

Table E-13. Employed U.S. scientists and engineers, by highest degree attained, occupation, and geographic region of employment: 1993

Highest degree and occupation	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All degree levels²										
All occupations, total³	9,793,500	766,400	1,600,800	1,395,200	647,700	1,717,800	376,200	833,200	560,700	1,888,100
S&E occupations, total	3,303,400	242,800	496,800	499,900	203,200	569,700	136,700	321,400	208,200	621,900
Scientists, total	1,912,300	148,000	303,800	269,300	127,700	351,300	72,700	170,600	120,500	347,100
Computer/math sci, total	991,500	80,700	157,100	134,700	57,700	189,000	34,200	92,800	58,600	186,100
Computer/information scientists	870,000	72,900	139,900	117,100	50,200	162,300	25,900	81,300	50,500	169,400
Mathematical scientists	46,800	3,600	5,900	6,000	2,600	13,100	2,700	3,500	2,000	7,300
Postsecondary teachers- computer math sci	74,700	4,200	11,300	11,600	4,800	13,500	5,600	8,000	6,200	9,400
Life/related scientists, total	322,300	23,300	43,800	48,400	31,800	58,100	13,300	23,100	18,500	61,800
Agricultural/food scientists	44,600	1,000	4,200	7,800	7,500	6,900	1,400	4,900	2,300	8,500
Biological scientists	175,900	13,000	28,500	25,500	11,500	35,300	6,100	9,800	9,200	36,900
Environmental life scientists	24,800	2,300	1,600	2,500	3,200	3,500	1,000	1,500	3,600	5,400
Postsecondary teachers- life/related sciences	77,000	6,900	9,500	12,600	9,600	12,400	4,900	6,800	3,300	11,000
Physical/related scientists, total ...	280,900	18,800	45,500	42,200	15,600	45,500	12,700	33,000	24,900	42,400
Chemistry, except biochemistry	114,200	7,200	24,500	24,000	7,600	17,500	5,000	9,700	5,000	13,600
Earth scientists/ geologists/oceanographers	68,700	2,800	6,500	5,500	2,600	9,100	2,100	16,700	10,800	12,700
Physicists/astronomers	34,900	3,200	4,100	4,200	1,100	6,600	1,500	1,800	4,800	7,600
Other physical/related scientists	17,700	1,200	2,300	1,900	1,400	4,800	700	1,500	1,500	2,400
Postsecondary teachers- physical/related sci	45,500	4,300	8,100	6,700	3,000	7,600	3,400	3,300	2,900	6,200

See explanatory information, if any, and SOURCE at end of table.

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Highest degree and occupation	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All degree levels² — continued										
Social/related scientists, total	317,600	25,200	57,400	44,000	22,600	58,600	12,500	21,600	18,500	56,800
Economists	31,100	2,900	5,200	2,500	800	12,100	200	1,300	1,800	4,200
Political/related scientists	8,600	400	500	600	100	4,300	100	500	200	1,700
Psychologists	150,800	13,200	28,100	21,000	11,400	22,300	5,300	10,700	8,600	30,100
Sociologists/anthropologists	15,100	400	2,800	2,200	900	2,400	800	1,100	1,300	3,100
Other social/related scientists	24,000	1,500	5,100	2,900	600	5,400	300	2,700	800	4,700
Postsecondary teachers- social/related sci	88,100	6,800	15,700	14,900	8,800	12,100	5,700	5,300	5,800	13,000
Engineers, total	1,391,100	94,800	193,000	230,500	75,400	218,400	64,000	150,800	87,800	274,800
Aerospace/related engineers	84,100	4,100	5,900	5,200	4,100	14,000	4,000	10,400	6,300	30,100
Chemical engineers	77,700	4,700	12,200	16,200	3,800	9,400	3,900	15,700	2,900	8,700
Civil/architectural engineers	191,500	9,900	28,900	24,700	13,200	32,500	7,600	14,900	13,300	46,200
Electrical/related engineers	362,500	28,200	49,800	46,100	18,800	59,400	17,300	34,400	26,200	81,800
Industrial engineers	70,200	4,000	9,300	16,300	6,400	9,900	4,700	6,900	3,500	9,200
Mechanical engineers	253,300	20,300	36,600	63,900	13,500	33,800	10,100	24,300	11,400	38,900
Other engineers	318,600	22,100	44,700	51,900	13,400	53,500	14,400	41,300	21,900	55,100
Postsecondary teachers-engineers ..	33,100	1,600	5,400	6,200	2,200	5,700	2,000	2,900	2,300	4,700
Non-S&E occupations, total	6,490,100	523,600	1,104,000	895,400	444,500	1,148,100	239,600	511,800	352,500	1,266,200
Managers/administrators	1,994,400	166,500	333,400	275,000	119,100	390,000	82,900	158,200	108,100	359,500
Health/related	758,000	57,200	137,400	104,200	56,100	125,400	37,400	60,800	41,700	137,800
Teachers, except S&E postsecondary	659,500	49,700	118,500	88,400	48,700	97,100	24,600	59,500	37,900	134,800
Sales/marketing	748,300	65,000	128,200	110,200	50,900	124,000	22,200	56,800	38,700	151,200
Other non-S&E occupations	2,330,000	185,300	386,500	317,500	169,700	411,500	72,400	176,400	126,100	482,800

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Table E-13. Employed U.S. scientists and engineers, by highest degree attained, occupation, and geographic region of employment: 1993

Highest degree and occupation	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Bachelor's										
All occupations, total³	5,727,200	441,000	870,500	803,600	411,000	1,005,200	218,800	519,200	326,400	1,125,800
S&E occupations, total	1,980,300	141,000	275,700	301,800	127,500	341,800	84,000	208,000	123,700	374,900
Scientists, total	1,007,000	78,500	150,300	138,400	70,500	184,500	36,900	96,900	62,700	187,600
Computer/math sci, total	676,200	55,100	102,200	93,200	41,800	125,600	22,900	66,200	39,900	128,900
Computer/information scientists	637,300	52,200	97,200	89,300	39,400	115,500	20,700	62,900	37,300	122,600
Mathematical scientists	21,200	1,800	2,500	2,100	1,100	6,700	800	1,800	600	3,700
Postsecondary teachers- computer math sci	17,800	1,200	2,500	1,900	1,200	3,400	1,400	1,500	1,900	2,600
Life/related scientists, total	131,600	8,600	15,900	18,900	15,800	23,000	4,200	8,500	7,700	29,000
Agricultural/food scientists	27,000	600	2,400	4,400	4,200	4,400	700	2,900	900	6,500
Biological scientists	72,300	5,100	11,000	10,900	5,800	13,900	1,900	3,900	3,900	16,000
Environmental life scientists	18,000	600	900	1,700	3,000	2,600	900	1,300	2,400	4,400
Postsecondary teachers- life/related sciences	14,400	2,400	1,500	1,900	2,800	2,100	700	400	500	2,100
Physical/related scientists, total ...	130,700	7,200	19,900	19,400	8,200	21,700	6,800	17,900	10,800	18,600
Chemistry, except biochemistry	66,500	3,300	13,700	13,200	4,600	10,700	3,500	5,900	3,400	8,200
Earth scientists/ geologists/oceanographers	35,100	1,100	3,200	2,800	1,400	4,900	800	10,400	5,200	5,300
Physicists/astronomers	8,900	1,000	700	700	300	1,700	700	600	900	2,400
Other physical/related scientists	9,200	300	1,100	1,000	1,000	2,900	400	400	600	1,500
Postsecondary teachers- physical/related sci	11,000	1,600	1,200	1,700	900	1,600	1,400	500	800	1,200

See explanatory information, if any, and SOURCE at end of table.

Table E-13. Employed U.S. scientists and engineers, by highest degree attained, occupation, and geographic region of employment: 1993

Highest degree and occupation	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Bachelor's — continued										
Social/related scientists, total	68,500	7,500	12,300	6,900	4,700	14,200	3,000	4,300	4,400	11,100
Economists	10,800	1,500	2,300	600	400	3,700	100	400	300	1,400
Political/related scientists	5,400	200	400	500	S	2,700	S	400	S	1,200
Psychologists	25,800	4,200	5,100	2,100	2,400	3,700	1,800	1,500	1,500	3,400
Sociologists/anthropologists	5,700	100	900	1,200	500	1,200	100	100	400	1,300
Other social/related scientists	8,700	700	1,800	800	200	1,300	200	1,500	500	1,600
Postsecondary teachers- social/related sci	12,100	900	1,700	1,600	1,100	1,500	900	400	1,700	2,200
Engineers, total	973,300	62,500	125,500	163,400	57,000	157,300	47,100	111,100	61,000	187,300
Aerospace/related engineers	54,200	2,700	4,500	2,100	2,500	8,600	3,100	7,300	4,300	19,100
Chemical engineers	49,900	2,400	6,100	11,400	2,600	6,600	2,800	11,300	1,700	4,900
Civil/architectural engineers	139,700	7,400	20,200	18,700	9,900	24,800	5,600	10,600	9,700	32,800
Electrical/related engineers	251,800	18,600	29,400	34,500	14,900	43,100	14,200	25,000	18,200	53,400
Industrial engineers	54,700	2,300	7,000	12,700	5,400	7,900	3,400	6,100	2,500	7,200
Mechanical engineers	194,400	12,800	28,300	48,500	10,300	26,400	8,400	20,200	8,900	30,000
Other engineers	222,300	16,200	28,900	34,000	11,000	38,200	9,600	30,100	15,500	38,700
Postsecondary teachers-engineers ..	6,200	200	1,000	1,400	300	1,600	100	400	100	1,100
Non-S&E occupations, total	3,746,900	300,000	594,800	501,800	283,500	663,400	134,800	311,300	202,700	750,900
Managers/administrators	1,134,700	88,500	179,400	160,800	78,600	217,800	48,500	93,700	58,800	207,500
Health/related	235,700	21,200	37,100	28,700	17,700	36,000	12,600	22,500	14,000	45,900
Teachers, except S&E postsecondary	299,700	20,300	43,900	33,000	24,500	47,100	10,700	31,500	15,700	72,800
Sales/marketing	600,000	54,000	98,800	88,600	44,100	100,300	17,700	45,100	32,100	118,400
Other non-S&E occupations	1,476,800	116,100	235,700	190,700	118,600	262,300	45,200	118,500	82,200	306,200

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Highest degree and occupation	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Master's										
All occupations, total³	2,575,600	207,900	466,000	371,600	140,300	444,600	95,800	204,800	155,000	488,300
S&E occupations, total	891,300	67,000	145,200	134,500	48,900	150,300	33,800	79,800	58,900	172,400
Scientists, total	541,400	39,600	88,800	77,900	34,000	99,800	20,200	46,400	36,400	98,200
Computer/math sci, total	263,600	21,700	45,600	34,800	12,900	54,100	9,000	22,300	15,800	47,400
Computer/information scientists	212,400	18,500	38,300	25,700	9,600	44,400	4,900	16,700	12,300	41,800
Mathematical scientists	18,200	1,500	2,300	3,100	1,000	4,000	1,400	1,400	1,000	2,300
Postsecondary teachers- computer math sci	33,000	1,700	4,900	6,100	2,200	5,600	2,700	4,100	2,500	3,200
Life/related scientists, total	70,400	4,700	9,500	11,100	7,300	13,100	3,300	4,800	4,700	11,800
Agricultural/food scientists	9,700	200	1,200	2,100	2,000	900	200	1,200	800	1,000
Biological scientists	37,100	1,700	5,700	4,800	2,600	8,200	1,700	2,100	2,400	7,900
Environmental life scientists	6,000	1,700	700	600	100	700	100	200	1,200	800
Postsecondary teachers- life/related sciences	17,700	1,100	2,000	3,500	2,600	3,400	1,300	1,400	300	2,200
Physical/related scientists, total ...	72,600	5,100	12,000	10,800	3,300	10,000	3,200	8,900	7,500	11,700
Chemistry, except biochemistry	21,100	1,900	4,800	5,400	1,400	2,400	800	1,500	700	2,300
Earth scientists/ geologists/oceanographers	23,900	1,000	2,600	2,000	900	2,800	1,100	5,000	3,400	5,000
Physicists/astronomers	11,000	900	1,300	1,700	300	1,800	400	500	2,100	1,900
Other physical/related scientists	6,400	800	1,000	700	300	1,300	100	1,100	600	400
Postsecondary teachers- physical/related sci	10,200	500	2,300	1,000	400	1,600	800	900	700	2,000

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		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Master's — continued										
Social/related scientists, total	134,900	8,100	21,800	21,200	10,500	22,600	4,700	10,500	8,400	27,200
Economists	13,500	800	1,900	1,400	100	5,100	100	700	1,400	2,000
Political/related scientists	1,900	S	100	S	S	1,100	100	S	100	400
Psychologists	76,400	5,200	12,200	12,800	6,200	10,000	2,300	6,400	4,400	17,000
Sociologists/anthropologists	6,300	100	1,200	400	300	600	700	900	700	1,500
Other social/related scientists	11,200	700	2,300	1,800	200	2,900	S	1,000	200	2,200
Postsecondary teachers- social/related sci	25,600	1,400	4,100	4,800	3,600	2,900	1,400	1,400	1,700	4,200
Engineers, total	349,900	27,400	56,400	56,600	14,900	50,500	13,600	33,400	22,500	74,200
Aerospace/related engineers	26,200	1,100	1,200	2,800	1,500	4,800	600	2,800	1,900	9,600
Chemical engineers	21,800	2,000	4,700	3,700	900	2,000	900	3,400	900	3,200
Civil/architectural engineers	47,800	2,200	8,200	5,800	2,700	7,200	1,800	4,100	3,300	12,400
Electrical/related engineers	98,500	8,300	17,500	10,600	3,500	14,600	2,900	8,200	7,500	25,200
Industrial engineers	15,100	1,700	2,200	3,500	1,000	2,000	1,300	700	900	1,900
Mechanical engineers	51,800	6,900	7,600	13,700	3,000	5,900	1,600	3,600	2,000	7,500
Other engineers	79,600	4,900	13,100	15,200	1,700	12,400	4,000	9,700	5,200	13,200
Postsecondary teachers-engineers ..	9,100	200	1,900	1,300	600	1,600	500	800	800	1,300
Non-S&E occupations, total	1,684,300	141,000	320,800	237,100	91,400	294,300	62,000	125,000	96,100	316,000
Managers/administrators	693,200	63,400	126,700	90,600	33,800	138,100	26,500	51,600	41,300	120,900
Health/related	83,600	4,900	19,500	11,400	3,800	15,600	3,600	4,900	4,500	15,500
Teachers, except S&E postsecondary	301,900	24,900	63,800	45,000	20,100	40,400	11,800	23,700	19,800	52,300
Sales/marketing	132,400	9,500	26,100	18,600	6,400	21,500	3,900	10,400	6,300	29,700
Other non-S&E occupations	473,200	38,200	84,800	71,500	27,300	78,700	16,100	34,400	24,200	97,600

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		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Doctorate										
All occupations, total³	634,800	49,200	110,800	92,900	38,000	119,400	27,000	48,700	35,700	112,600
S&E occupations, total	395,600	31,800	71,000	57,900	24,100	70,500	17,200	30,100	24,000	68,500
Scientists, total	330,500	27,000	60,200	47,600	21,000	60,600	14,100	24,400	19,800	55,500
Computer/math sci, total	48,700	3,400	9,100	6,400	2,400	9,000	2,200	4,100	2,800	9,300
Computer/information scientists	17,500	1,600	4,200	1,900	600	2,200	300	1,500	700	4,500
Mathematical scientists	7,400	400	1,100	900	400	2,400	400	300	400	1,200
Postsecondary teachers-computer math sci	23,800	1,400	3,900	3,600	1,400	4,500	1,500	2,300	1,700	3,600
Life/related scientists, total	98,100	8,100	15,600	14,600	7,300	18,500	4,400	7,200	5,100	17,200
Agricultural/food scientists	7,800	300	600	1,300	1,300	1,700	400	800	500	1,000
Biological scientists	56,400	5,400	10,600	8,000	2,600	11,000	1,900	3,100	2,500	11,300
Environmental life scientists	900	S	100	100	100	200	S	S	100	200
Postsecondary teachers-life/related sciences	33,000	2,400	4,300	5,300	3,300	5,700	2,000	3,200	2,000	4,700
Physical/related scientists, total ...	77,000	6,500	13,500	11,600	4,100	13,800	2,700	6,300	6,600	12,000
Chemistry, except biochemistry	25,800	2,100	5,900	5,000	1,700	4,300	700	2,300	900	3,000
Earth scientists/										
geologists/oceanographers	9,800	700	700	700	200	1,500	300	1,200	2,200	2,300
Physicists/astronomers	15,000	1,300	2,100	1,800	400	3,100	500	700	1,800	3,300
Other physical/related scientists	2,000	100	200	200	100	600	100	S	200	400
Postsecondary teachers-physical/related sci	24,300	2,300	4,600	4,000	1,700	4,300	1,100	2,000	1,400	3,000

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		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Doctorate — continued										
Social/related scientists, total	106,700	9,100	22,100	15,000	7,300	19,300	4,700	6,800	5,300	17,000
Economists	6,300	400	900	400	300	3,000	100	200	200	800
Political/related scientists	1,200	300	100	100	100	400	S	S	200	100
Psychologists	44,300	3,800	9,800	5,300	2,700	7,000	1,200	2,800	2,200	9,500
Sociologists/anthropologists	3,100	200	700	600	100	600	100	100	300	400
Other social/related scientists	3,000	200	1,000	300	100	600	100	300	100	400
Postsecondary teachers- social/related sci	48,900	4,300	9,700	8,300	4,000	7,600	3,300	3,300	2,400	5,900
Engineers, total	65,000	4,700	10,800	10,300	3,100	9,800	3,100	5,700	4,300	13,000
Aerospace/related engineers	3,600	200	200	300	200	600	300	200	100	1,400
Chemical engineers	6,000	300	1,400	1,100	300	800	200	1,000	300	700
Civil/architectural engineers	3,200	200	500	200	100	600	200	200	300	1,000
Electrical/related engineers	11,600	1,200	2,800	1,000	300	1,500	200	900	500	3,200
Industrial engineers	400	S	100	S	S	100	S	S	S	100
Mechanical engineers	6,500	500	700	1,500	200	1,300	100	300	500	1,300
Other engineers	16,000	1,100	2,700	2,700	600	2,400	800	1,500	1,200	3,100
Postsecondary teachers-engineers ..	17,700	1,200	2,500	3,500	1,300	2,500	1,400	1,700	1,300	2,200
Non-S&E occupations, total	239,200	17,400	39,700	34,900	13,900	48,900	9,800	18,600	11,700	44,100
Managers/administrators	119,000	8,200	19,700	17,200	5,900	26,000	5,100	9,500	6,600	20,600
Health/related	21,100	1,400	4,100	3,200	1,100	4,100	1,300	1,500	1,000	3,300
Teachers, except S&E postsecondary	46,900	3,900	8,700	8,200	4,000	7,500	2,000	3,700	1,700	7,200
Sales/marketing	7,400	600	1,400	900	300	1,600	100	400	200	1,800
Other non-S&E occupations	44,800	3,300	5,800	5,300	2,500	9,700	1,300	3,500	2,200	11,100

1 Includes individuals employed in the U.S. who reported employer address outside the U.S., not shown separately

2 Includes professional degrees

3 Total excludes 37,000 individuals who reported never having worked.

NOTES: The term "Scientists and Engineers" (S&Es) includes all persons who have ever received a bachelor's degree or higher in a science or engineering (S&E) field, plus persons holding a non-S&E bachelor's or higher degree who are employed in an S&E occupation. Figures are rounded to nearest hundred. Details may not add to total because of rounding.

KEY: S = Suppressed for reasons of confidentiality and/or data reliability

SOURCE: National Science Foundation/Science Resources Studies Division, 1993 SESTAT (Scientists and Engineers Statistical Data System)