

TABLE 59

Domestic full-time equivalent R&D employees and researchers, by work status, industry, and company size: 2017

(Thousands)

Industry and company size	NAICS code	FTE R&D employees ^a				FTE R&D scientists and engineers ^b				
		Total	Full-time R&D employees	Full-time employees working on R&D part-time	Part-time employees working on R&D	Total	Full-time R&D employees	Full-time employees working on R&D part-time	Part-time employees working on R&D	
All industries	21-23, 31-33, 42-81	1,475	1,231	228	16	1,023	885	130	9	i
Manufacturing industries	31-33	841	732	100	9	599	539	54	5	i
Food	311	19	17	2	1	12	11	1	*	i
Beverage and tobacco products	312	4	3	*	*	2	2	*	*	
Textile, apparel, and leather products	313-16	6	5	2	*	3	2	1	*	i
Wood products	321	2	1	1	*	1	1	*	*	
Paper	322	7	5	1	*	5	4	1	*	
Printing and related support activities	323	2	1	1	*	1	1	*	*	
Petroleum and coal products	324	2	2	*	*	1	1	*	*	i
Chemicals	325	171	160	9	1	116	110	5	1	
Basic chemicals	3251	15	14	1	*	9	9	1	*	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	4	3	*	*	2	2	*	*	
Pesticide, fertilizer, and other agricultural chemicals	3253	5	5	*	*	4	4	*	*	i
Pharmaceuticals and medicines	3254	125	118	6	1	86	82	4	*	
Soap, cleaning compound, and toilet preparation	3256	11	11	*	*	9	9	*	*	i
Paint, coating, adhesive, and other chemicals	3255, 3259	10	9	1	*	6	6	*	*	
Plastics and rubber products	326	23	18	5	1	13	11	2	*	
Nonmetallic mineral products	327	5	4	1	*	3	3	*	*	i
Primary metals	331	6	3	3	*	2	2	1	*	
Fabricated metal products	332	18	10	8	*	9	5	3	*	i
Machinery	333	74	53	21	*	51	38	13	*	
Agricultural implement	33311	8	7	1	*	6	5	1	*	
Semiconductor machinery	333242	10	10	*	*	8	8	*	*	i
Engine, turbine, and power transmission equipment	3336	10	3	7	*	8	2	6	*	
Other machinery	other 333	46	33	13	*	29	23	7	*	i
Computer and electronic products	334	250	228	18	3	202	187	13	2	i
Communications equipment	3342	43	42	1	*	33	32	1	*	i
Semiconductor and other electronic components	3344	85	80	4	2	74	70	3	2	i
Navigational, measuring, electromedical, and control instruments	3345	65	53	11	1	51	42	9	*	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	13	12	1	*	10	9	*	*	i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	29	20	9	*	24	16	7	*	

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Other measuring and controlling device	other 3345	23	21	2	*	18	16	1	*
Other computer and electronic products	other 334	56	54	2	*	44	43	1	i *
Electrical equipment, appliances, and components	335	26	i 23	i 3	1	19	i 17	i 2	i *
Transportation equipment	336	154	137	16	1	112	103	9	1
Automobiles, bodies, trailers, and parts	3361-63	88	83	5	*	69	67	3	*
Aerospace products and parts	3364	54	44	9	1	37	31	5	i *
Aircraft, aircraft engine, and aircraft parts	336411-13	43	34	8	1	31	25	5	i *
Guided missile, space vehicle, and related parts	336414-15, 336419	10	10	*	*	6	6	*	*
Military armored vehicle, tank, and tank component	336992	*	*	*	0	*	*	*	0
Other transportation	other 336	12	i 10	i 2	i *	6	i 5	1	i *
Furniture and related products	337	5	3	1	*	2	2	*	*
Miscellaneous manufacturing	339	67	60	6	1	45	41	3	i *
Medical equipment and supplies	3391	49	46	3	*	35	33	2	*
Other miscellaneous manufacturing	3399	18	15	3	*	11	i 9	i 2	i *
Nonmanufacturing industries	21-23, 42-81	634	499	128	7	424	345	75	4
Mining, extraction, and support activities	21	12	11	1	*	4	i 4	i *	i *
Utilities	22	1	1	*	*	1	* i	*	*
Wholesale trade	42	6	4	3	i *	3	2	1	i *
Electronic shopping and electronic auctions	454111-12	40	10	31	0	28	9	19	0
Transportation and warehousing	48-49	7	6	1	*	4	3	*	*
Information	51	296	257	38	1	216	193	22	i 1
Publishing	511	132	120	12	*	103	95	8	i *
Newspaper, periodical, book, and directory publishers	5111	1	*	*	*	*	*	*	0
Software publishers	5112	131	119	12	*	103	95	8	i *
Telecommunications	517	30	14	16	*	18	i 10	8	i *
Data processing, hosting, and related services	518	76	67	9	*	52	47	5	*
Other information	other 51	58	57	1	*	i 43	42	1	*
Finance and insurance	52	29	25	i 4	*	i 15	14	1	i *
Real estate and rental and leasing	53	6	4	2	i *	4	3	1	i *
Lessors of nonfinancial intangible assets (except copyrighted works)	533	2	i *	i 2	i 0	1	i *	i 1	i 0
Other real estate and rental and leasing	other 53	4	4	*	*	3	3	*	*

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Professional, scientific, and technical services	54	207	169	34	5	133	110	21	2
Architectural, engineering, and related services	5413	30	13	16	1	20	9	10	*
Computer systems design and related services	5415	72	61	10	1	55	49	6	1
Scientific research and development services	5417	82	78	3	2	43	41	1	1
Biotechnology research and development	541711	19	18	*	*	10	10	*	*
Physical, engineering, and life sciences (except biotechnology) research and development	541712	53	50	2	1	25	23	1	1
Social sciences and humanities research and development	541720	11	10	*	*	8	7	*	*
Other professional, scientific, and technical services	other 54	23	18	4	*	15	12	3	*
Health care services	621-23	6	6	*	*	2	2	*	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	23	8	15	1	14	5	9	*
All companies (number of domestic employees)	-	1,475	1,231	228	16	1,023	885	130	9
Small companies									
10-19 ^c	-	23	16	6	1	15	11	3	*
20-49	-	67	43	22	1	42	29	12	*
Medium companies									
50-99	-	63	44	18	1	36	28	7	*
100-249	-	90	65	23	2	56	45	10	1
Large companies									
250-499	-	73	56	17	1	46	37	9	*
500-999	-	77	62	14	1	53	46	6	*
1,000-4,999	-	250	222	27	2	175	160	14	1
5,000-9,999	-	177	158	18	1	120	108	12	1
10,000-24,999	-	238	223	12	3	168	158	7	2
25,000 or more	-	417	343	72	3	312	262	48	2

* = amount < 500; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

FTE = full-time equivalent; NAICS = 2012 North American Industry Classification System.

^a Includes scientists and engineers and their managers, as well as technicians, technologists, and support staff.^b Includes scientists and engineers and their managers.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.