Table 819. Employment, Mean Earnings, and Growth in Science and Engineering (S&E) Occupations: 2004 to 2008

[Minus sign (–) represents a decrease. Based on data derived from Bureau of Labor Statistics' Occupational Employment Survey (OES)]

Occupation	Employment					Mean earnings	
	2004, total	2008, total	Total growth	Total growth (percent)	Average annual growth rate (percent)	2008 annual earnings (dol.)	Average annual growth rate (percent)
All occupations	**128,127,360**	**135,185,230**	**7,057,870**	**5.5**	**1.3**	**42,270**	**3.4**
STEM [1]	7,160,770	7,852,710	691,940	9.7	2.3	74,950	3.6
S&E	5,085,740	5,781,460	695,720	13.7	3.3	76,680	3.5
Engineers	1,487,810	1,626,330	138,520	9.3	2.3	84,120	3.7
Mathematical and computer scientists	2,566,170	2,972,940	406,770	15.9	3.7	74,420	3.4
Life scientists	275,500	319,520	44,020	16.0	3.8	75,130	3.7
Physical scientists	273,360	301,500	28,140	10.3	2.5	76,710	3.8
Social scientists	482,900	561,160	78,260	16.2	3.8	67,980	2.9
Technicians, programmers, and S&E managers	2,075,020	2,071,260	–3,760	–0.2	(Z)	70,170	3.6
S&E related	6,914,070	7,737,490	823,420	11.9	2.9	(NA)	(NA)
Healthcare practitioners and technicians	6,769,900	7,569,040	799,140	11.8	2.8	(NA)	(NA)
Other S&E related	144,170	168,450	24,280	16.8	4.0	(NA)	(NA)
Not STEM or S&E related	114,052,530	119,595,020	5,542,490	4.9	1.2	(NA)	(NA)

NA Not available. Z Less than 0.05. [1] STEM = science, technology, engineering, and mathematics.

Source: National Science Foundation, *Employment in Science and Engineering Occupations Reached 5.8 Million in 2008*, NSF 10-315, 2010. See also <http://www.nsf.gov/statistics/infbrief/nsf10315/>.

Table 820. Research and Development (R&D) Scientists and Engineers—Employment and Cost by Industry: 2005 to 2007

[In thousands (1,104.5 represents 1,104,500). Data are estimates on full-time-equivalent (FTE) basis. Based on the Survey of Industrial Research and Development. The Business R&D and Innovation Survey replaces the Survey of Industrial Research and Development for data available as of December 2010; see <http://www.nsf.gov/statistics/srvyindustry/about/brdis/>]

Industry	NAICS [1] code	Employed scientists and engineers [2] (1,000)			Cost per scientist or engineer, constant (2000) dollars [3, 4] ($1,000)		
		2005	2006	2007	2005	2006	2007
All industries [5]	**(X)**	**1,104.5**	**1,116.6**	**1,133.0**	**192.4**	**201.6**	**211.9**
Chemicals	325	118.3	123.2	134.0	328.5	330.1	356.4
Machinery	333	61.1	62.3	61.9	125.2	141.1	144.4
Electrical equipment, appliances, and components	335	18.7	16.9	15.8	(D)	(D)	(D)
Motor vehicles, trailers, and parts	3361–3363	42.0	42.0	(NA)	(D)	(D)	(D)
Aerospace products and parts	3364	39.7	39.5	40.2	335.4	359.4	380.5
Software publishing	5112	93.4	46.5	(NA)	162.5	174.0	175.4
Architectural, engineering, and related services	5413	35.8	41.2	48.5	129.3	146.4	113.9
Computer systems design and related services	5415	82.4	93.1	88.1	158.5	157.2	160.3
Scientific R&D services	5417	43.7	44.3	50.4	264.0	298.2	308.7
NOTE: Constant 2000 dollar deflator	(X)	(X)	(X)	(X)	1.1303	1.1668	1.1982

D Withheld to avoid disclosure. NA Not available. X Not applicable. [1] North American Industry Classification System 2002 (NAICS); see text, Section 15. [2] The mean number of full-time equivalent (R&D) scientists and engineers employed in January of the year shown and the following January. [3] Based on gross domestic product implicit price deflator. [4] Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in 2 consecutive years divided into total R&D expenditures in each industry. [5] Includes other industries not shown separately.

Source: National Science Foundation, *Research and Development in Industry*, NSF 10-319, 2010, and unpublished data. See also <http://www.nsf.gov/statistics/industry/>.