

TABLE 30

## Domestic R&amp;D paid for and performed by the company, by industry, company size, and domestic R&amp;D program size: 2022

(Millions of U.S. dollars)

Industry and company size	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	608,058	5,382	30,478	49,030	29,517	493,651	
Manufacturing industries	31–33	326,998	2,764	13,182	25,506	19,039	266,507	
Food	311	D	D	835	1,886	r D	3,186	
Beverage and tobacco products	312	660	39	146	79	239	157	
Textile, apparel, and leather products	313–16	D	D	133	299	150	0	
Wood products	321	254	16	74	164	0	0	
Paper	322	1,004	12	103	178	159	552	
Printing and related support activities	323	164	25	59	80	i 0	0	
Petroleum and coal products	324	856	10	D	176	D	D	
Chemicals	325	113,518	373	2,348	8,882	7,407	94,508	
Basic chemicals	3251	D	D	292	877	D	D	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,413	D	197	284	0	D	
Pesticide, fertilizer, and other agricultural chemicals	3253	D	13	D	163	0	D	
Pharmaceuticals and medicines	3254	104,720	D	1,355	7,202	D	89,275	
Soap, cleaning compound, and toilet preparations	3256	D	66	204	D	76	i 2,146	
Paint, coating, adhesive, and other chemicals	3255, 3259	1,195	D	D	D	98	D	
Plastics and rubber products	326	3,251	150	662	930	415	1,094	
Nonmetallic mineral products	327	1,435	69	115	161	77	1,014	
Primary metals	331	1,099	57	193	311	128	410	
Fabricated metal products	332	3,304	D	1,306	612	D	528	i
Machinery	333	18,246	387	1,992	2,107	1,474	12,286	
Agricultural implement	33311	D	D	141	166	D	D	
Semiconductor machinery	333242	5,390	6	31	145	317	4,892	
Engine, turbine, and power transmission equipment	3336	D	D	123	138	D	2,396	
Other machinery	other 333	7,987	D	1,697	1,658	D	D	
Computer and electronic products	334	99,234	457	1,800	4,309	2,930	89,738	
Communications equipment	3342	10,870	D	D	D	D	D	
Semiconductor and other electronic components	3344	47,380	D	D	2,142	r D	43,576	
Navigational, measuring, electromedical, and control instruments	3345	10,105	D	833	1,273	D	7,095	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	3,959	14	291	394	349	2,911	
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	2,170	D	D	214	1	1,847	
Other measuring and controlling devices	other 3345	3,976	D	D	665	D	2,337	
Other computer and electronic products	other 334	30,879	D	D	D	407	D	

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		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
Electrical equipment, appliances, and components	335	6,657	58	880	1,082	1,032	3,605
Transportation equipment	336	46,468	193	1,002	1,866	2,009	41,400
Motor vehicles, bodies, trailers, and parts	3361–63	30,722	101	499	1,081	1,106	27,936
Aerospace products and parts	3364	13,786	D	247	626	681	D
Aircraft, aircraft engine, and aircraft parts	336411–13	9,303	D	217	549	D	8,033
Guided missile, space vehicle, and related parts	336414–15, 336419	4,483	D	29	78	D	D
Military armored vehicle, tank, and tank components	336992	26	D	14	D	0	0
Other transportation	other 336	1,935	D	242	D	221	D
Furniture and related products	337	405	38	115	186	65	0
Miscellaneous	339	23,032	237	D	2,200	D	D
Medical equipment and supplies	3391	20,112	114	948	1,628	1,514	15,908
Other miscellaneous manufacturing	3399	2,921	123	D	573	D	D
Nonmanufacturing industries	21–23, 42–81	281,060	2,618	17,295	23,524	10,478	227,144
Mining, quarrying, oil and gas extraction, and support activities	21	D	17	306	336	D	D
Utilities	22	D	3	D	D	D	231
Wholesale trade	42	D	344	1,243	D	0	0
Electronic shopping and electronic auctions	454111–12	D	D	88	D	D	D
Transportation and warehousing	48–49	D	D	70	393	0	D
Information	51	181,392	424	5,848	11,208	5,382	158,530
Publishing	511	49,674	D	2,332	3,041	1,093	D
Newspaper, periodical, book, and directory publishers	5111	72	10	6	55	0	0
Software publishers	5112	49,602	D	2,325	2,985	1,093	D
Telecommunications	517	3,614	D	139	D	85	2,803
Data processing, hosting, and related services	518	49,270	106	3,079	6,930	3,767	35,389
Other information	other 51	78,834	53	298	D	438	D
Finance and insurance	52	17,173	9	D	1,155	702	D
Real estate and rental and leasing	53	2,398	D	32	D	0	2,145
Lessors of nonfinancial intangible assets (except copyrighted works)	533	5	D	0	0	0	0
Other real estate and rental and leasing	other 53	2,393	D	32	D	0	2,145
Professional, scientific, and technical services	54	38,633	1,352	6,782	8,429	2,908	19,161
Architectural, engineering, and related services	5413	2,912	187	1,340	1,185	200	0
Computer systems design and related services	5415	18,878	647	2,763	3,529	1,266	10,672
Scientific research and development services	5417	9,297	85	1,897	2,248	1,023	4,045

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**Domestic R&D paid for and performed by the company, by industry, company size, and domestic R&D program size: 2022**

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		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
Research and development in nanotechnology	541713	179	7	130	42	0	0
Research and development in biotechnology (except nanobiotechnology)	541714	2,916	23	639	682	530	1,042
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	6,176	55	1,121	1,504	493	3,003
Research and development in the social sciences and humanities	541720	27	1	6	20	0	0
Other professional, scientific, and technical services	other 54	7,547	433	783	1,467	419	4,444
Health care services	621–23	D	D	D	481	691	1,299
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	3,300	D	D	D	D	D
All companies (number of domestic employees)	–	608,058	5,382	30,478	49,030	29,517	493,651
Small companies							
10–19 <sup>a</sup>	–	4,009	1,409	2,168	377	55	0
20–49	–	12,788	D	7,973	3,127	D	0
Medium companies							
50–99	–	13,274	D	5,594	5,042	D	127
100–249	–	24,844	926	6,717	9,844	4,369	2,988
Large companies							
250–499	–	26,469	227	3,235	9,401	4,257	9,349
500–999	–	29,007	121	2,282	7,324	6,149	13,130
1,000–4,999	–	94,615	66	2,100	9,916	7,956	74,578
5,000–9,999	–	54,018	7	160	2,054	2,797	49,000
10,000–24,999	–	96,071	2	165	1,291	1,857	92,756
25,000 or more	–	252,964	2	84	654	499	251,724

D = data withheld to avoid disclosing operations of individual companies; i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse; r = relative standard error is more than 50%.

NAICS = 2017 North American Industry Classification System.

<sup>a</sup> 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&amp;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&amp;D and are not comparable with estimates published for years prior to 2018. R&amp;D program size classifications are based on R&amp;D performance.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2022.