

TABLE 22

Total R&D performance of companies with 1–4 employees, by industry: 2016

(Thousands of U.S. dollars)

Industry	NAICS code	Companies (number)	Amount
All industries	21–23, 31–33, 42–81	44,139	4,843,494
Manufacturing industries	31–33	4,856	554,091
Food	311	D	s
Beverages and tobacco products	312	D	s
Textiles, apparel, and leather products	313–16	D	s
Wood products	321	s	s
Paper	322	0	0
Printing and related support activities	323	136	s
Petroleum and coal products	324	D	s
Chemicals	325	469	118,986
Basic chemicals	3251	D	s
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	24	1,490
Pesticides, fertilizers, and other agricultural chemicals	3253	D	26
Pharmaceuticals and medicines	3254	131	73,993
Soaps, cleaning compounds, and toilet preparations	3256	133	s
Paints, coatings, adhesives, and other chemicals	3255, 3259	124	17,592
Plastics and rubber products	326	106	s
Nonmetallic mineral products	327	106	s
Primary metals	331	D	s
Fabricated metal products	332	619	26,848
Machinery	333	805	114,951
Agricultural implements	33311	D	s
Semiconductor machinery	333242	39	s
Engines, turbines, and power transmission equipment	3336	D	s
Other machinery	other 333	658	67,821
Computer and electronic products	334	846	134,686
Communications equipment	3342	73	8,518
Semiconductors and other electronic components	3344	194	32,457
Navigational, measuring, electromedical, and control instruments	3345	375	64,131
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	68	20,745
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	25	4,733
Other measuring and controlling devices	other 3345	282	38,653
Other computer and electronic products	other 334	203	29,580
Electrical equipment, appliances, and components	335	211	23,861
Transportation equipment	336	273	29,131
Automobiles, bodies, trailers, and parts	3361–63	189	s
Aerospace products and parts	3364	D	D
Aircraft, aircraft engines, and aircraft parts	336411–13	D	3
Guided missiles, space vehicles, and related parts	336414–15, 336419	D	D
Military armored vehicles, tanks, and tank components	336992	D	63
Other transportation	other 336	D	D
Furniture and related products	337	s	s
Miscellaneous	339	839	76,731
Medical equipment and supplies	3391	382	s
Other miscellaneous manufacturing	3399	457	37,156
Nonmanufacturing industries	21–23, 42–81	39,283	4,289,402
Mining, extraction, and support activities	21	145	s
Utilities	22	s	s
Wholesale trade	42	5,340	295,290
Electronic shopping and electronic auctions	454111–12	720	39,818
Transportation and warehousing	48–49	120	s

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Industry	NAICS code	Companies (number)	Amount
Information	51	1,983	239,024
Publishing	511	632	108,978
Newspaper, periodical, book, and directory publishers	5111	0	0
Software publishers	5112	632	108,978
Telecommunications	517	166	s
Data processing, hosting, and related services	518	507	63,032
Other information	other 51	678	55,222
Finance and insurance	52	158	s
Real estate and rental and leasing	53	D	s
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	s
Other real estate and rental and leasing	other 53	D	s
Professional, scientific, and technical services	54	30,249	3,577,353
Architectural, engineering, and related services	5413	4,628	381,344
Computer systems design and related services	5415	11,577	1,456,420
Scientific research and development services	5417	2,497	889,127
Biotechnology research and development	541711	777	337,866
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,552	529,224
Social sciences and humanities research and development	541720	168	22,037
Other professional, scientific, and technical services	other 54	11,548	850,462
Health care services	621–23	250	49,510
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	D	s

D = data withheld to avoid disclosing operations of individual companies; s = suppressed for reliability; standard error exceeds publication standards.

NAICS = 2012 North American Industry Classification System.

Note(s)

Detail may not add to total because of rounding. Industry classification based on sample NAICS code. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Microbusiness R&D and Innovation Survey, 2016.