year college/university	500	500	500	500	500	*
Other educational institution	500	D	500	*	D	D
Government	1,500	1,000	500	1,500	500	1,000
Chemical engineering	6,500	4,000	2,000	6,000	2,000	3,000
Business/industry	6,500	4,000	1,500	6,000	2,000	3,000
4-year college/university	1,500	1,000	1,500	1,500	*	500
Other educational institution	1,000	S	1,000	D	D	D
Government	2,000	1,000	D	1,500	500	1,500
Civil/architectural engineering	11,500	6,000	2,500	10,500	3,000	5,500
Business/industry	10,000	5,000	2,000	9,000	3,000	5,000
4-year college/university	1,500	1,000	1,000	1,000	1,000	*
Other educational institution	1,500	S	1,000	S	D	D
Government	5,500	3,000	500	5,000	1,000	3,000
Electrical/computer engineering	15,000	10,000	2,500	12,000	8,500	6,500
Business/industry	14,000	9,500	2,000	12,000	8,000	6,500
4-year college/university	2,500	2,000	1,500	1,000	1,500	1,000
Other educational institution	1,500	500	1,500	1,000	500	S
Government	4,000	3,000	S	3,000	2,000	1,500
Industrial engineering	8,000	4,500	2,000	7,000	3,500	4,500
Business/industry	7,500	4,500	1,000	7,000	3,000	4,000
4-year college/university	1,000	1,000	1,000	500	*	*
Other educational institution	1,500	D	1,500	S	D	D
Government	2,000	1,000	D	2,000	S	1,000
Mechanical engineering	12,500	8,000	3,000	11,000	4,000	7,000
Business/industry	11,500	7,500	2,500	10,000	3,500	6,000
4-year college/university	2,000	1,500	1,000	1,500	1,000	1,000
Other educational institution	2,000	500	1,500	1,500	D	S
Government	3,500	2,500	500	3,500	1,000	2,000
Other engineering	10,000	6,000	1,500	9,000	4,000	6,000
Business/industry	9,000	5,500	1,500	8,000	3,500	6,000
4-year college/university	2,500	2,000	1,000	500	1,000	1,000
Other educational institution	1,500	500	1,000	1,500	D	D
Government	4,000	2,500	500	3,500	1,500	2,500
S&E-related fields	44,500	22,500	30,000	37,000	11,000	35,500
Business/industry	38,500	19,000	20,500	32,500	9,500	32,500
4-year college/university	13,000	7,500	9,000	8,500	2,500	11,000
Other educational institution	18,500	7,500	16,500	11,500	3,500	10,500
Government	17,000	7,500	9,500	13,000	3,500	14,500

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Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Health	37,000	15,500	26,000	30,000	7,500	33,500
Business/industry	33,500	13,000	20,500	27,500	6,500	31,000
4-year college/university	13,000	6,500	9,000	8,000	2,000	11,000
Other educational institution	14,000	4,500	11,500	7,500	2,500	10,000
Government	15,500	6,000	9,500	11,500	2,500	14,000
Science/mathematics teacher education	16,000	7,000	12,000	11,500	3,500	7,500
Business/industry	9,000	3,500	2,500	7,500	2,500	6,000
4-year college/university	2,500	2,000	2,500	1,000	D	500
Other educational institution	11,500	5,500	11,000	8,500	2,500	3,500
Government	3,500	1,500	1,500	2,000	D	2,500
Technology/technical fields	13,000	7,500	5,000	11,500	6,500	6,500
Business/industry	12,500	7,000	3,000	11,000	6,000	6,000
4-year college/university	3,000	2,000	S	2,000	2,000	S
Other educational institution	3,500	2,000	3,000	2,500	D	D
Government	4,500	3,000	D	3,500	2,000	1,500
Other S&E-related fields	14,500	10,500	2,500	12,500	2,500	9,000
Business/industry	14,000	9,000	1,000	12,500	2,500	8,500
4-year college/university	2,000	1,000	1,000	2,000	D	D
Other educational institution	3,000	1,500	D	2,500	D	S
Government	5,500	4,000	D	5,000	500	3,500
Non-S&E fields	47,000	23,000	25,000	41,500	17,000	31,500
Business/industry	39,000	19,500	11,000	34,000	14,500	27,000
4-year college/university	12,000	7,000	8,000	8,500	4,000	7,500
Other educational institution	23,500	10,500	20,500	18,000	4,500	10,000
Government	19,000	8,500	5,500	17,500	5,000	15,000
Arts/humanities	13,500	7,500	6,500	11,500	5,500	8,000
Business/industry	11,500	6,500	3,000	9,500	5,500	7,000
4-year college/university	4,500	2,500	3,500	3,500	1,500	3,500
Other educational institution	5,000	3,000	5,000	4,000	S	1,000
Government	4,000	2,000	D	3,500	1,500	3,000
Education, except science/mathematics teacher education	25,000	10,500	18,500	21,500	5,500	12,500
Business/industry	12,500	6,000	5,500	11,000	3,000	7,000
4-year college/university	6,500	3,500	4,500	4,500	1,000	4,000
Other educational institution	20,500	9,000	18,500	15,000	4,000	8,000
Government	6,000	2,500	3,000	5,500	3,000	3,000
Management/administration	31,000	14,500	7,500	28,500	12,000	15,500
Business/industry	28,000	13,000	5,500	26,000	10,500	14,000
4-year college/university	6,000	3,500	3,000	4,500	3,000	2,500
Other educational institution	6,000	2,000	5,000	4,500	1,000	3,000
Government	9,000	5,000	2,500	8,000	3,000	5,000
Sales/marketing	10,000	5,500	3,000	9,500	3,000	4,500
Business/industry	10,000	5,000	1,500	9,500	2,500	4,500
4-year college/university	2,000	1,500	1,500	D	D	D
Other educational institution	2,000	D	1,500	D	D	D
Government	2,500	D	D	S	D	D
Social services/related	15,500	6,500	8,000	12,000	3,000	11,500
Business/industry	12,500	5,500	6,000	10,000	2,500	9,500
4-year college/university	4,000	2,000	3,000	3,000	S	3,000
Other educational institution	5,500	2,500	4,000	3,500	D	4,000
Government	6,000	2,500	2,500	5,000	S	5,000

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Other non-S&E fields	28,500	12,000	10,000	25,500	7,000	21,000
Business/industry	24,000	9,500	6,000	18,500	6,000	19,500
4-year college/university	6,500	3,500	4,000	5,000	2,500	4,000
Other educational institution	6,500	3,500	6,000	4,500	2,000	3,500
Government	14,500	6,000	3,000	13,000	2,000	12,000
Bachelor's degrees, all fields	66,500	36,000	33,500	62,500	24,000	45,500
Business/industry	62,000	32,000	22,500	56,500	21,000	41,500
4-year college/university	16,500	10,000	8,500	12,000	5,500	10,000
Other educational institution	25,500	10,500	24,000	15,500	5,500	11,500
Government	31,000	14,500	10,500	25,000	7,500	21,000
S&E fields	59,500	29,000	21,000	55,000	20,000	35,500
Business/industry	54,500	26,500	13,500	49,000	18,000	31,000
4-year college/university	12,500	8,000	6,000	9,500	4,500	7,500
Other educational institution	18,500	8,000	16,500	12,500	5,000	7,000
Government	25,500	12,500	7,000	21,500	6,500	16,000
Sciences	58,000	26,000	20,500	53,000	18,500	33,000
Business/industry	51,500	23,000	12,500	47,500	16,000	28,500
4-year college/university	12,500	8,000	6,000	9,000	4,500	7,500
Other educational institution	18,000	8,000	16,000	12,000	4,500	7,000
Government	24,000	11,500	6,500	20,500	6,000	15,000
Biological/agricultural/environmental life sciences	27,500	13,000	11,500	24,500	6,000	16,500
Business/industry	25,000	11,000	7,500	22,500	5,000	14,500
4-year college/university	7,000	5,500	3,500	4,500	1,500	4,500
Other educational institution	7,500	4,000	7,000	4,500	S	2,500
Government	10,500	6,000	3,000	9,500	3,000	7,000
Agricultural/food sciences	12,500	6,500	3,500	11,000	3,000	9,000
Business/industry	11,000	5,000	2,000	9,500	2,500	8,000
4-year college/university	2,500	1,500	1,000	1,500	D	2,000
Other educational institution	3,000	1,500	2,500	2,000	D	S
Government	5,500	3,000	S	5,500	D	3,500
Biological sciences	23,000	11,000	10,500	21,000	5,000	13,000
Business/industry	20,500	9,000	7,000	18,500	4,500	12,000
4-year college/university	6,500	5,500	3,500	4,500	1,500	4,000
Other educational institution	6,500	3,500	6,500	4,000	D	2,000
Government	8,000	4,000	2,500	6,500	1,500	5,000
Environmental life sciences	9,000	3,500	2,500	8,500	2,500	6,000
Business/industry	7,500	2,500	2,000	7,000	1,500	5,000
4-year college/university	2,000	1,000	500	1,500	D	S
Other educational institution	2,000	1,000	1,000	1,000	D	D
Government	5,000	2,500	1,000	4,000	2,000	3,500
Computer/mathematical sciences	21,500	12,500	8,000	19,500	13,500	11,000
Business/industry	20,500	11,500	4,500	17,500	13,000	9,500
4-year college/university	5,000	3,500	2,500	3,000	3,500	1,500
Other educational institution	6,500	3,000	6,000	4,500	2,000	2,500
Government	7,500	4,500	2,000	6,000	4,000	4,000
Computer/information sciences	15,500	10,500	4,500	15,000	12,000	8,000
Business/industry	16,000	10,000	3,000	14,000	11,500	7,500
4-year college/university	4,000	3,000	1,500	2,500	3,000	1,500
Other educational institution	4,000	2,000	3,500	2,500	1,500	2,000
Government	6,000	4,000	1,000	5,000	3,500	3,000

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Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Mathematical sciences	15,500	7,000	6,500	12,500	7,000	7,500
Business/industry	13,000	6,500	3,000	11,000	6,500	6,500
4-year college/university	2,500	2,000	2,000	1,500	2,000	500
Other educational institution	5,500	2,500	5,500	3,500	2,000	2,000
Government	4,500	2,500	S	4,000	2,000	2,500
Physical/related sciences	13,000	7,500	4,000	11,500	5,500	7,500
Business/industry	12,000	6,500	3,000	10,500	4,500	6,500
4-year college/university	3,500	2,500	1,000	3,000	1,000	2,000
Other educational institution	3,500	1,500	3,000	2,000	S	S
Government	6,000	3,000	1,000	4,500	1,000	4,000
Chemistry, except biochemistry	10,000	6,000	3,000	8,500	3,000	6,000
Business/industry	8,500	5,500	2,000	7,500	3,000	5,000
4-year college/university	2,500	2,000	1,000	1,500	1,000	1,500
Other educational institution	2,500	500	2,000	1,500	D	D
Government	4,000	1,500	*	3,500	*	3,500
Earth/atmospheric/ocean sciences	7,500	3,500	2,500	6,500	2,000	4,500
Business/industry	6,500	3,000	S	5,500	1,500	3,500
4-year college/university	1,500	500	500	S	D	S
Other educational institution	2,000	S	2,000	1,000	D	S
Government	3,000	2,000	S	2,500	500	2,000
Physics/astronomy	6,000	3,000	1,500	4,500	4,000	3,000
Business/industry	5,500	2,500	500	4,500	3,000	2,500
4-year college/university	1,000	1,000	500	500	500	500
Other educational institution	2,000	S	1,500	1,000	D	D
Government	2,500	500	*	2,000	500	1,500
Other physical sciences	5,000	3,000	2,000	3,500	1,500	2,500
Business/industry	4,000	2,000	S	3,000	1,500	2,500
4-year college/university	S	S	D	S	D	D
Other educational institution	S	D	S	D	D	D
Government	2,500	S	D	2,000	*	*
Social/related sciences	44,500	17,000	17,000	40,000	10,000	25,000
Business/industry	37,000	13,500	9,500	34,000	8,500	21,000
4-year college/university	8,500	4,000	4,000	7,000	2,000	5,000
Other educational institution	15,500	6,500	14,000	10,000	3,500	6,500
Government	18,500	8,500	6,000	15,500	3,500	12,000
Economics	20,500	7,000	5,000	18,500	5,000	11,500
Business/industry	18,500	7,000	3,500	17,500	4,500	11,000
4-year college/university	3,000	1,000	1,500	3,000	1,000	S
Other educational institution	3,500	D	3,000	2,000	D	D
Government	5,500	3,000	1,000	4,000	2,000	4,000
Political/related sciences	19,500	8,000	6,000	17,500	3,500	11,500
Business/industry	18,000	6,000	3,500	16,500	3,000	10,000
4-year college/university	4,000	2,000	1,500	3,000	D	2,000
Other educational institution	5,000	3,000	4,000	3,500	D	1,500
Government	8,000	4,000	3,000	6,500	1,000	5,500
Psychology	24,000	10,000	11,000	21,000	6,500	14,000
Business/industry	19,500	7,500	6,500	17,500	5,000	11,000
4-year college/university	4,500	3,000	2,000	3,500	1,000	3,500
Other educational institution	10,000	4,000	9,500	6,500	2,500	4,500
Government	9,500	4,000	4,000	8,000	2,000	6,500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Sociology/anthropology	20,500	9,500	9,500	19,000	4,000	13,000
Business/industry	16,000	7,500	5,000	14,500	3,500	11,000
4-year college/university	4,000	1,500	2,500	3,500	1,500	2,500
Other educational institution	9,000	3,500	7,000	6,000	S	3,500
Government	11,000	5,000	3,500	9,500	1,500	6,500
Other social sciences	14,500	5,500	6,000	13,000	3,500	8,500
Business/industry	13,500	4,500	2,500	12,000	2,500	7,000
4-year college/university	3,000	1,000	2,000	2,500	1,000	1,500
Other educational institution	5,000	2,500	5,000	3,000	D	2,500
Government	5,500	3,000	D	5,000	2,000	4,000
Engineering	24,000	15,000	5,500	20,000	9,500	13,000
Business/industry	23,000	14,500	4,000	19,500	9,000	12,000
4-year college/university	3,500	2,500	1,500	2,000	1,500	1,000
Other educational institution	3,000	1,500	2,500	2,500	S	1,500
Government	7,500	4,500	1,500	6,500	2,500	4,000
Aerospace/related engineering	5,000	3,000	1,500	4,000	2,000	3,000
Business/industry	5,000	3,000	S	4,000	2,000	3,000
4-year college/university	500	500	*	D	*	D
Other educational institution	*	D	*	D	D	D
Government	1,500	1,000	*	1,000	*	1,000
Chemical engineering	6,500	4,000	2,000	5,500	1,500	3,000
Business/industry	6,500	3,500	S	5,500	1,500	3,000
4-year college/university	1,500	1,000	S	S	D	500
Other educational institution	500	D	500	D	D	D
Government	1,500	1,000	D	1,500	D	1,500
Civil/architectural engineering	10,000	5,500	2,500	9,500	2,500	5,000
Business/industry	9,000	5,000	2,000	8,500	2,000	4,500
4-year college/university	1,500	500	1,000	1,000	D	D
Other educational institution	1,500	D	S	S	D	D
Government	5,000	2,500	500	4,000	1,000	2,500
Electrical/computer engineering	12,500	8,500	2,500	10,000	7,000	6,000
Business/industry	11,500	8,000	2,000	10,000	7,000	6,000
4-year college/university	1,500	1,500	500	1,000	1,000	1,000
Other educational institution	1,500	500	1,000	D	D	D
Government	3,500	2,500	D	3,000	2,000	1,500
Industrial engineering	7,500	4,000	1,500	6,500	3,000	4,000
Business/industry	7,000	4,000	1,000	6,500	3,000	4,000
4-year college/university	*	*	D	*	D	D
Other educational institution	S	D	S	S	D	D
Government	2,000	500	D	2,000	D	1,000
Mechanical engineering	11,500	7,000	2,500	10,000	3,000	6,500
Business/industry	11,000	6,500	2,500	9,500	3,000	6,000
4-year college/university	1,500	1,500	500	1,000	500	500
Other educational institution	2,000	S	1,500	1,000	D	D
Government	3,500	2,500	500	3,000	1,000	2,000
Other engineering	9,000	4,500	1,500	8,000	3,500	6,000
Business/industry	8,000	4,000	1,500	7,000	3,000	5,500
4-year college/university	2,000	2,000	1,000	500	S	500
Other educational institution	1,500	D	500	S	D	D
Government	3,000	1,500	500	2,500	1,500	2,000

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
S&E-related fields	36,000	17,500	23,500	31,500	9,500	27,500
Business/industry	33,000	15,500	16,500	29,000	8,500	25,500
4-year college/university	8,500	5,000	5,000	5,500	2,000	7,000
Other educational institution	14,500	6,000	13,000	7,500	2,000	8,500
Government	14,500	5,500	7,500	11,000	3,000	12,500
Health	28,500	12,000	20,500	25,500	6,500	25,000
Business/industry	27,000	10,500	16,000	23,500	6,000	23,000
4-year college/university	8,500	4,500	5,000	5,500	1,500	7,000
Other educational institution	10,500	3,500	9,500	5,500	D	8,000
Government	13,000	4,000	7,500	9,500	2,000	12,000
Science/mathematics teacher education	12,000	5,000	8,000	9,000	2,500	6,000
Business/industry	8,000	3,000	S	7,500	2,000	5,000
4-year college/university	D	D	D	D	D	D
Other educational institution	8,000	4,000	7,500	4,500	1,000	2,500
Government	2,500	1,000	D	1,500	D	2,000
Technology/technical fields	12,000	7,000	4,500	10,500	6,000	6,000
Business/industry	11,500	6,000	3,000	11,000	5,500	6,000
4-year college/university	2,500	1,500	D	1,500	2,000	D
Other educational institution	3,000	1,500	2,500	2,000	D	D
Government	4,500	2,500	D	3,500	2,000	1,500
Other S&E-related fields	12,500	8,500	2,000	11,000	2,000	7,500
Business/industry	12,500	8,000	D	11,500	2,000	7,000
4-year college/university	1,500	D	D	1,500	D	D
Other educational institution	2,500	D	D	1,500	D	D
Government	4,000	3,000	D	3,500	D	2,000
Non-S&E fields	27,000	13,500	11,500	22,000	13,500	14,500
Business/industry	23,000	11,500	6,500	20,000	11,500	12,500
4-year college/university	6,000	3,500	2,500	4,500	3,000	3,500
Other educational institution	10,000	4,000	9,500	7,000	2,000	3,000
Government	9,000	4,500	3,000	7,500	4,000	6,000
Arts/humanities	11,000	6,000	4,500	9,500	5,500	6,000
Business/industry	9,500	6,000	2,500	8,500	5,000	5,500
4-year college/university	3,500	S	S	3,000	1,500	2,500
Other educational institution	4,000	D	4,000	3,000	D	500
Government	3,500	2,000	D	3,000	1,500	2,500
Education, except science/mathematics teacher education	10,500	5,000	8,000	9,000	3,500	6,000
Business/industry	7,500	3,500	2,500	6,500	2,500	5,000
4-year college/university	2,500	D	D	1,500	D	S
Other educational institution	7,500	3,000	7,500	5,500	S	2,000
Government	3,500	S	2,000	3,000	2,500	D
Management/administration	17,000	7,500	5,500	14,000	9,000	8,500
Business/industry	15,500	6,500	4,000	13,000	8,000	7,500
4-year college/university	4,000	2,500	S	2,500	2,500	1,500
Other educational institution	3,500	S	3,000	2,000	1,000	2,000
Government	5,000	3,000	S	4,000	2,500	3,500
Sales/marketing	5,500	3,500	2,000	5,000	2,500	2,500
Business/industry	5,500	3,500	D	5,000	2,000	2,000
4-year college/university	D	D	D	D	D	D
Other educational institution	D	D	D	D	D	D
Government	S	D	D	D	D	D

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Social services/related	5,000	3,000	S	4,500	2,000	3,000
Business/industry	4,000	3,000	D	3,500	2,000	3,000
4-year college/university	D	D	D	D	D	D
Other educational institution	D	D	D	D	D	D
Government	2,000	D	D	2,000	D	1,500
Other non-S&E fields	10,500	5,500	4,500	8,000	5,000	7,000
Business/industry	8,500	4,500	3,500	6,500	4,500	5,500
4-year college/university	3,000	S	D	2,500	S	D
Other educational institution	3,500	2,000	3,500	2,000	D	D
Government	4,500	2,500	D	4,000	D	3,000
Master's degrees, all fields	50,000	26,500	27,500	43,000	14,000	28,000
Business/industry	39,500	20,500	13,000	35,500	12,000	23,000
4-year college/university	13,500	7,500	8,500	10,000	4,000	9,000
Other educational institution	25,000	11,500	23,000	18,000	5,000	12,000
Government	18,500	9,000	6,000	16,000	6,000	12,500
S&E fields	25,000	16,000	11,000	21,500	9,500	14,500
Business/industry	20,500	13,000	5,000	17,500	9,000	11,500
4-year college/university	8,000	5,000	4,000	5,500	3,000	4,000
Other educational institution	11,000	5,000	8,500	7,000	2,000	6,000
Government	10,500	6,000	2,500	8,500	4,000	6,500
Sciences	22,000	12,500	10,500	19,000	8,500	14,000
Business/industry	17,000	10,000	5,000	15,500	7,500	10,500
4-year college/university	7,500	4,500	4,000	5,500	3,000	4,000
Other educational institution	10,500	4,500	8,500	7,000	2,000	6,000
Government	9,500	5,000	2,500	8,000	3,500	6,000
Biological/agricultural/environmental life sciences	9,000	5,000	4,000	7,500	2,500	5,000
Business/industry	7,000	3,500	2,000	6,000	1,500	4,500
4-year college/university	3,500	2,500	2,000	3,000	2,000	1,500
Other educational institution	3,500	1,500	3,000	2,000	D	1,500
Government	4,500	2,500	1,500	4,000	500	2,500
Agricultural/food sciences	3,500	2,500	1,500	3,000	S	2,000
Business/industry	2,500	1,500	1,000	2,500	D	2,000
4-year college/university	2,500	1,500	S	2,000	D	D
Other educational institution	1,000	D	1,000	500	D	D
Government	1,000	1,000	500	1,000	D	*
Biological sciences	8,000	4,500	3,500	6,500	2,500	4,000
Business/industry	6,000	3,500	2,000	5,000	1,500	3,500
4-year college/university	3,000	2,000	1,500	2,500	2,000	1,000
Other educational institution	3,500	1,500	3,000	2,000	D	S
Government	3,500	1,500	S	3,000	500	2,000
Environmental life sciences	4,500	2,500	1,500	4,000	1,000	2,500
Business/industry	3,000	1,500	D	2,500	500	2,000
4-year college/university	1,000	500	S	1,000	D	D
Other educational institution	1,000	D	500	D	D	D
Government	3,000	1,500	D	2,500	D	1,500
Computer/mathematical sciences	11,000	7,500	4,000	8,500	7,000	5,000
Business/industry	9,500	6,500	1,500	7,500	7,000	4,000
4-year college/university	3,500	2,000	2,000	2,500	2,000	2,000
Other educational institution	3,500	2,000	3,000	2,000	1,500	500
Government	3,500	2,500	S	3,000	2,000	1,500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Computer/information sciences	9,500	6,500	3,000	8,000	6,500	4,000
Business/industry	8,500	5,500	1,500	7,000	6,500	3,500
4-year college/university	2,500	2,000	1,000	1,500	2,000	1,500
Other educational institution	2,500	1,500	2,000	1,500	1,500	*
Government	3,000	2,000	S	2,500	1,500	1,500
Mathematical sciences	5,500	3,500	3,000	4,500	3,000	2,500
Business/industry	4,500	3,000	1,500	4,000	2,500	2,000
4-year college/university	2,000	1,000	1,500	2,000	1,000	S
Other educational institution	2,500	2,000	2,500	1,500	500	500
Government	2,500	1,500	D	2,000	1,500	S
Physical/related sciences	6,000	3,500	3,000	5,000	2,500	3,500
Business/industry	5,000	3,000	1,500	4,000	1,500	2,500
4-year college/university	1,500	1,000	1,000	1,000	1,000	1,500
Other educational institution	3,000	1,000	2,500	2,000	D	S
Government	2,500	1,500	500	2,000	2,000	2,000
Chemistry, except biochemistry	3,500	2,000	2,000	3,000	1,000	2,000
Business/industry	3,000	2,000	1,500	2,500	1,000	1,500
4-year college/university	1,500	1,000	500	S	D	S
Other educational institution	1,500	*	1,500	1,500	D	S
Government	1,000	500	D	500	D	1,000
Earth/atmospheric/ocean sciences	4,000	2,000	1,500	3,500	2,000	2,500
Business/industry	3,000	2,000	D	3,000	1,000	2,000
4-year college/university	1,000	1,000	500	500	500	S
Other educational institution	2,000	500	1,500	1,500	D	D
Government	2,500	1,500	D	2,000	2,000	1,500
Physics/astronomy	3,000	2,000	1,500	2,500	1,500	1,500
Business/industry	2,500	1,500	D	2,500	1,500	1,500
4-year college/university	1,000	1,000	500	500	500	*
Other educational institution	1,500	1,000	1,500	1,000	D	D
Government	1,000	500	D	500	S	*
Other physical sciences	1,500	1,000	500	1,500	D	*
Business/industry	1,500	D	D	S	D	D
4-year college/university	*	*	D	D	D	D
Other educational institution	S	D	500	D	D	D
Government	*	D	D	D	D	D
Social/related sciences	15,500	8,500	7,500	14,500	4,500	11,500
Business/industry	12,500	6,000	4,000	11,500	3,500	8,500
4-year college/university	5,000	3,000	2,500	3,500	1,000	2,500
Other educational institution	8,500	3,500	6,500	5,500	1,500	5,500
Government	8,000	4,000	2,000	6,500	2,000	5,000
Economics	6,000	3,000	2,000	5,500	2,000	3,000
Business/industry	5,500	2,500	S	5,500	2,000	2,500
4-year college/university	1,000	1,000	1,000	500	500	D
Other educational institution	1,500	S	1,000	S	D	D
Government	1,500	1,000	D	1,500	D	500
Political/related sciences	8,500	4,000	2,500	7,500	1,500	4,500
Business/industry	6,500	3,000	S	6,000	1,500	3,500
4-year college/university	2,000	1,500	1,000	1,500	D	1,000
Other educational institution	2,500	1,500	1,500	2,000	D	D
Government	4,500	2,000	500	4,000	*	2,500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Psychology	12,500	5,500	6,500	10,500	3,000	9,500
Business/industry	8,500	4,500	3,500	7,500	2,000	7,000
4-year college/university	3,000	2,000	2,000	2,500	1,000	2,000
Other educational institution	7,500	3,000	6,000	5,000	S	5,500
Government	6,000	2,500	1,500	5,000	2,000	4,000
Sociology/anthropology	5,000	3,000	2,500	4,000	1,000	3,500
Business/industry	3,000	2,000	1,500	3,000	1,000	2,000
4-year college/university	3,000	1,500	1,000	2,000	D	2,000
Other educational institution	2,000	1,500	2,000	1,500	D	500
Government	2,500	1,500	S	2,000	S	2,000
Other social sciences	5,000	3,000	3,000	4,000	1,500	3,000
Business/industry	3,500	1,500	500	3,000	1,000	2,500
4-year college/university	2,000	2,000	1,000	1,500	500	1,000
Other educational institution	3,000	1,500	3,000	2,000	D	1,500
Government	2,500	1,000	*	2,000	500	2,000
Engineering	11,000	8,500	2,500	9,500	5,000	5,000
Business/industry	10,500	7,500	1,500	9,000	5,000	4,500
4-year college/university	2,500	2,000	1,500	1,000	1,500	1,000
Other educational institution	1,500	S	1,000	500	D	500
Government	4,500	3,000	500	4,000	1,500	2,000
Aerospace/related engineering	2,000	2,000	500	2,000	1,000	1,500
Business/industry	2,000	1,500	500	1,500	500	1,500
4-year college/university	500	500	500	*	*	*
Other educational institution	D	D	D	D	D	D
Government	1,000	1,000	D	1,000	S	500
Chemical engineering	3,000	2,000	S	2,500	1,500	1,500
Business/industry	2,500	1,500	*	2,500	1,500	1,500
4-year college/university	500	500	*	D	*	*
Other educational institution	S	D	S	D	D	D
Government	1,000	500	D	S	D	D
Civil/architectural engineering	5,000	3,500	1,000	4,500	2,000	2,500
Business/industry	4,500	3,000	D	4,000	2,000	2,000
4-year college/university	1,000	500	500	500	D	D
Other educational institution	500	D	S	D	D	D
Government	2,500	1,500	D	2,000	500	1,500
Electrical/computer engineering	7,000	5,000	1,500	6,000	4,000	3,000
Business/industry	7,000	5,000	1,500	5,500	4,000	3,000
4-year college/university	1,500	1,500	1,000	500	1,000	S
Other educational institution	500	D	S	D	D	D
Government	1,500	1,500	D	1,500	1,000	500
Industrial engineering	3,000	2,000	1,000	2,500	1,500	2,000
Business/industry	2,500	2,000	*	2,500	1,500	1,500
4-year college/university	1,000	1,000	S	*	D	*
Other educational institution	D	D	D	D	D	D
Government	1,500	1,000	D	1,500	*	S
Mechanical engineering	4,500	3,500	1,000	4,000	2,000	2,000
Business/industry	4,000	3,000	*	3,500	2,000	1,500
4-year college/university	1,500	1,000	1,000	500	1,000	500
Other educational institution	500	D	500	D	D	D
Government	2,000	1,000	D	1,500	S	1,000

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Other engineering	5,500	4,000	1,000	5,000	2,000	3,000
Business/industry	5,000	3,500	500	4,500	2,000	2,500
4-year college/university	1,000	1,000	500	500	500	S
Other educational institution	1,000	D	500	500	D	D
Government	2,500	2,000	D	2,500	1,000	1,000
S&E-related fields	21,500	11,000	13,000	17,000	5,000	17,000
Business/industry	18,000	9,500	8,500	13,500	4,000	14,500
4-year college/university	7,000	3,500	5,000	5,000	1,500	5,000
Other educational institution	11,500	4,500	10,000	7,500	3,000	7,500
Government	8,500	4,000	3,500	7,000	2,000	6,500
Health	17,500	8,500	10,500	13,500	3,500	15,500
Business/industry	15,500	7,500	8,000	11,500	2,500	13,500
4-year college/university	7,000	3,500	4,500	5,000	1,500	5,000
Other educational institution	8,000	2,500	6,500	5,000	D	6,500
Government	7,000	3,000	3,500	5,500	1,500	6,000
Science/mathematics teacher education	9,500	4,500	8,000	7,000	3,000	4,500
Business/industry	4,000	2,000	S	3,000	1,000	3,000
4-year college/university	1,500	1,000	1,500	1,000	D	D
Other educational institution	8,500	3,500	8,000	6,500	2,500	3,000
Government	3,000	S	S	1,500	D	1,500
Technology/technical fields	4,500	3,000	2,000	4,000	2,500	2,000
Business/industry	4,000	2,500	D	3,500	2,500	2,000
4-year college/university	500	D	D	S	D	D
Other educational institution	2,000	D	S	D	D	D
Government	2,000	D	D	S	D	D
Other S&E-related fields	7,000	5,000	1,000	6,000	1,000	5,000
Business/industry	5,500	4,500	D	4,500	1,000	4,000
4-year college/university	1,500	D	1,000	S	D	D
Other educational institution	2,000	D	D	D	D	D
Government	3,500	2,500	D	3,500	D	3,000
Non-S&E fields	37,000	17,500	21,000	33,500	10,000	20,500
Business/industry	28,500	13,500	7,500	27,000	8,000	16,500
4-year college/university	9,000	4,500	6,500	7,000	2,500	5,500
Other educational institution	21,500	9,500	18,500	16,000	4,000	9,500
Government	13,500	6,000	4,500	12,000	3,500	9,000
Arts/humanities	8,500	4,000	5,000	6,500	2,000	5,000
Business/industry	6,000	3,000	1,500	5,000	2,000	4,000
4-year college/university	3,000	1,500	3,000	1,500	500	2,500
Other educational institution	4,000	2,500	4,000	2,500	D	D
Government	2,500	1,000	D	2,000	D	2,000
Education, except science/mathematics teacher education	23,500	9,500	17,000	18,500	4,500	11,000
Business/industry	10,000	4,500	4,500	8,500	1,500	6,000
4-year college/university	5,000	3,000	4,000	4,000	D	3,000
Other educational institution	19,000	8,500	17,000	14,000	4,000	8,000
Government	5,000	2,500	2,500	4,500	1,500	3,000
Management/administration	25,500	11,500	6,000	25,000	7,500	12,500
Business/industry	23,000	11,000	4,000	22,500	7,000	12,000
4-year college/university	4,000	2,500	2,000	4,000	1,500	2,000
Other educational institution	5,500	1,500	4,500	4,000	D	2,500
Government	8,000	3,500	1,500	7,500	2,500	4,000

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Sales/marketing	8,500	4,500	2,000	8,000	2,000	4,000
Business/industry	8,000	4,500	D	7,500	2,000	4,000
4-year college/university	D	D	D	D	D	D
Other educational institution	1,500	D	S	D	D	D
Government	S	D	D	D	D	D
Social services/related	13,500	6,000	7,500	10,500	2,500	10,000
Business/industry	11,000	4,500	5,000	9,000	2,000	8,500
4-year college/university	3,000	1,500	2,500	2,500	D	2,500
Other educational institution	5,000	2,000	3,500	3,500	D	4,000
Government	5,500	2,500	2,500	4,500	D	5,000
Other non-S&E fields	14,000	6,500	6,500	12,500	4,000	8,000
Business/industry	9,500	4,500	3,000	8,500	3,000	6,000
4-year college/university	5,000	2,000	3,000	4,000	S	3,000
Other educational institution	5,500	2,500	4,500	4,000	S	2,500
Government	8,500	4,000	2,500	8,000	2,000	5,000
Doctoral degrees, all fields	10,000	7,500	6,000	7,500	2,500	6,000
Business/industry	6,500	5,000	2,500	5,000	2,000	4,500
4-year college/university	6,000	5,000	4,500	3,500	1,000	3,000
Other educational institution	4,500	2,500	3,500	3,000	1,000	2,500
Government	3,500	3,000	1,000	2,500	1,500	1,500
S&E fields	5,500	5,000	3,000	4,000	2,500	3,000
Business/industry	4,000	3,500	1,000	3,500	2,000	2,500
4-year college/university	4,000	3,500	2,500	2,000	1,000	1,500
Other educational institution	1,500	500	1,500	500	1,000	500
Government	2,000	1,500	500	1,500	500	1,000
Sciences	5,000	4,500	3,000	3,500	2,000	2,500
Business/industry	4,000	3,000	1,000	3,000	1,500	2,500
4-year college/university	3,500	3,000	2,500	2,000	1,000	1,500
Other educational institution	1,500	500	1,500	500	S	500
Government	2,000	1,500	500	1,500	500	1,000
Biological/agricultural/environmental life sciences	3,000	3,000	2,000	2,500	1,500	1,500
Business/industry	2,500	2,000	500	2,000	1,000	1,000
4-year college/university	2,500	2,500	1,500	1,500	500	1,000
Other educational institution	1,000	500	1,000	500	D	500
Government	1,500	1,000	500	1,000	500	500
Agricultural/food sciences	1,000	1,000	500	1,000	500	500
Business/industry	1,000	1,000	*	1,000	*	500
4-year college/university	500	500	500	500	*	500
Other educational institution	500	D	500	*	D	D
Government	500	500	D	500	D	500
Biological sciences	3,000	3,000	2,000	2,500	1,500	1,500
Business/industry	2,500	2,000	500	2,000	1,000	1,000
4-year college/university	2,500	2,000	1,500	1,500	500	1,000
Other educational institution	1,000	500	1,000	500	D	500
Government	1,500	1,000	500	1,000	500	500
Environmental life sciences	500	500	500	500	*	500
Business/industry	500	500	*	500	*	*
4-year college/university	500	500	500	500	D	*
Other educational institution	*	D	*	D	D	D
Government	500	500	*	500	*	*

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Computer/mathematical sciences	2,000	1,500	1,000	1,500	1,000	1,500
Business/industry	2,000	1,500	*	1,500	1,000	1,500
4-year college/university	1,500	1,500	1,000	500	500	500
Other educational institution	500	*	500	*	*	*
Government	500	500	D	500	500	*
Computer/information sciences	1,500	1,000	1,000	1,500	1,000	1,500
Business/industry	1,500	1,000	*	1,500	1,000	S
4-year college/university	1,000	1,000	1,000	500	500	500
Other educational institution	*	D	*	D	*	D
Government	500	500	D	*	*	D
Mathematical sciences	1,500	1,000	1,000	1,000	1,000	500
Business/industry	1,000	1,000	*	1,000	500	500
4-year college/university	1,000	1,000	1,000	500	500	500
Other educational institution	500	*	500	*	D	*
Government	500	500	D	500	500	*
Physical/related sciences	2,000	2,000	1,500	1,500	1,000	1,000
Business/industry	2,000	1,500	500	1,500	1,000	1,000
4-year college/university	1,500	1,500	1,500	1,000	500	500
Other educational institution	500	500	500	500	*	500
Government	1,000	1,000	*	500	500	500
Chemistry, except biochemistry	1,500	1,500	1,000	1,500	500	1,000
Business/industry	1,500	1,500	500	1,500	500	1,000
4-year college/university	1,000	1,000	1,000	500	500	500
Other educational institution	500	*	500	500	D	*
Government	1,000	1,000	D	500	*	500
Earth/atmospheric/ocean sciences	1,000	1,000	1,000	1,000	500	500
Business/industry	500	500	500	500	500	500
4-year college/university	1,000	1,000	500	500	500	500
Other educational institution	500	*	*	*	D	D
Government	500	500	D	500	*	500
Physics/astronomy	1,500	1,500	1,000	1,000	1,000	500
Business/industry	1,000	1,000	500	1,000	500	500
4-year college/university	1,000	1,000	1,000	500	500	500
Other educational institution	500	*	500	*	D	*
Government	500	500	D	500	500	500
Other physical sciences	500	500	500	500	*	*
Business/industry	500	500	D	*	D	*
4-year college/university	500	500	500	*	D	D
Other educational institution	D	D	D	D	D	D
Government	*	*	D	*	D	D
Social/related sciences	2,500	2,000	1,500	2,000	500	2,000
Business/industry	2,000	1,500	500	1,500	500	1,500
4-year college/university	2,000	1,500	1,500	1,000	500	1,000
Other educational institution	1,000	500	500	500	*	500
Government	1,000	1,000	500	1,000	500	1,000
Economics	1,000	1,000	1,000	1,000	500	500
Business/industry	500	500	*	500	500	500
4-year college/university	1,000	1,000	1,000	500	*	500
Other educational institution	*	*	*	*	D	D
Government	500	500	D	500	*	500

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Political/related sciences	1,000	1,000	1,000	1,000	*	1,000
Business/industry	1,000	500	*	1,000	*	500
4-year college/university	1,000	1,000	1,000	500	*	500
Other educational institution	500	*	500	*	D	*
Government	500	500	D	500	D	500
Psychology	2,000	1,500	1,000	1,500	500	1,500
Business/industry	1,500	1,000	500	1,000	500	1,500
4-year college/university	1,500	1,000	1,000	1,000	500	1,000
Other educational institution	500	500	500	500	*	500
Government	1,000	500	500	500	*	500
Sociology/anthropology	1,000	1,000	1,000	1,000	500	500
Business/industry	500	500	*	500	*	500
4-year college/university	1,000	1,000	1,000	500	*	500
Other educational institution	500	*	500	*	D	*
Government	500	500	D	500	*	500
Other social sciences	1,000	1,000	1,000	500	*	500
Business/industry	500	500	*	500	*	500
4-year college/university	1,000	1,000	1,000	500	*	500
Other educational institution	500	*	500	*	D	*
Government	500	500	D	500	D	*
Engineering	2,500	2,000	1,000	1,500	1,500	1,000
Business/industry	2,000	2,000	500	1,500	1,500	1,000
4-year college/university	1,500	1,500	1,000	500	500	500
Other educational institution	500	D	500	*	D	*
Government	1,000	500	*	500	500	500
Aerospace/related engineering	1,000	1,000	500	500	500	*
Business/industry	1,000	1,000	D	500	500	*
4-year college/university	500	500	500	*	D	*
Other educational institution	D	D	D	D	D	D
Government	500	500	D	*	D	D
Chemical engineering	1,000	1,000	500	1,000	500	500
Business/industry	1,000	1,000	*	500	500	500
4-year college/university	500	500	500	500	D	*
Other educational institution	*	D	D	D	D	D
Government	500	500	D	*	*	*
Civil/architectural engineering	1,000	1,000	500	1,000	500	500
Business/industry	1,000	500	D	500	500	500
4-year college/university	500	500	500	500	*	*
Other educational institution	D	D	D	D	D	D
Government	500	500	D	500	D	*
Electrical/computer engineering	1,500	1,500	1,000	1,000	1,000	500
Business/industry	1,500	1,000	*	1,000	1,000	500
4-year college/university	1,000	1,000	1,000	500	500	500
Other educational institution	*	D	*	D	D	D
Government	500	500	D	500	*	D
Industrial engineering	500	500	500	500	500	500
Business/industry	500	500	D	500	500	*
4-year college/university	500	500	500	*	D	*
Other educational institution	D	D	D	D	D	D
Government	*	D	D	*	D	D

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Mechanical engineering	1,000	1,000	500	1,000	500	500
Business/industry	1,000	1,000	D	500	500	500
4-year college/university	500	500	500	500	*	*
Other educational institution	*	D	*	D	D	D
Government	500	500	D	500	*	*
Other engineering	1,500	1,500	500	1,000	500	500
Business/industry	1,500	1,000	*	1,000	500	500
4-year college/university	1,000	1,000	500	500	500	500
Other educational institution	*	D	*	*	D	D
Government	500	500	D	500	*	500
S&E-related fields	4,000	3,500	2,000	2,500	1,000	2,500
Business/industry	2,500	2,500	500	1,500	1,000	2,500
4-year college/university	2,000	2,000	1,500	1,000	500	1,000
Other educational institution	1,500	1,000	1,500	1,000	D	500
Government	2,500	2,000	S	1,500	500	1,000
Health	3,000	2,500	1,500	2,000	1,000	2,500
Business/industry	2,000	1,500	500	1,500	500	2,000
4-year college/university	1,500	1,000	1,000	1,000	*	1,000
Other educational institution	1,000	S	S	*	D	*
Government	2,000	2,000	S	1,500	500	1,000
Science/mathematics teacher education	1,500	1,500	1,500	1,000	D	D
Business/industry	D	D	D	D	D	D
4-year college/university	1,000	1,000	1,000	500	D	D
Other educational institution	1,500	D	1,000	D	D	D
Government	D	D	D	D	D	D
Technology/technical fields	1,500	1,500	D	S	1,000	D
Business/industry	1,000	1,000	D	D	1,000	D
4-year college/university	S	S	D	D	D	D
Other educational institution	D	D	D	D	D	D
Government	D	D	D	D	D	D
Other S&E-related fields	1,500	1,500	500	500	D	D
Business/industry	D	D	D	D	D	D
4-year college/university	500	500	500	D	D	D
Other educational institution	D	D	D	D	D	D
Government	D	D	D	D	D	D
Non-S&E fields	8,000	4,500	5,000	6,000	1,500	4,500
Business/industry	5,000	2,500	2,500	4,000	1,000	3,500
4-year college/university	4,500	3,000	3,500	2,500	500	2,500
Other educational institution	4,000	2,500	3,000	3,000	D	2,000
Government	2,000	S	D	S	S	D
Arts/humanities	2,500	2,000	1,500	2,000	D	2,000
Business/industry	1,500	S	D	500	D	S
4-year college/university	2,000	1,500	1,500	1,500	D	1,000
Other educational institution	500	D	500	D	D	D
Government	D	D	D	D	D	D
Education, except science/mathematics teacher education	6,000	3,000	4,000	5,000	S	3,500
Business/industry	3,000	2,000	1,500	2,500	D	2,000
4-year college/university	3,000	2,000	2,500	2,000	D	2,000
Other educational institution	3,500	2,000	3,000	3,000	D	2,000
Government	S	D	D	D	D	D

TABLE A-7. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree, employment sector, and primary/secondary work activity: 2008

Level and field of highest degree and employment sector	Employed scientists and engineers	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, administration	Computer applications	Other
Management/administration	2,500	2,000	1,500	2,000	D	S
Business/industry	2,000	S	D	2,000	D	D
4-year college/university	1,500	1,500	1,500	1,000	D	D
Other educational institution	D	D	D	D	D	D
Government	D	D	D	D	D	D
Sales/marketing	1,000	1,000	1,000	D	D	D
Business/industry	D	D	D	D	D	D
4-year college/university	1,000	1,000	1,000	D	D	D
Other educational institution	D	D	D	D	D	D
Government	D	D	D	D	D	D
Social services/related	3,500	2,000	2,500	2,500	S	2,000
Business/industry	2,000	D	1,500	2,000	D	1,500
4-year college/university	2,000	1,500	1,500	1,000	D	S
Other educational institution	S	D	S	D	D	D
Government	D	D	D	D	D	D
Other non-S&E fields	3,500	2,000	1,500	3,000	S	2,000
Business/industry	3,000	1,500	D	3,000	D	2,000
4-year college/university	1,500	1,000	1,500	500	D	D
Other educational institution	D	D	D	D	D	D
Government	500	D	D	D	D	D

\* = standard error is not computed when value < 500. D = standard error is not computed when value is suppressed to avoid disclosure of confidential information. S = suppressed; data cell not published.

S&E = science and engineering.

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

NOTES: Scientists and engineers include any person who has ever received bachelor's or higher degree in S&E or S&E-related field through 30 June 2007, plus any person holding non-S&E bachelor's or higher degree who was employed in S&E or S&E-related occupation on 1 October 2003. See <http://sestat.nsf.gov/docs/ed03maj.html> for detailed description of educational field classification, and see <http://sestat.nsf.gov/docs/occ03maj.html> for detailed description of occupational classification. Business/industry includes self-employed individuals, nonprofit organizations, and other unspecified types of employers. Four-year college/university includes medical schools and university-affiliated research institutes. Other educational institution includes 2-year colleges, precollege institutions, and other educational institutions. Government includes federal (civilian), military, state, and local employers. Standard errors are rounded up to nearest 500.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, Scientists and Engineers Statistical Data System (SESTAT): 2008.