

TABLE 30

Domestic R&D paid for and performed by the company, by industry, company size, and domestic R&D program size: 2020

(Millions of U.S. dollars)

Industry	NAICS code	R&D program size					
		All companies	Less than \$1 million	\$1 million–\$9.999 million	\$10 million–\$49.999 million	\$50 million–\$99.999 million	\$100 million or more
All industries	21–23, 31–33, 42–81	466,162	5,191	29,001	35,739	26,561	369,670
Manufacturing industries	31–33	264,596	2,965	13,685	21,592	15,150	211,204
Food	311	4,985	192 - 202	673	535	752 - 765	2,822
Beverage and tobacco products	312	1,056	36	81	32	240 - 276	629 - 666
Textile, apparel, and leather products	313–16	812	38	127	235	224	188
Wood products	321	183	26	66	91	0	0
Paper	322	927	13	101	139	141	532
Printing and related support activities	323	282	45	90	146	0	0
Petroleum and coal products	324	1,222	0 - 162	91	204 - 241	0	729 - 927
Chemicals	325	89,403	387	2,786	7,641	5,417	73,173
Basic chemicals	3251	2,523	51	317	1,000	448	706
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,161	32	220	137	0	771
Pesticide, fertilizer, and other agricultural chemicals	3253	775	24 - 33	63	73	0	606 - 615
Pharmaceuticals and medicines	3254	80,858	77	1,782	6,001	4,834	68,164
Soap, cleaning compound, and toilet preparation	3256	2,476	100	165	145	56	2,010
Paint, coating, adhesive, and other chemicals	3255, 3259	1,610	91 - 100	239	284	78	909 - 918
Plastics and rubber products	326	2,607	217	715	974	469	232
Nonmetallic mineral products	327	1,619	53	130 - 166	210	50 - 212	980 - 1,178
Primary metals	331	795	48	167	374	0	206
Fabricated metal products	332	3,336	509	1,409	801	485	132
Machinery	333	15,071	354	1,992	2,092	1,105	9,528
Agricultural implement	33311	1,760	33	46 - 99	117	121 - 165	1,348 - 1,401
Semiconductor machinery	333242	4,121	8	47	177	142	3,747
Engine, turbine, and power transmission equipment	3336	1,523	16	47	208	113	1,138
Other machinery	other 333	7,667	297	1,799 - 1,854	1,590	683 - 728	3,241 - 3,297
Computer and electronic products	334	88,505	396	2,037	2,961	2,217	80,893
Communications equipment	3342	11,107	37 - 66	369	254 - 368	524 - 638	9,810
Semiconductor and other electronic components	3344	40,801	93	543	991	684	38,489
Navigational, measuring, electromedical, and control instruments	3345	11,012	190 - 218	938	1,261	575 - 687	7,908 - 8,019
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	2,606	23	236	579	253	1,515

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Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	3,561	0 - 23	97	172	50 - 73	3,221
Other measuring and controlling device	other 3345	4,844	144 - 196	605	510	248 - 384	3,171 - 3,284
Other computer and electronic products	other 334	25,585	46	187	342 - 454	322	24,576 - 24,688
Electrical equipment, appliances, and components	335	4,492	133	560	979	969	1,851
Transportation equipment	336	30,232	131	1,043	1,600	1,553	25,906
Motor vehicles, bodies, trailers, and parts	3361–63	19,522	77	527	894	871	17,154
Aerospace products and parts	3364	9,111	34	294 - 319	570	400	7,786 - 7,813
Aircraft, aircraft engine, and aircraft parts	336411–13	8,281	31	283	467	257	7,243
Guided missile, space vehicle, and related parts	336414–15, 336419	831	3	11 - 36	103	144	544 - 570
Military armored vehicle, tank, and tank component	336992	4	3	2	0	0	0
Other transportation	other 336	1,594	17	194 - 219	135	282	940 - 967
Furniture and related products	337	492	42	224	227	0	0
Miscellaneous	339	18,576	182 - 348	1,351 - 1,386	2,309 - 2,353	1,360 - 1,531	13,167
Medical equipment and supplies	3391	15,944	183	841	1,745	1,139	12,036
Other miscellaneous manufacturing	3399	2,632	0 - 165	509 - 545	563 - 609	221 - 393	1,131 i
Nonmanufacturing industries	21–23, 42–81	201,566	2,225	15,316	14,147	11,412	158,467
Mining, quarrying, oil and gas extraction, and support activities	21	1,121	47 - 58	247 i	9 - 559	189 i	69 - 629
Utilities	22	224	5	43 - 57	125	36 - 50	0
Wholesale trade	42	1,001	294	669 i	38 i	0	0
Electronic shopping and electronic auctions	454111–12	3,837 - 19,343 i	0 - 145	64	0 - 950	50 - 664	2,053 - 19,229 i
Transportation and warehousing	48–49	4,954 i	0 - 47	141	101	50 - 97	4,616 i
Information	51	128,350	567 - 578	5,755	6,619	7,897 - 7,910	107,500
Publishing	511	34,516	352	1,939	1,460	850	29,914
Newspaper, periodical, book, and directory publishers	5111	60	4	8	48	0	0
Software publishers	5112	34,456	349	1,931	1,412	850	29,914
Telecommunications	517	3,371	8	227	444	65 i	2,626
Data processing, hosting, and related services	518	41,105	169	3,190	4,110	6,554	27,081
Other information	other 51	49,358	36 - 49	399	605	427 - 441	47,878

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Finance and insurance	52	12,204	11	337 - 349	1,147	474	10,223 - 10,234
Real estate and rental and leasing	53	3,249	4 - 150	13	10 - 960	50 - 664	1,462 - 3,172
Lessors of nonfinancial intangible assets (except copyrighted works)	533	7	4	2	0	0	0
Other real estate and rental and leasing	other 53	3,242	0 - 145	11	10 - 960	50 - 664	1,462 - 3,172
Professional, scientific, and technical services	54	28,322	1,062	6,533	4,719	1,635	14,373
Architectural, engineering, and related services	5413	2,214	236	1,108	676	191	2
Computer systems design and related services	5415	14,293	536	2,712	1,568	761	8,716
Scientific research and development services	5417	6,246	143	1,897	1,585	360	2,262 i
Research and development in nanotechnology	541713	126 i	20	106 i	0	0	0
Research and development in biotechnology (except nanobiotechnology)	541714	1,176	29	462	468	174	44
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	4,906 i	55 - 96 i	1,299 - 1,330	1,078 - 1,118	186	2,218 i
Research and development in the social sciences and humanities	541720	38	0 - 38 i	0 - 29	0 - 38	0	0
Other professional, scientific, and technical services	other 54	5,570	148	815	890	323	3,394
Health care services	621–23	1,374	81	216	432	359	285
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	1,429 - 16,934	0 - 145	1,269 - 1,298	0 - 950	50 - 664 i	100 - 15,615
All companies (number of domestic employees)	–	466,162	5,191	29,001	35,739	26,561	369,670
Small companies							
10–19 ^a	–	4,019	1,009	2,531	323	0	155
20–49	–	10,970	2,019	6,105	2,607	239	0
Medium companies							
50–99	–	11,177	993	5,257	4,211	716	0
100–249	–	22,132	691	7,362	7,116	3,392	3,571
Large companies							
250–499	–	18,067	257	3,319	4,818	5,162	4,511
500–999	–	18,458	129	2,037	5,117	4,126	7,050
1,000–4,999	–	75,917	81	1,905	8,042	8,120	57,769
5,000–9,999	–	42,451	7	194	1,925	2,109	38,217
10,000–24,999	–	72,827	4	210	1,064	2,249	69,300
25,000 or more	–	190,145	1	82	516	449	189,097

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2017 North American Industry Classification System.

^a 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. R&D program size classifications are based on R&D performance. 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.