

TABLE 59

Domestic full-time equivalent R&D employees and researchers, by work status, industry, and company size: 2018

(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	1,619	1,367	236	16	1,127	987	131	9		
Manufacturing industries	31-33	899	783	106	10	640	579	56	5		
Food	311	20	17	3	*	12	10	1	*		
Beverage and tobacco products	312	5	5	1	*	3	3	*	*		
Textile, apparel, and leather products	313-16	6	4	2	*	3	2	1	*		
Wood products	321	2	1	1	*	1	1	*	0		
Paper	322	5	4	1	*	3	3	1	*		
Printing and related support activities	323	2	1	1	*	1	1	*	*		
Petroleum and coal products	324	6	6	*	*	1	1	*	*		
Chemicals	325	185	178	6	1	127	123	3	1		
Basic chemicals	3251	12	11	1	*	7	6	*	*		
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	7	7	*	*	5	5	*	*		
Pesticide, fertilizer, and other agricultural chemicals	3253	8	7	1	*	5	5	*	*		
Pharmaceuticals and medicines	3254	137	133	3	1	94	92	2	*		
Soap, cleaning compound, and toilet preparation	3256	11	11	1	*	9	8	*	*		
Paint, coating, adhesive, and other chemicals	3255, 3259	10	10	1	*	7	7	*	*		
Plastics and rubber products	326	19	14	5	*	10	8	2	*		
Nonmetallic mineral products	327	4	3	1	*	2	2	1	*		
Primary metals	331	7	3	4	*	2	2	1	*		
Fabricated metal products	332	18	10	8	*	9	6	3	*		
Machinery	333	82	58	23	1	55	41	13	*		
Agricultural implement	33311	10	9	1	*	7	6	*	*		
Semiconductor machinery	333242	11	10	*	*	9	8	*	*		
Engine, turbine, and power transmission equipment	3336	12	6	6	*	11	5	5	*		
Other machinery	other 333	49	33	16	*	29	21	8	*		
Computer and electronic products	334	267	246	18	3	218	203	13	2		
Communications equipment	3342	44	43	1	*	35	34	1	*		
Semiconductor and other electronic components	3344	96	89	6	2	83	78	4	1		
Navigational, measuring, electromedical, and control instruments	3345	68	57	10	1	53	44	8	1		

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Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	15	13	1	*	11	10	1	*				
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	30	22	7	1	24	17	6	*				
Other measuring and controlling device	other 3345	23	21	2	*	18	16	1	*				
Other computer and electronic products	other 334	59	58	1	*	47	46	*	*				
Electrical equipment, appliances, and components	335	21	19	3	*	16	14	2	*				
Transportation equipment	336	176	152	22	2	130	118	11	1				
Motor vehicles, bodies, trailers, and parts	3361-63	104	94	9	1	82	76	5	*				
Aerospace products and parts	3364	61	50	11	1	43	37	5	1				
Aircraft, aircraft engine, and aircraft parts	336411-13	58	48	9	1	41	36	4	1				
Guided missile, space vehicle, and related parts	336414-15, 336419	3	1	1	*	2	1	1	*				
Military armored vehicle, tank, and tank component	336992	*	*	*	0	*	*	*	0				
Other transportation	other 336	11	8	3	*	6	4	1	*				
Furniture and related products	337	4	3	1	*	2	1	*	*				
Miscellaneous	339	67	61	6	1	44	41	3	*				
Medical equipment and supplies	3391	52	49	3	1	36	34	2	*				
Other miscellaneous manufacturing	3399	15	12	3	*	8	7	1	*				
Nonmanufacturing industries	21-23, 42-81	720	583	130	7	487	408	76	4				
Mining, quarrying, oil and gas extraction, and support activities	21	11	10	1	*	8	8	*	*				
Utilities	22	1	1	*	*	*	*	*	*				
Wholesale trade	42	8	3	4	*	4	2	2	*				
Electronic shopping and electronic auctions	454111-12	51	13	39	0	36	12	25	0				
Transportation and warehousing	48-49	6	5	1	*	4	3	*	*				
Information	51	332	299	31	2	247	230	16	1				
Publishing	511	111	105	6	1	87	84	3	*				
Newspaper, periodical, book, and directory publishers	5111	1	1	*	*	*	*	*	0				
Software publishers	5112	110	104	6	1	87	84	3	*				
Telecommunications	517	21	8	13	*	10	3	6	*				

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Data processing, hosting, and related services	518	100	92	8	1	73	68	4	*
Other information	other 51	99	95	4	i *	77	74	3	i *
Finance and insurance	52	37	31	5	* i	22	21	1	i *
Real estate and rental and leasing	53	3	3	*	*	3	3	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	* i	*	0	*	0	*	0
Other real estate and rental and leasing	other 53	3	3	*	*	3	3	*	*
Professional, scientific, and technical services	54	243	205	34	4	146	122	21	2
Architectural, engineering, and related services	5413	35	19	15	1	23	13	10	* i
Computer systems design and related services	5415	87	75	11	1	62	54	7	1
Scientific research and development services	5417	95	90	3	2	44	42	2	i 1
Research and development in biotechnology	541711	30	30	*	*	10	10	*	*
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	59	55	2	1	31	29	1	i 1
Research and development in the social sciences and humanities	541720	5	i 5	* i	* i	4	i 3	* i	* i
Other professional, scientific, and technical services	other 54	27	21	6	*	17	13	i 4	* i
Health care services	621-23	6	5	*	*	3	i 3	* i	* i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	23	8	14	1	14	5	9	*
All companies (number of domestic employees)	-	1,619	1,367	236	16	1,127	987	131	9
Small companies									
10-19 ^c	-	22	17	4	1	15	12	3	*
20-49	-	59	45	13	2	40	32	7	1
Medium companies									
50-99	-	68	47	20	1	42	33	9	*
100-249	-	106	77	28	1	62	50	12	1
Large companies									
250-499	-	85	68	17	1	55	46	8	1
500-999	-	76	58	16	1	50	42	7	*

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1,000–4,999	–	275	243	29	3	196	178	17	i	1	i		
5,000–9,999	–	166	148	16	i	109	100	8	i	1	i		
10,000–24,999	–	289	269	19	2	202	188	13		1	i		
25,000 or more	–	473	395	74	3	356	306	47		2	i		

* = amount < 500 employees; 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.