

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
All degree levels and occupations ^a	81,000	73,000	24,000	34,000	37,000
U.S. citizen	80,500	72,500	23,000	33,500	36,500
Native-born	78,500	67,000	21,500	32,500	36,000
Naturalized	25,500	22,500	8,000	9,000	11,000
Non-U.S. citizen	15,500	14,500	5,000	5,500	4,000
Permanent resident	15,000	14,000	4,000	5,000	4,000
Temporary resident	6,500	6,000	3,000	1,500	1,000
S&E occupations	45,000	36,500	12,500	7,500	17,000
U.S. citizen	43,500	36,000	11,500	7,500	17,000
Native-born	39,500	31,500	11,000	7,000	15,500
Naturalized	13,500	12,000	3,500	2,000	5,000
Non-U.S. citizen	8,500	7,500	4,500	1,000	2,000
Permanent resident	7,500	7,000	3,500	500	2,000
Temporary resident	5,000	4,500	3,000	S	1,000
Science occupations	36,000	28,000	11,500	7,500	14,500
U.S. citizen	34,500	27,500	10,500	7,500	14,000
Native-born	31,500	24,000	10,000	7,500	13,000
Naturalized	12,000	10,500	3,500	2,000	3,500
Non-U.S. citizen	8,000	7,000	4,000	1,000	1,500
Permanent resident	7,000	6,000	3,500	500	1,500
Temporary resident	4,000	3,500	2,500	S	500
Biological/agricultural/other life scientists	12,500	8,500	7,000	2,500	6,500
U.S. citizen	12,500	8,500	6,500	2,500	6,500
Native-born	11,500	7,500	6,000	2,500	6,500
Naturalized	4,000	3,000	2,500	500	2,000
Non-U.S. citizen	3,500	2,000	3,000	*	1,000
Permanent resident	3,500	2,000	3,000	*	1,000
Temporary resident	1,500	1,000	1,000	D	*
Agricultural/food scientists	5,500	4,500	2,000	D	3,000
U.S. citizen	5,500	4,500	2,000	D	3,000
Native-born	5,500	4,000	2,000	D	3,000
Naturalized	1,500	1,500	*	D	*
Non-U.S. citizen	1,500	500	1,000	D	D
Permanent resident	1,500	500	S	D	D
Temporary resident	500	*	500	D	D
Biological/medical scientists	10,000	6,500	5,500	*	5,500
U.S. citizen	10,000	6,500	5,500	*	5,500
Native-born	9,000	6,000	5,000	*	5,000
Naturalized	4,000	3,000	2,500	D	1,500
Non-U.S. citizen	3,000	2,000	2,500	D	1,000
Permanent resident	3,000	1,500	2,500	D	500
Temporary resident	1,500	1,000	1,000	D	*
Environmental life scientists	4,000	2,500	1,000	D	3,500
U.S. citizen	4,000	2,000	500	D	3,500
Native-born	4,000	2,000	500	D	3,500
Naturalized	S	D	D	D	S
Non-U.S. citizen	S	S	S	D	D
Permanent resident	S	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Postsecondary teachers-life/related sciences	4,500	*	4,000	2,500	S
U.S. citizen	4,500	*	3,500	2,500	S
Native-born	4,000	*	3,000	2,500	S
Naturalized	1,500	D	1,500	500	D
Non-U.S. citizen	1,500	D	1,500	*	D
Permanent resident	1,500	D	1,000	*	D
Temporary resident	500	D	500	D	D
Computer/mathematical scientists	26,000	22,000	7,500	5,000	9,500
U.S. citizen	25,500	21,500	7,000	5,000	9,500
Native-born	22,500	18,500	6,500	5,000	8,500
Naturalized	10,000	9,500	2,000	1,500	3,000
Non-U.S. citizen	7,000	6,500	2,000	500	1,500
Permanent resident	6,000	5,500	1,500	500	1,500
Temporary resident	4,000	3,500	1,500	D	500
Computer/information scientists	24,500	22,000	6,500	4,000	8,000
U.S. citizen	24,500	21,500	6,000	4,000	8,000
Native-born	21,500	18,500	6,000	4,000	7,000
Naturalized	10,000	9,000	2,000	1,500	3,000
Non-U.S. citizen	6,500	6,500	1,500	D	1,500
Permanent resident	6,000	5,500	1,500	D	1,500
Temporary resident	3,500	3,500	1,000	D	500
Mathematical scientists	7,000	5,500	2,000	1,000	4,000
U.S. citizen	6,500	5,500	2,000	S	4,000
Native-born	6,500	5,000	2,000	D	4,000
Naturalized	2,000	2,000	500	D	1,000
Non-U.S. citizen	1,500	1,000	500	D	500
Permanent resident	1,000	1,000	500	D	D
Temporary resident	1,000	1,000	500	D	D
Postsecondary teachers-computer/mathematical sciences	5,000	500	3,500	3,000	S
U.S. citizen	4,500	500	3,000	3,000	S
Native-born	4,500	S	3,000	3,000	S
Naturalized	1,500	D	1,000	1,000	D
Non-U.S. citizen	1,500	D	1,500	500	D
Permanent resident	1,000	D	1,000	*	D
Temporary resident	1,000	D	1,000	D	D
Physical/related scientists	9,000	7,500	3,000	1,500	4,500
U.S. citizen	9,000	7,500	2,500	1,500	4,500
Native-born	8,500	6,500	2,500	1,500	4,500
Naturalized	3,000	3,000	1,000	S	1,000
Non-U.S. citizen	2,500	2,000	1,500	*	500
Permanent resident	2,000	2,000	1,000	D	500
Temporary resident	1,000	500	1,000	D	*
Chemists, except biochemists	6,000	6,000	1,500	D	2,000
U.S. citizen	6,000	5,500	1,000	D	2,000
Native-born	5,000	4,500	1,000	D	2,000
Naturalized	3,000	3,000	1,000	D	500
Non-U.S. citizen	2,000	2,000	500	D	*
Permanent resident	2,000	2,000	500	D	D
Temporary resident	500	500	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Earth/atmospheric/ocean scientists	4,500	3,500	1,000	D	3,000
U.S. citizen	4,500	3,500	1,000	D	3,000
Native-born	4,500	3,000	1,000	D	3,000
Naturalized	1,000	500	500	D	500
Non-U.S. citizen	1,000	500	500	D	*
Permanent resident	500	500	500	D	*
Temporary resident	500	500	500	D	D
Physicists/astronomers	1,500	1,000	1,000	D	1,000
U.S. citizen	1,500	1,000	1,000	D	1,000
Native-born	1,500	1,000	1,000	D	1,000
Naturalized	1,000	500	500	D	500
Non-U.S. citizen	1,000	500	500	D	*
Permanent resident	500	500	500	D	*
Temporary resident	500	*	500	D	*
Postsecondary teachers-physical/related sciences	3,000	S	2,500	1,500	D
U.S. citizen	2,500	S	2,000	1,500	D
Native-born	2,500	D	2,000	1,500	D
Naturalized	1,000	D	1,000	S	D
Non-U.S. citizen	1,000	D	1,000	*	D
Permanent resident	1,000	D	1,000	D	D
Temporary resident	500	D	500	D	D
Other physical/related scientists	4,000	2,500	500	D	2,500
U.S. citizen	4,000	2,500	500	D	2,500
Native-born	4,000	2,500	500	D	2,500
Naturalized	500	500	D	D	S
Non-U.S. citizen	500	500	500	D	D
Permanent resident	500	*	D	D	D
Temporary resident	500	*	*	D	D
Social/related scientists	13,000	9,500	5,000	5,000	5,500
U.S. citizen	12,500	9,500	5,000	5,000	5,500
Native-born	12,000	9,000	5,000	5,000	5,000
Naturalized	3,000	2,500	1,500	1,000	1,000
Non-U.S. citizen	2,000	1,500	2,000	1,000	500
Permanent resident	1,500	1,500	1,000	S	S
Temporary resident	1,500	1,000	1,500	D	*
Economists	2,500	2,000	1,000	D	2,000
U.S. citizen	2,500	2,000	1,000	D	2,000
Native-born	2,500	2,000	1,000	D	2,000
Naturalized	500	500	500	D	*
Non-U.S. citizen	1,000	500	500	D	*
Permanent resident	500	500	*	D	*
Temporary resident	1,000	500	500	D	D
Political/related scientists	3,000	2,500	1,000	D	2,000
U.S. citizen	3,000	2,000	1,000	D	2,000
Native-born	3,000	2,000	1,000	D	2,000
Naturalized	S	D	D	D	D
Non-U.S. citizen	1,000	S	500	D	D
Permanent resident	*	D	*	D	D
Temporary resident	1,000	D	S	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Postsecondary teachers-social/related sciences	5,000	500	4,000	3,000	*
U.S. citizen	5,000	500	4,000	3,000	*
Native-born	5,000	500	3,500	3,000	*
Naturalized	1,000	D	1,000	*	D
Non-U.S. citizen	1,500	D	1,500	*	D
Permanent resident	1,000	D	1,000	*	D
Temporary resident	1,500	D	1,500	D	D
Psychologists	7,000	5,000	2,500	4,000	2,500
U.S. citizen	7,000	5,000	2,500	4,000	2,500
Native-born	7,000	4,500	2,000	4,000	2,500
Naturalized	2,000	1,500	1,000	1,000	500
Non-U.S. citizen	1,000	1,000	1,000	D	D
Permanent resident	1,000	1,000	S	D	D
Temporary resident	1,000	D	500	D	D
Sociologists/anthropologists	2,500	2,000	1,500	500	1,000
U.S. citizen	2,500	2,000	1,500	500	1,000
Native-born	2,500	2,000	1,500	500	1,000
Naturalized	500	S	*	D	*
Non-U.S. citizen	500	*	*	D	D
Permanent resident	*	D	*	D	D
Temporary resident	500	D	*	D	D
Other social/related scientists	8,500	7,000	2,500	1,000	4,000
U.S. citizen	8,500	7,000	2,500	1,000	4,000
Native-born	8,500	7,000	2,500	500	4,000
Naturalized	2,000	1,500	*	D	1,000
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	S	D	D
Temporary resident	500	500	500	D	D
Engineering occupations	20,500	19,000	3,500	1,000	7,500
U.S. citizen	20,000	18,500	3,000	1,000	7,500
Native-born	18,500	17,000	3,000	1,000	7,000
Naturalized	7,500	6,500	1,500	500	3,000
Non-U.S. citizen	4,500	4,500	1,500	D	1,000
Permanent resident	3,500	3,500	1,000	D	1,000
Temporary resident	3,000	2,500	1,500	D	500
Aerospace/aeronautical/astronautical engineers	5,000	4,500	500	D	2,500
U.S. citizen	5,000	4,500	500	D	2,500
Native-born	5,000	4,500	500	D	2,000
Naturalized	2,000	1,500	*	D	1,000
Non-U.S. citizen	1,000	500	500	D	D
Permanent resident	500	500	*	D	D
Temporary resident	500	*	500	D	D
Chemical engineers	4,500	4,000	1,500	D	1,500
U.S. citizen	4,500	4,000	1,500	D	1,500
Native-born	4,500	3,500	1,500	D	1,000
Naturalized	1,500	1,500	*	D	S
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	*	D	D
Temporary resident	500	500	*	D	D

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Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Civil/architectural/sanitary engineers	7,500	6,000	1,000	D	5,000
U.S. citizen	7,500	6,000	1,000	D	5,000
Native-born	7,500	6,000	1,000	D	4,500
Naturalized	3,000	2,500	*	D	2,500
Non-U.S. citizen	1,500	1,500	500	D	1,000
Permanent resident	1,000	1,000	D	D	1,000
Temporary resident	1,000	1,000	500	D	*
Electrical/computer hardware engineers	8,500	8,000	1,500	500	3,000
U.S. citizen	8,500	8,000	1,500	500	3,000
Native-born	7,500	7,000	1,000	D	2,500
Naturalized	4,500	4,500	500	D	1,500
Non-U.S. citizen	3,000	3,000	1,000	D	D
Permanent resident	2,500	2,500	500	D	D
Temporary resident	2,000	2,000	500	D	D
Industrial engineers	5,500	5,500	500	D	1,500
U.S. citizen	5,500	5,000	500	D	1,500
Native-born	5,000	4,500	500	D	1,500
Naturalized	2,500	2,500	D	D	D
Non-U.S. citizen	1,500	1,500	*	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	1,500	1,500	*	D	D
Mechanical engineers	8,500	8,000	1,500	D	2,500
U.S. citizen	8,500	8,000	1,500	D	2,500
Native-born	8,000	7,500	1,000	D	2,500
Naturalized	3,000	2,500	500	D	1,000
Non-U.S. citizen	2,000	1,500	500	D	*
Permanent resident	1,500	1,500	D	D	D
Temporary resident	1,500	1,000	500	D	*
Postsecondary teachers-engineering	2,000	D	2,000	1,000	*
U.S. citizen	2,000	D	2,000	1,000	*
Native-born	2,000	D	1,500	1,000	*
Naturalized	1,000	D	1,000	D	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	500	D	500	D	D
Temporary resident	1,000	D	1,000	D	D
Other engineers	11,000	10,000	1,500	D	4,000
U.S. citizen	10,500	10,000	1,500	D	4,000
Native-born	10,000	9,500	1,500	D	4,000
Naturalized	2,500	2,500	500	D	1,000
Non-U.S. citizen	2,500	2,000	1,000	D	500
Permanent resident	2,000	2,000	1,000	D	500
Temporary resident	1,500	1,500	500	D	*
S&E-related occupations	50,000	39,000	14,000	23,000	17,000
U.S. citizen	49,500	39,000	14,000	23,000	16,500
Native-born	45,000	36,000	13,000	22,000	16,000
Naturalized	17,000	15,000	5,000	5,000	6,000
Non-U.S. citizen	8,000	7,000	2,500	3,000	2,000
Permanent resident	7,500	6,500	2,000	3,000	2,000
Temporary resident	3,000	2,500	1,500	S	D

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Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Health occupations	40,500	35,500	13,500	11,000	15,000
U.S. citizen	40,000	35,000	13,000	11,000	15,000
Native-born	36,500	33,000	12,000	10,500	14,000
Naturalized	14,000	12,500	5,000	2,500	5,500
Non-U.S. citizen	6,500	6,000	2,500	S	2,000
Permanent resident	6,500	6,000	2,000	S	2,000
Temporary resident	2,500	2,000	1,500	D	D
S&E managers, including health	17,000	15,500	3,000	2,000	6,500
U.S. citizen	17,000	15,000	3,000	2,000	6,500
Native-born	16,500	14,500	2,500	1,500	6,500
Naturalized	4,500	4,000	1,000	D	1,500
Non-U.S. citizen	2,500	2,500	500	D	D
Permanent resident	2,500	2,500	500	D	D
Temporary resident	1,000	1,000	D	D	D
S&E precollege teachers	20,000	S	500	19,500	S
U.S. citizen	19,500	S	500	19,500	S
Native-born	19,000	S	500	19,000	S
Naturalized	4,500	D	D	4,500	D
Non-U.S. citizen	2,500	D	D	2,500	D
Permanent resident	2,500	D	D	2,500	D
Temporary resident	S	D	D	S	D
S&E technicians/technologists	14,500	14,000	3,500	2,000	6,000
U.S. citizen	14,000	13,500	3,500	2,000	6,000
Native-born	13,000	12,500	3,000	2,000	6,000
Naturalized	5,500	5,000	1,500	D	2,000
Non-U.S. citizen	3,000	2,500	1,000	D	S
Permanent resident	2,500	2,500	500	D	S
Temporary resident	1,500	1,500	1,000	D	D
Other S&E-related occupations	10,000	9,500	1,500	D	3,500
U.S. citizen	10,000	9,500	S	D	3,500
Native-born	9,500	9,000	D	D	3,000
Naturalized	4,000	3,500	D	D	1,500
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	1,500	1,500	D	D	D
Non-S&E occupations	81,000	69,000	15,500	29,000	29,000
U.S. citizen	79,000	67,000	15,000	28,500	29,000
Native-born	78,000	64,500	14,500	28,000	28,500
Naturalized	18,000	16,000	4,500	7,500	7,500
Non-U.S. citizen	11,000	10,500	2,500	4,000	3,500
Permanent resident	10,500	10,000	2,500	4,000	3,500
Temporary resident	3,500	3,500	1,500	500	D
Arts/humanities/related occupations	14,500	13,000	4,000	3,000	4,000
U.S. citizen	14,500	13,000	4,000	3,000	4,000
Native-born	14,000	12,500	4,000	3,000	4,000
Naturalized	3,500	3,500	S	D	1,500
Non-U.S. citizen	2,500	2,500	*	D	D
Permanent resident	2,500	2,500	D	D	D
Temporary resident	1,000	S	D	D	D

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Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Management-related occupations	31,000	27,500	6,000	4,000	12,000
U.S. citizen	30,500	26,500	6,000	4,000	12,000
Native-born	28,500	26,000	5,500	4,000	12,000
Naturalized	8,500	7,500	2,500	S	3,000
Non-U.S. citizen	5,500	5,500	500	D	1,000
Permanent resident	5,000	5,000	S	D	S
Temporary resident	1,500	1,500	D	D	D
Non-S&E managers	28,500	25,000	5,500	8,500	10,000
U.S. citizen	28,000	24,500	5,500	8,500	10,000
Native-born	27,500	24,000	5,500	8,000	9,500
Naturalized	7,000	6,500	2,000	1,500	2,500
Non-U.S. citizen	4,500	4,500	1,000	D	D
Permanent resident	4,000	4,000	500	D	D
Temporary resident	1,500	1,500	D	D	D
Non-S&E postsecondary teachers	8,500	3,000	7,000	4,000	1,000
U.S. citizen	8,000	2,500	7,000	4,000	1,000
Native-born	8,000	2,500	7,000	4,000	1,000
Naturalized	2,000	D	1,500	1,000	D
Non-U.S. citizen	1,500	D	1,500	D	D
Permanent resident	1,500	D	1,500	D	D
Temporary resident	1,000	D	1,000	D	D
Non-S&E precollege/other teachers	24,500	4,500	1,000	24,000	2,500
U.S. citizen	24,000	4,500	1,000	23,500	2,500
Native-born	23,500	4,500	1,000	23,000	2,500
Naturalized	6,500	1,500	D	6,500	D
Non-U.S. citizen	4,000	D	D	4,000	D
Permanent resident	4,000	D	D	4,000	D
Temporary resident	*	D	D	*	D
Sales/marketing occupations	33,000	33,000	2,500	2,500	2,000
U.S. citizen	32,500	32,500	2,500	2,500	2,000
Native-born	31,000	31,000	2,500	2,500	1,500
Naturalized	9,000	8,500	D	D	D
Non-U.S. citizen	4,500	4,500	D	D	D
Permanent resident	4,500	4,500	D	D	D
Temporary resident	1,500	1,500	D	D	D
Social services/related occupations	19,500	16,000	4,500	7,500	11,000
U.S. citizen	19,500	16,000	4,500	7,500	11,000
Native-born	18,000	15,500	4,000	7,000	10,500
Naturalized	5,000	4,000	2,000	2,000	3,000
Non-U.S. citizen	2,500	2,500	500	D	S
Permanent resident	2,500	2,500	D	D	S
Temporary resident	500	D	D	D	D
Other non-S&E occupations	46,000	39,500	8,500	9,000	22,500
U.S. citizen	45,500	39,000	8,000	9,000	22,500
Native-born	43,500	37,000	7,500	8,500	21,500
Naturalized	13,500	12,000	2,000	2,500	6,000
Non-U.S. citizen	6,500	6,000	2,000	S	2,500
Permanent resident	6,000	5,500	2,000	S	2,500
Temporary resident	2,500	2,500	1,000	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Bachelor's degrees, all occupations	66,500	62,000	16,500	25,500	31,000
U.S. citizen	66,500	62,000	16,000	25,500	30,500
Native-born	62,000	57,000	14,000	25,000	29,500
Naturalized	22,000	18,500	6,000	7,000	9,000
Non-U.S. citizen	12,000	10,500	3,000	4,500	3,500
Permanent resident	11,000	10,000	2,500	4,000	3,000
Temporary resident	4,500	4,000	2,000	D	*
S&E occupations	33,000	28,500	9,000	4,500	14,000
U.S. citizen	32,500	28,000	9,000	4,500	14,000
Native-born	30,000	25,000	8,500	4,500	13,000
Naturalized	10,000	10,000	2,500	1,500	4,000
Non-U.S. citizen	6,000	5,500	2,500	D	1,000
Permanent resident	5,500	5,000	2,000	D	1,000
Temporary resident	3,000	2,500	1,500	D	*
Science occupations	26,000	22,000	8,500	5,000	12,000
U.S. citizen	26,000	22,000	8,500	4,500	11,500
Native-born	24,000	20,000	8,000	4,500	11,000
Naturalized	9,000	8,500	2,500	1,500	3,000
Non-U.S. citizen	5,000	4,500	2,500	D	1,000
Permanent resident	4,500	4,500	2,000	D	1,000
Temporary resident	2,500	2,000	1,500	D	D
Biological/agricultural/other life scientists	10,000	7,000	5,000	S	6,000
U.S. citizen	10,000	7,000	5,000	S	6,000
Native-born	9,500	6,500	4,500	S	5,500
Naturalized	3,000	2,000	2,000	D	1,500
Non-U.S. citizen	2,000	1,500	1,500	D	D
Permanent resident	2,000	1,500	1,500	D	D
Temporary resident	1,000	D	1,000	D	D
Agricultural/food scientists	5,000	4,000	1,500	D	3,000
U.S. citizen	5,000	4,000	1,500	D	3,000
Native-born	5,000	4,000	1,500	D	3,000
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Biological/medical scientists	8,000	5,000	4,500	D	4,500
U.S. citizen	7,500	5,000	4,000	D	4,500
Native-born	7,000	4,500	4,000	D	4,000
Naturalized	3,000	2,000	2,000	D	1,000
Non-U.S. citizen	1,500	1,000	1,500	D	D
Permanent resident	1,500	1,000	1,000	D	D
Temporary resident	1,000	D	1,000	D	D
Environmental life scientists	3,500	2,000	D	D	2,500
U.S. citizen	3,000	1,500	D	D	2,500
Native-born	3,000	1,500	D	D	2,500
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Postsecondary teachers-life/related sciences	3,000	D	2,500	S	D
U.S. citizen	3,000	D	2,500	S	D
Native-born	3,000	D	2,500	S	D
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Computer/mathematical scientists	21,500	19,000	5,500	3,500	8,500
U.S. citizen	22,000	19,000	5,500	3,500	8,500
Native-born	19,500	17,000	5,500	3,500	7,500
Naturalized	8,500	7,500	1,500	1,500	3,000
Non-U.S. citizen	4,500	4,500	1,500	D	1,000
Permanent resident	4,500	4,500	S	D	1,000
Temporary resident	2,000	2,000	1,000	D	D
Computer/information scientists	21,000	18,500	5,500	3,500	7,500
U.S. citizen	21,500	19,000	5,500	3,500	7,000
Native-born	19,500	17,000	5,000	3,500	6,500
Naturalized	8,000	7,500	1,500	1,500	3,000
Non-U.S. citizen	4,500	4,500	1,000	D	1,000
Permanent resident	4,500	4,500	D	D	1,000
Temporary resident	2,000	2,000	D	D	D
Mathematical scientists	5,000	4,000	1,000	D	3,500
U.S. citizen	5,000	4,000	1,000	D	3,500
Native-born	5,000	4,000	1,000	D	3,500
Naturalized	1,500	1,500	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Postsecondary teachers-computer/mathematical sciences	2,500	D	2,000	1,500	D
U.S. citizen	2,500	D	2,000	1,500	D
Native-born	2,500	D	2,000	1,500	D
Naturalized	1,000	D	1,000	D	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	D	D	D	D	D
Temporary resident	1,000	D	1,000	D	D
Physical/related scientists	7,500	6,000	2,000	D	4,000
U.S. citizen	7,500	6,000	2,000	D	4,000
Native-born	7,000	5,500	2,000	D	4,000
Naturalized	3,000	2,500	1,000	D	500
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	*	D	D
Temporary resident	500	D	500	D	D
Chemists, except biochemists	5,500	5,000	1,000	D	2,000
U.S. citizen	5,500	5,000	1,000	D	2,000
Native-born	4,500	4,500	1,000	D	2,000
Naturalized	2,500	2,500	D	D	500
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	S	D	D	D
Temporary resident	500	D	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Earth/atmospheric/ocean scientists	3,500	2,500	1,000	D	2,500
U.S. citizen	3,500	2,500	1,000	D	2,500
Native-born	3,500	2,500	1,000	D	2,500
Naturalized	1,000	500	D	D	D
Non-U.S. citizen	*	*	D	D	D
Permanent resident	*	*	D	D	D
Temporary resident	D	D	D	D	D
Physicists/astronomers	1,000	500	500	D	500
U.S. citizen	1,000	500	500	D	500
Native-born	1,000	500	500	D	500
Naturalized	D	D	D	D	D
Non-U.S. citizen	500	D	*	D	D
Permanent resident	D	D	D	D	D
Temporary resident	*	D	*	D	D
Postsecondary teachers-physical/related sciences	1,500	D	1,500	D	D
U.S. citizen	1,500	D	1,500	D	D
Native-born	1,500	D	1,500	D	D
Naturalized	*	D	*	D	D
Non-U.S. citizen	*	D	*	D	D
Permanent resident	D	D	D	D	D
Temporary resident	*	D	*	D	D
Other physical/related scientists	3,500	2,500	D	D	2,500
U.S. citizen	3,500	2,500	D	D	2,500
Native-born	3,500	2,500	D	D	2,500
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Social/related scientists	7,500	6,000	4,000	2,500	3,500
U.S. citizen	7,500	6,000	3,500	2,500	3,500
Native-born	7,500	6,000	3,500	2,500	3,500
Naturalized	2,000	1,500	1,000	D	1,000
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	1,000	D	D	D	D
Temporary resident	1,000	D	1,000	D	D
Economists	1,500	1,000	S	D	1,000
U.S. citizen	1,500	1,000	S	D	1,000
Native-born	1,500	1,000	D	D	1,000
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Political/related scientists	2,000	S	1,000	D	S
U.S. citizen	2,000	S	1,000	D	S
Native-born	1,500	D	1,000	D	S
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Postsecondary teachers-social/related sciences	3,000	D	2,500	2,000	D
U.S. citizen	3,000	D	2,000	2,000	D
Native-born	3,000	D	2,000	2,000	D
Naturalized	D	D	D	D	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Psychologists	3,000	2,000	2,000	2,000	D
U.S. citizen	3,000	2,000	2,000	2,000	D
Native-born	3,000	2,000	1,500	1,500	D
Naturalized	1,000	D	1,000	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Sociologists/anthropologists	2,000	1,500	1,000	D	D
U.S. citizen	2,000	1,500	1,000	D	D
Native-born	1,500	1,500	1,000	D	D
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Other social/related scientists	6,000	5,000	2,500	D	3,000
U.S. citizen	6,000	5,000	2,500	D	3,000
Native-born	6,000	5,000	2,500	D	3,000
Naturalized	1,500	1,500	D	D	D
Non-U.S. citizen	1,000	D	D	D	D
Permanent resident	1,000	D	D	D	D
Temporary resident	D	D	D	D	D
Engineering occupations	17,500	16,500	2,500	1,000	6,500
U.S. citizen	17,500	16,000	2,500	1,000	6,500
Native-born	16,500	15,000	2,500	1,000	6,000
Naturalized	5,500	5,000	1,000	D	2,500
Non-U.S. citizen	3,000	3,000	1,000	D	1,000
Permanent resident	3,000	3,000	S	D	1,000
Temporary resident	2,000	2,000	500	D	D
Aerospace/aeronautical/astronautical engineers	4,000	4,000	500	D	1,500
U.S. citizen	4,000	4,000	500	D	1,500
Native-born	4,000	3,500	500	D	1,500
Naturalized	1,500	1,500	D	D	*
Non-U.S. citizen	500	500	D	D	D
Permanent resident	500	500	D	D	D
Temporary resident	D	D	D	D	D
Chemical engineers	4,000	3,500	S	D	1,000
U.S. citizen	4,000	3,500	S	D	1,000
Native-born	4,000	3,000	S	D	1,000
Naturalized	1,000	1,000	D	D	D
Non-U.S. citizen	500	500	D	D	D
Permanent resident	500	S	D	D	D
Temporary resident	*	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Civil/architectural/sanitary engineers	6,500	5,500	500	D	4,500
U.S. citizen	6,500	5,500	500	D	4,500
Native-born	6,500	5,000	500	D	4,000
Naturalized	2,500	2,000	D	D	2,000
Non-U.S. citizen	1,000	500	D	D	500
Permanent resident	1,000	500	D	D	D
Temporary resident	500	500	D	D	D
Electrical/computer hardware engineers	7,000	6,500	1,000	D	2,500
U.S. citizen	7,000	6,500	1,000	D	2,500
Native-born	6,500	6,000	1,000	D	2,500
Naturalized	3,500	3,500	D	D	1,500
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	1,000	1,000	D	D	D
Industrial engineers	5,000	5,000	D	D	1,500
U.S. citizen	4,500	4,500	D	D	1,500
Native-born	4,500	4,000	D	D	1,500
Naturalized	2,500	2,500	D	D	D
Non-U.S. citizen	1,500	1,500	D	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	S	S	D	D	D
Mechanical engineers	7,000	7,000	1,000	D	2,000
U.S. citizen	7,000	7,000	1,000	D	2,000
Native-born	7,000	6,500	1,000	D	2,000
Naturalized	2,000	2,000	D	D	500
Non-U.S. citizen	1,500	1,000	*	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	1,000	1,000	D	D	D
Postsecondary teachers-engineering	1,500	D	1,500	500	D
U.S. citizen	1,500	D	1,500	500	D
Native-born	1,500	D	1,000	500	D
Naturalized	S	D	D	D	D
Non-U.S. citizen	*	D	*	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Other engineers	9,500	9,000	1,500	D	3,500
U.S. citizen	9,500	8,500	1,500	D	3,500
Native-born	9,000	8,500	1,500	D	3,500
Naturalized	2,000	2,000	*	D	1,000
Non-U.S. citizen	1,500	1,500	D	D	D
Permanent resident	1,500	1,500	D	D	D
Temporary resident	S	S	D	D	D
S&E-related occupations	36,000	33,000	10,000	14,500	14,500
U.S. citizen	35,500	32,000	10,000	14,500	14,500
Native-born	33,000	30,000	9,000	14,000	13,500
Naturalized	13,000	11,500	4,000	4,000	5,000
Non-U.S. citizen	6,000	5,500	2,000	2,500	S
Permanent resident	6,000	5,000	1,500	2,500	S
Temporary resident	2,500	2,000	S	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Health occupations	31,000	28,500	9,500	7,500	13,500
U.S. citizen	30,500	28,000	9,500	7,500	13,000
Native-born	28,000	26,500	8,500	7,500	12,500
Naturalized	11,500	10,500	4,000	D	4,500
Non-U.S. citizen	5,000	4,500	1,500	D	D
Permanent resident	5,000	4,500	S	D	D
Temporary resident	1,500	S	D	D	D
S&E managers, including health	12,000	11,500	2,000	S	4,000
U.S. citizen	12,000	11,000	2,000	S	4,000
Native-born	12,000	11,000	2,000	S	4,000
Naturalized	3,500	3,000	D	D	1,500
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	D	D	D	D	D
S&E precollege teachers	12,500	D	D	12,000	D
U.S. citizen	12,000	D	D	12,000	D
Native-born	12,000	D	D	11,500	D
Naturalized	3,500	D	D	3,500	D
Non-U.S. citizen	2,000	D	D	2,000	D
Permanent resident	2,000	D	D	2,000	D
Temporary resident	D	D	D	D	D
S&E technicians/technologists	13,500	13,000	3,000	2,000	5,500
U.S. citizen	13,500	12,500	3,000	2,000	5,500
Native-born	12,500	12,000	3,000	2,000	5,500
Naturalized	4,500	4,000	1,500	D	1,500
Non-U.S. citizen	2,500	2,500	S	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	1,000	1,000	D	D	D
Other S&E-related occupations	8,500	8,000	1,500	D	2,500
U.S. citizen	8,500	8,000	D	D	2,500
Native-born	8,000	7,500	D	D	2,500
Naturalized	3,500	3,000	D	D	D
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	1,500	1,500	D	D	D
Temporary resident	D	D	D	D	D
Non-S&E occupations	65,000	57,000	10,000	19,500	23,000
U.S. citizen	64,000	56,000	9,500	19,000	22,500
Native-born	60,500	53,000	9,000	19,000	22,000
Naturalized	15,500	13,000	3,500	6,000	6,500
Non-U.S. citizen	8,500	8,000	2,000	3,000	2,500
Permanent resident	8,500	8,000	1,500	3,000	2,500
Temporary resident	3,000	2,500	S	D	D
Arts/humanities/related occupations	12,000	11,000	3,000	2,000	3,500
U.S. citizen	12,000	11,000	3,000	2,000	3,500
Native-born	11,500	11,000	3,000	2,000	3,000
Naturalized	3,000	3,000	D	D	D
Non-U.S. citizen	2,000	S	D	D	D
Permanent resident	2,000	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Management-related occupations	26,000	22,500	5,000	2,500	9,500
U.S. citizen	25,500	22,000	5,000	2,500	9,500
Native-born	23,500	20,500	4,500	2,500	9,000
Naturalized	7,000	6,000	2,000	D	2,500
Non-U.S. citizen	4,000	4,000	D	D	D
Permanent resident	4,000	4,000	D	D	D
Temporary resident	1,000	1,000	D	D	D
Non-S&E managers	21,000	20,000	3,500	3,500	7,500
U.S. citizen	20,500	19,500	3,500	3,500	7,500
Native-born	20,500	19,500	3,000	3,000	7,500
Naturalized	4,500	4,500	1,500	D	1,500
Non-U.S. citizen	3,500	3,500	D	D	D
Permanent resident	3,000	3,500	D	D	D
Temporary resident	D	D	D	D	D
Non-S&E postsecondary teachers	3,500	1,000	3,500	1,500	D
U.S. citizen	3,500	1,000	3,500	1,500	D
Native-born	3,500	1,000	3,500	1,500	D
Naturalized	D	D	D	D	D
Non-U.S. citizen	S	D	S	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Non-S&E precollege/other teachers	18,000	3,500	1,000	18,000	2,500
U.S. citizen	18,000	3,500	1,000	17,500	2,500
Native-born	17,000	3,500	1,000	17,000	2,500
Naturalized	5,000	D	D	5,500	D
Non-U.S. citizen	3,000	D	D	3,000	D
Permanent resident	3,000	D	D	3,000	D
Temporary resident	D	D	D	D	D
Sales/marketing occupations	28,000	28,000	1,000	2,500	1,500
U.S. citizen	28,000	28,000	1,000	2,500	1,500
Native-born	27,000	27,500	1,000	2,500	1,500
Naturalized	7,500	7,500	D	D	D
Non-U.S. citizen	3,500	3,500	D	D	D
Permanent resident	3,500	3,500	D	D	D
Temporary resident	S	S	D	D	D
Social services/related occupations	12,500	9,000	2,500	3,000	8,000
U.S. citizen	12,500	9,000	2,500	3,000	8,000
Native-born	11,500	8,500	2,000	3,000	8,000
Naturalized	4,500	3,000	D	D	2,500
Non-U.S. citizen	1,500	1,000	D	D	D
Permanent resident	1,500	1,000	D	D	D
Temporary resident	D	D	D	D	D
Other non-S&E occupations	37,000	32,000	6,000	6,500	18,500
U.S. citizen	36,500	31,000	6,000	6,500	18,500
Native-born	34,500	29,000	6,000	6,000	17,500
Naturalized	11,500	9,500	1,500	2,500	5,000
Non-U.S. citizen	6,000	5,000	1,500	D	2,500
Permanent resident	5,500	4,500	1,500	D	2,500
Temporary resident	2,000	2,000	S	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Master's degrees, all occupations	50,000	39,500	13,500	25,000	18,500
U.S. citizen	50,000	39,000	13,000	25,500	18,500
Native-born	48,000	37,000	12,500	24,500	18,000
Naturalized	15,000	12,500	3,500	5,500	5,500
Non-U.S. citizen	9,500	8,500	3,500	3,000	2,000
Permanent resident	9,500	8,000	2,500	3,000	2,000
Temporary resident	4,500	4,000	2,500	1,000	500
S&E occupations	23,000	19,000	6,500	6,000	8,500
U.S. citizen	22,500	18,500	6,000	6,000	8,500
Native-born	20,000	16,000	6,000	5,500	8,000
Naturalized	7,500	7,000	2,000	1,500	2,500
Non-U.S. citizen	6,500	5,500	3,000	1,000	1,500
Permanent resident	5,500	5,000	2,500	500	1,500
Temporary resident	4,000	3,500	2,000	S	500
Science occupations	19,000	15,000	6,500	6,000	7,500
U.S. citizen	18,500	14,500	6,000	6,000	7,500
Native-born	17,000	13,000	5,500	5,500	7,000
Naturalized	6,500	6,000	2,000	1,500	2,000
Non-U.S. citizen	6,000	5,000	3,000	1,000	1,500
Permanent resident	5,000	4,500	2,500	500	1,000
Temporary resident	3,500	3,000	2,000	S	500
Biological/agricultural/other life scientists	6,000	4,500	4,000	1,500	3,500
U.S. citizen	6,000	4,000	3,500	1,500	3,500
Native-born	5,500	3,500	3,500	1,500	3,500
Naturalized	2,500	2,000	1,000	D	1,000
Non-U.S. citizen	2,500	1,000	2,000	D	D
Permanent resident	2,000	1,000	2,000	D	D
Temporary resident	1,000	500	1,000	D	D
Agricultural/food scientists	2,500	2,000	2,000	D	1,000
U.S. citizen	2,500	2,000	2,000	D	1,000
Native-born	2,500	1,500	2,000	D	1,000
Naturalized	S	D	D	D	D
Non-U.S. citizen	1,000	*	S	D	D
Permanent resident	D	D	D	D	D
Temporary resident	500	D	*	D	D
Biological/medical scientists	4,500	3,500	3,000	D	2,500
U.S. citizen	5,000	3,500	2,500	D	2,500
Native-born	4,500	3,000	2,500	D	2,500
Naturalized	2,000	2,000	1,000	D	1,000
Non-U.S. citizen	2,500	1,000	2,000	D	D
Permanent resident	2,000	1,000	2,000	D	D
Temporary resident	1,000	500	500	D	D
Environmental life scientists	2,500	1,000	1,000	D	2,000
U.S. citizen	2,500	1,000	D	D	2,000
Native-born	2,500	1,000	D	D	2,000
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Postsecondary teachers-life/related sciences	2,500	D	2,000	1,500	D
U.S. citizen	2,500	D	2,000	1,500	D
Native-born	2,500	D	2,000	1,500	D
Naturalized	500	D	500	D	D
Non-U.S. citizen	*	D	*	D	D
Permanent resident	D	D	D	D	D
Temporary resident	*	D	*	D	D
Computer/mathematical scientists	14,500	12,500	4,000	3,500	5,000
U.S. citizen	13,500	11,500	3,500	3,500	4,500
Native-born	12,000	10,000	3,500	3,000	4,500
Naturalized	5,500	5,500	1,500	1,000	1,500
Non-U.S. citizen	5,000	5,000	1,500	500	1,000
Permanent resident	4,000	4,000	1,000	500	1,000
Temporary resident	3,500	3,000	1,500	D	500
Computer/information scientists	13,500	12,500	3,000	2,000	4,000
U.S. citizen	12,500	11,500	3,000	2,000	4,000
Native-born	11,500	10,000	2,500	2,000	3,500
Naturalized	5,000	5,000	1,500	500	1,500
Non-U.S. citizen	5,000	4,500	1,000	D	1,000
Permanent resident	4,000	4,000	500	D	1,000
Temporary resident	3,000	3,000	1,000	D	500
Mathematical scientists	4,500	3,500	2,000	D	2,500
U.S. citizen	4,500	3,000	2,000	D	2,500
Native-born	4,000	2,500	2,000	D	2,500
Naturalized	1,500	1,500	500	D	500
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	1,000	1,000	500	D	D
Postsecondary teachers-computer/mathematical sciences	3,500	D	2,500	2,500	D
U.S. citizen	3,500	D	2,000	2,500	D
Native-born	3,500	D	2,000	2,500	D
Naturalized	1,000	D	1,000	1,000	D
Non-U.S. citizen	1,000	D	1,000	*	D
Permanent resident	500	D	500	*	D
Temporary resident	500	D	500	D	D
Physical/related scientists	4,000	3,500	1,500	1,500	2,000
U.S. citizen	4,000	3,500	1,500	1,500	2,000
Native-born	4,000	3,500	1,500	1,500	2,000
Naturalized	1,500	1,000	500	D	500
Non-U.S. citizen	1,500	1,500	1,000	D	*
Permanent resident	1,500	1,500	500	D	D
Temporary resident	1,000	500	1,000	D	D
Chemists, except biochemists	2,500	2,500	500	D	1,000
U.S. citizen	2,500	2,000	500	D	1,000
Native-born	2,000	2,000	500	D	1,000
Naturalized	1,000	1,000	D	D	500
Non-U.S. citizen	1,500	1,500	500	D	D
Permanent resident	1,500	1,500	*	D	D
Temporary resident	500	*	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Earth/atmospheric/ocean scientists	2,500	2,000	1,000	D	1,500
U.S. citizen	2,500	2,000	500	D	1,500
Native-born	2,500	2,000	500	D	1,500
Naturalized	500	500	D	D	*
Non-U.S. citizen	500	500	500	D	D
Permanent resident	500	D	D	D	D
Temporary resident	500	S	*	D	D
Physicists/astronomers	1,000	1,000	500	D	500
U.S. citizen	1,000	1,000	500	D	500
Native-born	1,000	1,000	500	D	500
Naturalized	D	D	D	D	D
Non-U.S. citizen	500	D	500	D	D
Permanent resident	*	D	*	D	D
Temporary resident	500	D	500	D	D
Postsecondary teachers-physical/related sciences	2,000	D	1,500	1,500	D
U.S. citizen	2,000	D	1,500	1,500	D
Native-born	2,000	D	1,500	1,500	D
Naturalized	S	D	*	D	D
Non-U.S. citizen	500	D	500	D	D
Permanent resident	*	D	*	D	D
Temporary resident	500	D	500	D	D
Other physical/related scientists	2,000	1,500	500	D	1,000
U.S. citizen	2,000	1,500	500	D	1,000
Native-born	2,000	1,500	500	D	1,000
Naturalized	D	D	D	D	D
Non-U.S. citizen	D	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Social/related scientists	9,500	6,500	3,500	4,500	4,500
U.S. citizen	9,000	6,500	3,000	4,500	4,500
Native-born	9,000	6,500	3,000	4,500	4,500
Naturalized	1,500	1,500	1,000	1,000	500
Non-U.S. citizen	1,500	1,500	1,500	D	S
Permanent resident	1,000	1,000	S	D	D
Temporary resident	1,500	1,000	1,000	D	D
Economists	2,500	1,500	1,000	D	1,500
U.S. citizen	2,500	1,500	S	D	1,500
Native-born	2,500	1,500	S	D	1,500
Naturalized	500	500	D	D	D
Non-U.S. citizen	500	500	500	D	D
Permanent resident	*	*	D	D	D
Temporary resident	500	S	500	D	D
Political/related scientists	2,500	2,000	1,000	D	1,500
U.S. citizen	2,500	1,500	S	D	1,500
Native-born	2,500	1,500	S	D	1,500
Naturalized	D	D	D	D	D
Non-U.S. citizen	500	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	S	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Postsecondary teachers-social/related sciences	3,500	D	2,500	2,500	D
U.S. citizen	3,000	D	2,500	2,500	D
Native-born	3,000	D	2,500	2,500	D
Naturalized	500	D	500	D	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	D	D	D	D	D
Temporary resident	1,000	D	1,000	D	D
Psychologists	6,000	4,000	1,500	3,500	2,500
U.S. citizen	6,000	4,000	1,500	3,500	2,500
Native-born	6,000	4,000	1,500	3,500	2,500
Naturalized	1,000	1,000	S	1,000	D
Non-U.S. citizen	1,000	S	500	D	D
Permanent resident	1,000	D	D	D	D
Temporary resident	1,000	D	D	D	D
Sociologists/anthropologists	2,000	1,500	1,000	D	500
U.S. citizen	2,000	1,500	1,000	D	500
Native-born	2,000	1,500	1,000	D	500
Naturalized	D	D	D	D	D
Non-U.S. citizen	*	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	*	D	D	D	D
Other social/related scientists	5,500	4,500	1,000	D	3,000
U.S. citizen	5,500	4,500	500	D	3,000
Native-born	5,500	4,500	500	D	3,000
Naturalized	1,500	1,000	D	D	D
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	500	500	500	D	D
Engineering occupations	10,000	9,500	2,000	500	4,000
U.S. citizen	10,000	9,500	2,000	500	4,000
Native-born	9,500	9,000	1,500	500	3,500
Naturalized	4,500	4,000	500	D	2,000
Non-U.S. citizen	3,000	3,000	1,000	D	500
Permanent resident	2,500	2,500	500	D	500
Temporary resident	2,500	2,000	1,000	D	500
Aerospace/aeronautical/astronautical engineers	3,000	3,000	500	D	1,500
U.S. citizen	3,000	3,000	500	D	1,500
Native-born	3,000	2,500	500	D	1,500
Naturalized	1,000	1,000	D	D	S
Non-U.S. citizen	500	500	*	D	D
Permanent resident	500	500	D	D	D
Temporary resident	500	*	*	D	D
Chemical engineers	2,500	2,500	500	D	*
U.S. citizen	2,500	2,500	500	D	*
Native-born	2,000	2,000	500	D	*
Naturalized	1,000	1,000	D	D	D
Non-U.S. citizen	1,000	1,000	*	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	500	*	*	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Civil/architectural/sanitary engineers	4,500	3,500	1,000	D	2,000
U.S. citizen	4,500	3,500	500	D	2,000
Native-born	4,000	3,500	S	D	2,000
Naturalized	2,000	1,500	D	D	1,500
Non-U.S. citizen	1,500	1,500	*	D	500
Permanent resident	1,000	1,000	D	D	*
Temporary resident	1,000	1,000	*	D	D
Electrical/computer hardware engineers	5,500	5,500	1,000	D	1,500
U.S. citizen	5,000	5,000	1,000	D	1,500
Native-born	4,000	3,500	1,000	D	1,500
Naturalized	3,000	3,000	D	D	1,000
Non-U.S. citizen	2,000	2,000	500	D	D
Permanent resident	1,500	1,500	D	D	D
Temporary resident	1,500	1,500	500	D	D
Industrial engineers	3,000	3,000	*	D	500
U.S. citizen	3,000	3,000	*	D	500
Native-born	3,000	3,000	*	D	500
Naturalized	1,000	1,000	D	D	D
Non-U.S. citizen	1,000	1,000	*	D	D
Permanent resident	500	500	D	D	D
Temporary resident	500	500	*	D	D
Mechanical engineers	4,500	4,000	500	D	1,500
U.S. citizen	4,500	4,000	500	D	1,500
Native-born	4,000	4,000	500	D	1,500
Naturalized	2,000	2,000	D	D	500
Non-U.S. citizen	1,500	1,500	500	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	1,000	1,000	500	D	D
Postsecondary teachers-engineering	1,500	D	1,500	500	D
U.S. citizen	1,500	D	1,500	500	D
Native-born	1,500	D	1,500	500	D
Naturalized	*	D	D	D	D
Non-U.S. citizen	500	D	500	D	D
Permanent resident	D	D	D	D	D
Temporary resident	500	D	500	D	D
Other engineers	5,500	5,000	1,000	D	2,000
U.S. citizen	5,000	4,500	1,000	D	2,000
Native-born	5,000	4,500	500	D	2,000
Naturalized	1,500	1,500	*	D	1,000
Non-U.S. citizen	1,500	1,500	500	D	*
Permanent resident	1,000	1,000	D	D	D
Temporary resident	1,000	1,000	500	D	D
S&E-related occupations	27,500	18,500	7,000	17,500	8,500
U.S. citizen	27,000	18,000	6,500	17,500	8,500
Native-born	25,000	16,500	6,000	17,000	8,000
Naturalized	7,500	6,000	2,500	3,000	3,000
Non-U.S. citizen	4,000	3,000	1,500	1,500	1,000
Permanent resident	3,500	3,000	1,000	1,500	1,000
Temporary resident	1,500	1,500	1,000	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Health occupations	18,000	15,500	6,500	8,000	7,000
U.S. citizen	17,500	15,500	6,500	8,000	7,000
Native-born	17,000	14,500	6,000	7,500	6,500
Naturalized	6,000	5,000	2,000	1,500	2,500
Non-U.S. citizen	2,000	1,500	1,500	D	*
Permanent resident	2,000	1,500	S	D	*
Temporary resident	1,000	1,000	S	D	D
S&E managers, including health	11,500	9,500	2,500	1,000	5,000
U.S. citizen	11,500	9,500	2,500	1,000	5,000
Native-born	10,500	8,500	2,000	S	5,000
Naturalized	3,000	2,500	1,000	D	1,000
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	1,000	1,000	D	D	D
S&E precollege teachers	15,000	D	500	15,000	D
U.S. citizen	15,000	D	500	15,000	D
Native-born	14,500	D	500	14,500	D
Naturalized	2,500	D	D	2,500	D
Non-U.S. citizen	1,500	D	D	1,500	D
Permanent resident	1,500	D	D	1,500	D
Temporary resident	D	D	D	D	D
S&E technicians/technologists	6,000	5,500	1,500	S	2,500
U.S. citizen	5,500	5,000	1,500	S	2,500
Native-born	5,000	4,000	1,500	S	2,500
Naturalized	3,000	2,500	500	D	500
Non-U.S. citizen	1,500	1,500	1,000	D	D
Permanent resident	1,500	1,500	D	D	D
Temporary resident	1,000	1,000	1,000	D	D
Other S&E-related occupations	5,500	5,000	D	D	2,000
U.S. citizen	5,000	5,000	D	D	2,000
Native-born	4,500	4,500	D	D	2,000
Naturalized	2,000	2,000	D	D	D
Non-U.S. citizen	1,500	1,500	D	D	D
Permanent resident	1,500	1,500	D	D	D
Temporary resident	S	S	D	D	D
Non-S&E occupations	43,500	33,500	10,000	21,500	14,500
U.S. citizen	42,500	32,000	10,000	21,500	14,500
Native-born	41,500	30,500	9,500	21,000	13,500
Naturalized	11,000	9,500	2,500	4,500	4,000
Non-U.S. citizen	7,000	6,500	1,500	3,000	2,000
Permanent resident	7,000	6,000	1,500	3,000	2,000
Temporary resident	2,500	2,000	1,000	D	D
Arts/humanities/related occupations	8,000	7,000	3,000	2,000	2,000
U.S. citizen	8,000	7,000	3,000	2,000	2,000
Native-born	7,500	6,500	3,000	2,000	2,000
Naturalized	2,500	2,000	D	D	D
Non-U.S. citizen	2,000	2,000	D	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	S	S	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Management-related occupations	17,000	15,500	3,500	3,500	7,000
U.S. citizen	16,500	15,000	3,500	3,500	6,500
Native-born	15,500	14,000	3,000	3,500	6,500
Naturalized	5,000	4,500	2,000	D	2,000
Non-U.S. citizen	4,000	4,000	D	D	S
Permanent resident	3,500	3,500	D	D	S
Temporary resident	1,000	1,000	D	D	D
Non-S&E managers	18,500	15,000	3,500	8,000	6,000
U.S. citizen	18,000	14,500	3,500	8,000	6,000
Native-born	17,500	14,000	3,500	8,000	5,500
Naturalized	5,500	4,500	S	1,000	1,500
Non-U.S. citizen	3,000	3,000	D	D	D
Permanent resident	3,000	2,500	D	D	D
Temporary resident	1,500	1,500	D	D	D
Non-S&E postsecondary teachers	6,500	2,500	5,000	4,000	S
U.S. citizen	6,500	2,500	5,000	4,000	S
Native-born	6,000	2,000	5,000	3,500	S
Naturalized	1,500	D	500	1,000	D
Non-U.S. citizen	1,500	D	1,000	D	D
Permanent resident	1,500	D	1,000	D	D
Temporary resident	1,000	D	1,000	D	D
Non-S&E precollege/other teachers	16,500	2,000	D	16,500	1,500
U.S. citizen	16,500	2,000	D	16,500	1,500
Native-born	16,500	2,000	D	16,500	1,500
Naturalized	4,000	D	D	3,500	D
Non-U.S. citizen	2,500	D	D	2,500	D
Permanent resident	2,500	D	D	2,500	D
Temporary resident	D	D	D	D	D
Sales/marketing occupations	15,500	15,500	S	D	1,000
U.S. citizen	15,500	15,000	S	D	1,000
Native-born	14,000	14,000	S	D	S
Naturalized	4,500	4,500	D	D	D
Non-U.S. citizen	3,000	3,000	D	D	D
Permanent resident	2,500	2,500	D	D	D
Temporary resident	S	S	D	D	D
Social services/related occupations	14,500	12,000	4,000	7,000	7,500
U.S. citizen	14,000	12,000	4,000	7,000	7,500
Native-born	14,000	11,500	3,500	7,000	7,000
Naturalized	3,000	2,500	1,000	2,000	2,000
Non-U.S. citizen	2,000	2,000	S	D	D
Permanent resident	2,000	2,000	D	D	D
Temporary resident	500	D	D	D	D
Other non-S&E occupations	17,500	15,000	5,000	5,500	9,000
U.S. citizen	17,500	14,500	5,000	5,500	9,000
Native-born	17,000	13,500	4,500	5,500	8,500
Naturalized	5,500	4,500	1,500	1,000	2,500
Non-U.S. citizen	3,000	2,500	1,000	D	S
Permanent resident	3,000	2,500	S	D	S
Temporary resident	1,000	1,000	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Doctoral degrees, all occupations	10,000	6,500	6,000	4,500	3,500
U.S. citizen	10,000	6,500	5,500	4,500	3,500
Native-born	9,000	6,000	5,000	4,000	3,000
Naturalized	4,000	3,000	2,500	1,500	1,500
Non-U.S. citizen	3,500	2,500	2,500	500	1,000
Permanent resident	3,500	2,500	2,000	500	1,000
Temporary resident	2,000	1,500	1,500	*	500
S&E occupations	6,000	4,000	4,000	2,000	2,500
U.S. citizen	5,500	3,500	3,500	2,000	2,500
Native-born	4,500	3,000	3,000	1,500	2,000
Naturalized	3,000	2,000	2,000	500	1,500
Non-U.S. citizen	3,000	2,000	2,500	500	1,000
Permanent resident	2,500	2,000	2,000	500	500
Temporary resident	2,000	1,500	1,500	*	500
Science occupations	6,000	3,500	4,000	2,000	2,500
U.S. citizen	5,000	3,000	3,500	2,000	2,500
Native-born	4,000	2,500	3,000	1,500	2,000
Naturalized	3,000	2,000	2,000	500	1,000
Non-U.S. citizen	2,500	2,000	2,000	500	500
Permanent resident	2,500	2,000	2,000	*	500
Temporary resident	1,500	1,000	1,000	*	500
Biological/agricultural/other life scientists	3,500	2,000	2,500	500	2,000
U.S. citizen	3,000	1,500	2,500	500	2,000
Native-born	2,500	1,500	2,000	500	1,500
Naturalized	2,000	1,500	1,500	*	1,000
Non-U.S. citizen	2,000	1,500	1,500	D	500
Permanent resident	1,500	1,000	1,500	D	500
Temporary resident	1,000	500	500	D	*
Agricultural/food scientists	1,000	1,000	500	D	500
U.S. citizen	1,000	500	500	D	500
Native-born	500	500	500	D	500
Naturalized	500	500	*	D	*
Non-U.S. citizen	500	500	500	D	D
Permanent resident	500	*	500	D	D
Temporary resident	*	*	*	D	D
Biological/medical scientists	3,000	2,000	2,000	*	2,000
U.S. citizen	3,000	1,500	2,000	*	2,000
Native-born	2,500	1,000	1,500	*	1,500
Naturalized	1,500	1,000	1,000	D	1,000
Non-U.S. citizen	1,500	1,500	1,000	D	500
Permanent resident	1,500	1,000	1,000	D	500
Temporary resident	1,000	500	500	D	*
Environmental life scientists	500	*	*	D	500
U.S. citizen	500	*	*	D	500
Native-born	500	*	*	D	500
Naturalized	*	D	D	D	D
Non-U.S. citizen	*	*	D	D	D
Permanent resident	*	D	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Postsecondary teachers-life/related sciences	1,500	*	1,500	500	D
U.S. citizen	1,500	*	1,500	500	D
Native-born	1,500	*	1,500	500	D
Naturalized	1,000	D	1,000	*	D
Non-U.S. citizen	500	D	500	D	D
Permanent resident	500	D	500	D	D
Temporary resident	500	D	500	D	D
Computer/mathematical scientists	3,000	2,500	2,000	1,000	1,500
U.S. citizen	3,000	2,000	1,500	1,000	1,500
Native-born	2,500	2,000	1,500	1,000	1,500
Naturalized	1,500	1,000	1,000	500	500
Non-U.S. citizen	1,500	1,500	1,000	*	*
Permanent resident	1,500	1,500	1,000	*	*
Temporary resident	1,000	1,000	500	D	D
Computer/information scientists	2,500	2,000	1,000	*	1,500
U.S. citizen	2,500	2,000	1,000	*	1,500
Native-born	2,000	1,500	500	D	1,500
Naturalized	1,000	1,000	500	D	500
Non-U.S. citizen	1,500	1,500	500	D	D
Permanent resident	1,500	1,000	500	D	D
Temporary resident	1,000	500	500	D	D
Mathematical scientists	1,500	1,000	500	S	500
U.S. citizen	1,500	1,000	500	S	500
Native-born	1,000	1,000	500	D	500
Naturalized	500	500	500	D	500
Non-U.S. citizen	500	500	500	D	D
Permanent resident	500	500	500	D	D
Temporary resident	500	500	*	D	D
Postsecondary teachers-computer/mathematical sciences	1,500	*	1,500	1,000	D
U.S. citizen	1,500	*	1,000	1,000	D
Native-born	1,500	D	1,000	1,000	D
Naturalized	1,000	D	1,000	500	D
Non-U.S. citizen	1,000	D	1,000	*	D
Permanent resident	1,000	D	1,000	*	D
Temporary resident	500	D	500	D	D
Physical/related scientists	2,000	1,500	1,500	500	1,000
U.S. citizen	2,000	1,500	1,500	500	1,000
Native-born	1,500	1,000	1,000	500	1,000
Naturalized	1,000	1,000	1,000	*	500
Non-U.S. citizen	1,500	1,000	1,000	*	500
Permanent resident	1,000	1,000	1,000	D	*
Temporary resident	500	500	500	D	*
Chemists, except biochemists	1,500	1,000	500	D	1,000
U.S. citizen	1,000	1,000	500	D	1,000
Native-born	1,000	500	500	D	500
Naturalized	1,000	1,000	500	D	500
Non-U.S. citizen	1,000	1,000	500	D	*
Permanent resident	1,000	1,000	500	D	D
Temporary resident	500	500	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Earth/atmospheric/ocean scientists	1,000	500	500	D	500
U.S. citizen	1,000	500	500	D	500
Native-born	500	500	500	D	500
Naturalized	500	*	*	D	500
Non-U.S. citizen	500	500	500	D	*
Permanent resident	500	*	500	D	D
Temporary resident	500	*	*	D	D
Physicists/astronomers	1,000	1,000	500	D	500
U.S. citizen	1,000	1,000	500	D	500
Native-born	1,000	500	500	D	500
Naturalized	500	500	500	D	500
Non-U.S. citizen	500	500	500	D	*
Permanent resident	500	500	*	D	*
Temporary resident	500	*	500	D	*
Postsecondary teachers-physical/related sciences	1,500	D	1,500	500	D
U.S. citizen	1,000	D	1,000	500	D
Native-born	1,000	D	1,000	500	D
Naturalized	500	D	500	*	D
Non-U.S. citizen	1,000	D	1,000	*	D
Permanent resident	1,000	D	1,000	D	D
Temporary resident	*	D	*	D	D
Other physical/related scientists	1,000	500	500	D	500
U.S. citizen	500	500	*	D	500
Native-born	500	500	*	D	500
Naturalized	500	500	D	D	D
Non-U.S. citizen	500	500	*	D	D
Permanent resident	*	D	D	D	D
Temporary resident	500	*	D	D	D
Social/related scientists	3,000	2,000	2,000	1,500	1,000
U.S. citizen	3,000	1,500	2,000	1,500	1,000
Native-born	2,500	1,500	2,000	1,500	1,000
Naturalized	1,500	1,000	1,000	500	500
Non-U.S. citizen	1,000	500	1,000	*	*
Permanent resident	1,000	500	1,000	*	*
Temporary resident	500	500	500	D	D
Economists	500	500	500	D	500
U.S. citizen	500	500	500	D	500
Native-born	500	500	500	D	500
Naturalized	500	*	*	D	*
Non-U.S. citizen	500	500	500	D	*
Permanent resident	500	*	*	D	*
Temporary resident	500	500	*	D	D
Political/related scientists	500	*	500	D	*
U.S. citizen	500	*	500	D	*
Native-born	500	*	500	D	*
Naturalized	D	D	D	D	D
Non-U.S. citizen	*	D	*	D	D
Permanent resident	*	D	*	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/industry	4-year college/university	Other educational institution	Government
Postsecondary teachers-social/related sciences	2,500	*	2,000	1,000	*
U.S. citizen	2,000	*	2,000	1,000	*
Native-born	2,000	*	2,000	1,000	*
Naturalized	1,000	D	1,000	*	D
Non-U.S. citizen	1,000	D	1,000	*	D
Permanent resident	1,000	D	1,000	*	D
Temporary resident	500	D	500	D	D
Psychologists	2,000	1,500	1,000	500	500
U.S. citizen	2,000	1,500	1,000	500	500
Native-born	1,500	1,500	1,000	500	500
Naturalized	1,000	1,000	S	*	500
Non-U.S. citizen	500	500	*	D	D
Permanent resident	500	500	*	D	D
Temporary resident	*	D	*	D	D
Sociologists/anthropologists	500	500	500	D	500
U.S. citizen	500	500	500	D	500
Native-born	500	500	500	D	500
Naturalized	*	D	*	D	*
Non-U.S. citizen	500	*	*	D	D
Permanent resident	*	D	*	D	D
Temporary resident	*	D	*	D	D
Other social/related scientists	1,000	500	500	*	500
U.S. citizen	1,000	500	500	*	500
Native-born	1,000	500	500	*	500
Naturalized	500	500	*	D	*
Non-U.S. citizen	500	S	*	D	D
Permanent resident	500	S	*	D	D
Temporary resident	*	*	D	D	D
Engineering occupations	2,500	2,000	1,500	*	1,000
U.S. citizen	2,000	2,000	1,000	*	1,000
Native-born	1,500	1,500	1,000	*	500
Naturalized	1,500	1,500	1,000	D	500
Non-U.S. citizen	1,500	1,500	1,000	D	500
Permanent resident	1,000	1,000	500	D	*
Temporary resident	1,500	1,000	1,000	D	*
Aerospace/aeronautical/astronautical engineers	1,000	1,000	*	D	500
U.S. citizen	1,000	1,000	*	D	500
Native-born	500	500	D	D	500
Naturalized	500	500	D	D	*
Non-U.S. citizen	500	*	*	D	D
Permanent resident	*	*	D	D	D
Temporary resident	*	D	D	D	D
Chemical engineers	1,000	1,000	500	D	*
U.S. citizen	500	500	*	D	*
Native-born	500	500	*	D	*
Naturalized	500	500	D	D	D
Non-U.S. citizen	500	500	*	D	D
Permanent resident	500	500	*	D	D
Temporary resident	500	*	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Civil/architectural/sanitary engineers	1,000	500	500	D	500
U.S. citizen	500	500	500	D	500
Native-born	500	500	*	D	*
Naturalized	500	500	*	D	500
Non-U.S. citizen	500	500	*	D	*
Permanent resident	500	500	D	D	*
Temporary resident	500	*	*	D	D
Electrical/computer hardware engineers	1,500	1,500	500	D	500
U.S. citizen	1,500	1,000	500	D	500
Native-born	1,000	1,000	500	D	500
Naturalized	1,000	1,000	500	D	S
Non-U.S. citizen	1,000	1,000	500	D	D
Permanent resident	1,000	1,000	*	D	D
Temporary resident	500	500	*	D	D
Industrial engineers	500	500	*	D	*
U.S. citizen	500	500	*	D	*
Native-born	500	500	*	D	D
Naturalized	500	S	D	D	D
Non-U.S. citizen	*	*	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Mechanical engineers	1,000	1,000	500	D	500
U.S. citizen	1,000	500	500	D	500
Native-born	500	500	500	D	*
Naturalized	500	500	*	D	*
Non-U.S. citizen	500	500	*	D	D
Permanent resident	500	500	D	D	D
Temporary resident	500	500	*	D	D
Postsecondary teachers-engineering	1,500	D	1,500	*	*
U.S. citizen	1,000	D	1,000	*	*
Native-born	1,000	D	1,000	*	*
Naturalized	1,000	D	1,000	D	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	500	D	500	D	D
Temporary resident	1,000	D	1,000	D	D
Other engineers	1,500	1,500	500	D	500
U.S. citizen	1,500	1,000	500	D	500
Native-born	1,000	1,000	500	D	500
Naturalized	1,000	500	500	D	500
Non-U.S. citizen	1,000	500	500	D	*
Permanent resident	500	500	500	D	*
Temporary resident	1,000	500	500	D	D
S&E-related occupations	4,500	3,000	2,000	3,000	2,000
U.S. citizen	4,500	2,500	2,000	3,000	1,500
Native-born	4,000	2,500	1,500	2,500	1,500
Naturalized	2,000	1,500	1,000	1,000	500
Non-U.S. citizen	1,500	1,000	1,000	*	1,000
Permanent resident	1,500	1,000	1,000	*	1,000
Temporary resident	500	500	500	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Health occupations	3,500	2,500	2,000	500	1,500
U.S. citizen	3,500	2,500	2,000	500	1,500
Native-born	3,000	2,000	1,500	500	1,500
Naturalized	1,500	1,000	1,000	D	500
Non-U.S. citizen	1,000	1,000	1,000	D	1,000
Permanent resident	1,000	1,000	1,000	D	S
Temporary resident	500	S	500	D	D
S&E managers, including health	1,500	1,500	500	D	500
U.S. citizen	1,500	1,500	500	D	500
Native-born	1,000	1,000	500	D	500
Naturalized	1,000	1,000	500	D	500
Non-U.S. citizen	500	500	500	D	D
Permanent resident	500	500	*	D	D
Temporary resident	*	*	D	D	D
S&E precollege teachers	3,000	D	D	3,000	D
U.S. citizen	3,000	D	D	3,000	D
Native-born	2,500	D	D	2,500	D
Naturalized	1,000	D	D	1,000	D
Non-U.S. citizen	*	D	D	*	D
Permanent resident	*	D	D	*	D
Temporary resident	D	D	D	D	D
S&E technicians/technologists	1,000	1,000	500	D	*
U.S. citizen	500	500	*	D	*
Native-born	500	500	*	D	*
Naturalized	500	500	D	D	D
Non-U.S. citizen	1,000	500	D	D	D
Permanent resident	500	500	D	D	D
Temporary resident	*	*	D	D	D
Other S&E-related occupations	500	*	D	D	D
U.S. citizen	500	*	D	D	D
Native-born	*	*	D	D	D
Naturalized	*	D	D	D	D
Non-U.S. citizen	*	*	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Non-S&E occupations	7,000	5,000	4,000	3,000	1,500
U.S. citizen	7,000	5,000	4,000	3,000	1,500
Native-born	7,000	5,000	4,000	3,000	1,500
Naturalized	2,500	2,000	1,000	1,000	500
Non-U.S. citizen	2,000	1,500	1,000	500	*
Permanent resident	1,500	1,500	1,000	*	*
Temporary resident	500	500	500	D	D
Arts/humanities/related occupations	1,000	1,000	1,000	D	*
U.S. citizen	1,000	1,000	1,000	D	*
Native-born	1,000	1,000	1,000	D	*
Naturalized	500	500	D	D	D
Non-U.S. citizen	500	500	D	D	D
Permanent resident	500	500	D	D	D
Temporary resident	D	D	D	D	D

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Management-related occupations	3,500	3,000	500	S	1,500
U.S. citizen	3,500	3,000	500	S	1,500
Native-born	3,000	3,000	500	S	1,500
Naturalized	1,000	1,000	*	D	S
Non-U.S. citizen	500	500	*	D	*
Permanent resident	500	500	*	D	D
Temporary resident	500	500	D	D	D
Non-S&E managers	4,000	2,500	2,000	2,500	1,000
U.S. citizen	3,500	2,500	2,000	2,500	1,000
Native-born	3,500	2,500	2,000	2,500	500
Naturalized	1,000	1,000	500	*	500
Non-U.S. citizen	1,000	1,000	*	D	D
Permanent resident	1,000	1,000	*	D	D
Temporary resident	*	*	D	D	D
Non-S&E postsecondary teachers	3,500	S	3,500	500	D
U.S. citizen	3,500	S	3,500	500	D
Native-born	3,500	S	3,000	500	D
Naturalized	1,000	D	1,000	*	D
Non-U.S. citizen	1,000	D	1,000	D	D
Permanent resident	1,000	D	1,000	D	D
Temporary resident	500	D	500	D	D
Non-S&E precollege/other teachers	2,000	S	D	1,500	*
U.S. citizen	2,000	S	D	1,500	D
Native-born	2,000	S	D	1,500	D
Naturalized	S	D	D	S	D
Non-U.S. citizen	*	D	D	*	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Sales/marketing occupations	2,000	2,000	D	D	D
U.S. citizen	2,000	2,000	D	D	D
Native-born	1,500	1,500	D	D	D
Naturalized	1,500	1,500	D	D	D
Non-U.S. citizen	1,000	1,000	D	D	D
Permanent resident	1,000	1,000	D	D	D
Temporary resident	*	*	D	D	D
Social services/related occupations	2,500	2,500	1,000	1,000	500
U.S. citizen	2,500	2,500	1,000	1,000	500
Native-born	2,500	2,500	1,000	1,000	500
Naturalized	500	500	D	D	*
Non-U.S. citizen	*	D	D	D	D
Permanent resident	D	D	D	D	D
Temporary resident	D	D	D	D	D
Other non-S&E occupations	2,000	2,000	1,000	S	1,000
U.S. citizen	2,000	2,000	1,000	S	1,000
Native-born	2,000	2,000	1,000	S	1,000
Naturalized	1,000	1,000	*	D	500

TABLE A-9. Standard errors for employed U.S. scientists and engineers, by highest degree, occupation, citizenship status, and employment sector: 2008

Level of highest degree, occupation, and citizenship status	Employed scientists and engineers	Sector of employment			
		Business/ industry	4-year college/ university	Other educational institution	Government
Non-U.S. citizen	500	500	D	D	D
Permanent resident	*	*	D	D	D
Temporary resident	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.

^a 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://seslat.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.