

TABLE 53
Domestic full-time equivalent R&D employees and researchers, by work status, industry, and company size: 2020

(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	1,765	1,472	272	21	1,201	1,038	152	10
Manufacturing industries	31-33	888	757	119	11	608	541	61	6
Food	311	24	20	3	1	12	11	1	i *
Beverage and tobacco products	312	4	3	1	*	3	3	*	*
Textile, apparel, and leather products	313-16	5	4	1	* i	2	2	*	* i
Wood products	321	2	1	1	*	1	1	*	*
Paper	322	4	3	1	*	3	3	*	*
Printing and related support activities	323	3	2	1	*	1	1	*	i *
Petroleum and coal products	324	6	5	*	*	2	2	*	*
Chemicals	325	187	179	7	1	118	114	3	i 1
Basic chemicals	3251	11	10	1	*	7	6	*	*
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	6	5	*	*	4	3	*	*
Pesticide, fertilizer, and other agricultural chemicals	3253	4	4	*	*	3	3	*	*
Pharmaceuticals and medicines	3254	143	139	4	i 1	88	86	2	i *
Soap, cleaning compound, and toilet preparation	3256	10	9	1	*	8	7	*	i *
Paint, coating, adhesive, and other chemicals	3255, 3259	12	11	1	*	9	8	*	*
Plastics and rubber products	326	19	13	i 6	*	10	i 8	i 2	i *
Nonmetallic mineral products	327	5	3	2	i *	3	2	1	i *
Primary metals	331	6	1	5	*	2	1	1	*
Fabricated metal products	332	27	14	12	1	13	8	5	*
Machinery	333	82	59	22	1	53	40	12	*
Agricultural implement	33311	10	9	1	*	6	6	*	i *
Semiconductor machinery	333242	12	12	*	i *	9	i 8	i *	i *
Engine, turbine, and power transmission equipment	3336	7	6	1	*	5	4	*	i *
Other machinery	other 333	53	31	21	1	33	21	12	*
Computer and electronic products	334	251	225	23	4	207	189	16	3
Communications equipment	3342	41	38	3	i *	32	30	2	i *
Semiconductor and other electronic components	3344	87	76	8	2	74	67	5	2
Navigational, measuring, electromedical, and control instruments	3345	59	47	11	1	48	39	9	1
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	7	7	1	*	6	5	*	i *
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	30	21	8	1	26	18	7	1

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Other measuring and controlling device	other 3345	22	20	2	*	17	15	1	*
Other computer and electronic products	other 334	64	64	*	*	53	53	*	i *
Electrical equipment, appliances, and components	335	24	20	3	1	16	14	2	* i
Transportation equipment	336	155	131	22	1	113	99	13	1
Motor vehicles, bodies, trailers, and parts	3361-63	95	89	5	1	73	70	3	*
Aerospace products and parts	3364	49	34	i 14	1 i	35 i	25 i	9	* i
Aircraft, aircraft engine, and aircraft parts	336411-13	45	32	i 13	* i	32 i	24 i	8	* i
Guided missile, space vehicle, and related parts	336414-15, 336419	4	2	2	*	3	2	1	*
Military armored vehicle, tank, and tank component	336992	*	*	*	*	*	*	*	0
Other transportation	other 336	10	7	3 i	* i	5 i	4	1 i	*
Furniture and related products	337	4	2	1	*	2	1	*	*
Miscellaneous	339	79	69	8	1	47	44	3	*
Medical equipment and supplies	3391	64	59	4	1	39	38	1	*
Other miscellaneous manufacturing	3399	15 i	11	4 i	* i	8 i	6 i	2 i	* i
Nonmanufacturing industries	21-23, 42-81	878	715	153	10	593	497	92	5
Mining, quarrying, oil and gas extraction, and support activities	21	7	5 i	2 i	* i	4	4 i	* i	* i
Utilities	22	1	1	*	* i	0-2	0-2	0-1	0-1
Wholesale trade	42	10 i	6	4 i	* i	5 i	3 i	1	* i
Electronic shopping and electronic auctions	454111-12	58 - 80	0 - 45	16 - 66	*	40 - 64	0 - 37	3 - 51	* i
Transportation and warehousing	48-49	13 i	12 i	1 i	* i	10 i	9 i	1 i	*
Information	51	411	384	24	2	303	289	13	1
Publishing	511	110	104	6	1	90	86	4	*
Newspaper, periodical, book, and directory publishers	5111	1	1	*	* i	*	*	*	0
Software publishers	5112	110	103	6	1	90	85	4	*
Telecommunications	517	21	19 i	2	*	9 i	9 i	1	*
Data processing, hosting, and related services	518	164	148	15	1	111	103	7	1
Other information	other 51	116	113	2	1	93	91	1 i	* i
Finance and insurance	52	55	43	12	1	34	29	4 i	* i
Real estate and rental and leasing	53	5	5	*	*	3	3	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	* i	* i	* i	0	* i	* i	0	0
Other real estate and rental and leasing	other 53	5	5	*	*	3	3	*	*

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Professional, scientific, and technical services	54	265	214	46	6	153	126	24	3
Architectural, engineering, and related services	5413	40	19	19	1	25	13	11	1
Computer systems design and related services	5415	85	72	12	1	59	52	7	1
Scientific research and development services	5417	103	95	5	3	49	46	2	1
Research and development in nanotechnology	541713	1	1	*	*	1	1	*	*
Research and development in biotechnology (except nanobiotechnology)	541714	29	28	*	1	11	11	*	*
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	66	60	4	2	34	31	2	1
Research and development in the social sciences and humanities	541720	7	6	*	*	3	3	*	*
Other professional, scientific, and technical services	other 54	37	28	9	*	19	15	4	*
Health care services	621-23	7	5	2	*	3	2	1	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	21 - 41	0 - 41	0 - 41	*	8 - 41	0 - 37	0 - 41	0 - 1
All companies (number of domestic employees)	-	1,765	1,472	272	21	1,201	1,038	152	10
Small companies									
10-19 ^c	-	29	21	6	1	19	15	4	1
20-49	-	79	55	22	2	47	35	11	1
Medium companies									
50-99	-	76	48	26	1	45	32	13	*
100-249	-	119	84	33	2	72	57	14	1
Large companies									
250-499	-	94	75	18	1	63	54	8	1
500-999	-	84	69	14	1	54	47	7	*
1,000-4,999	-	292	257	31	3	202	185	16	1
5,000-9,999	-	159	141	17	1	107	98	8	*
10,000-24,999	-	259	232	24	4	155	140	13	2
25,000 or more	-	573	489	81	3	438	377	59	3

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

FTE = full-time equivalent; NAICS = 2017 North American Industry Classification System.

^a Includes scientists and engineers; their managers; and technicians, technologists, and support staff.

^b Includes scientists and engineers and their managers.

^c The Business Enterprise 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 \$50,000 or more of R&D and are not comparable with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2020.