

TABLE 5. Worldwide R&D paid for by the company and performed by the company and others, by industry and company size: 2014
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Performed by the company	Performed by others
All industries	21-23, 31-33, 42-81	399,321	351,926	47,395
Manufacturing industries	31-33	286,694	244,474	42,220
Food	311	6,880	6,309	570 i
Beverages and tobacco products	312	1,655	1,322	333
Textiles, apparel, and leather products	313-16	736	719	17
Wood products	321	371 i	356 i	15 i
Paper	322	898	868	30
Printing and related support activities	323	243	236	7
Petroleum and coal products	324	372	293	79
Chemicals	325	101,004	69,462	31,542
Basic chemicals	3251	3,586	3,325	261
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,939	1,825	114
Pesticides, fertilizers, and other agricultural chemicals	3253	1,762 i	1,610 i	152 i
Pharmaceuticals and medicines	3254	88,135	57,606	30,529
Soaps, cleaning compounds, and toilet preparations	3256	3,927	3,483	444
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,656	1,614 i	41
Plastics and rubber products	326	4,537	4,297	240
Nonmetallic mineral products	327	1,758	1,574	184
Primary metals	331	772	709	63
Fabricated metal products	332	2,256	2,222	33
Machinery	333	15,024	14,243	781
Agricultural implements	33311	2,429	D	D
Semiconductor machinery	333295	3,326	3,304	22
Engines, turbines, and power transmission equipment	3336	D	2,820	D
Other machinery	other 333	D	D	D
Computer and electronic products	334	87,622	85,365	2,258
Communications equipment	3342	21,261	20,496	765
Semiconductors and other electronic components	3344	41,288	40,530	758
Navigational, measuring, electromedical, and control instruments	3345	14,104	13,512	592
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	4,938	4,747	192
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	3,758	3,531	227
Other measuring and controlling devices	other 3345	5,407	5,234	173
Other computer and electronic products	other 334	10,970	10,827	143
Electrical equipment, appliances, and components	335	5,860	5,552	308
Transportation equipment	336	40,984	36,117	4,867
Automobiles, bodies, trailers, and parts	3361-63	26,193	23,001	3,192
Aerospace products and parts	3364	13,586	11,936	1,650
Aircraft, aircraft engines, and aircraft parts	336411-13	D	D	D
Guided missiles, space vehicles, and related parts	336414-15, 336419	D	D	D
Military armored vehicles, tanks, and tank components	336992	D	D	1
Other transportation	other 336	D	D	24
Furniture and related products	337	441	414	27
Miscellaneous manufacturing	339	15,281	14,415	866
Medical equipment and supplies	3391	12,322	11,583	739
Other miscellaneous manufacturing	3399	2,959	2,832	127
Nonmanufacturing industries	21-23, 42-81	112,626	107,452	5,175
Mining, extraction, and support activities	21	D	D	D
Utilities	22	491	259	232
Wholesale trade	42	438	D	D
Electronic shopping and electronic auctions	454111-12	D	D	D
Transportation and warehousing	48-49	709	688	21 i
Information	51	77,949	75,811	2,139
Publishing	511	46,291	44,840	1,451
Newspaper, periodical, book, and directory publishers	5111	102	92 i	10 i

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Software publishers	5112	46,189	44,748	1,441
Telecommunications	517	4,045	3,771	274 i
Data processing, hosting, and related services	518	10,455	10,215	240
Other information	other 51	17,159	16,985	174
Finance and insurance	52	4,844	4,715	128
Real estate and rental and leasing	53	276	268	8 i
Lessors of nonfinancial intangible assets (except copyrighted works)	533	58	58	*
Other real estate and rental and leasing	other 53	218	210	8 i
Professional, scientific, and technical services	54	D	18,048 i	D
Architectural, engineering, and related services	5413	1,598	1,549 i	50 i
Computer systems design and related services	5415	10,277	10,117 i	160 i
Scientific R&D services	5417	D	2,746	D
Biotechnology R&D	541711	D	727	D
Physical, engineering, and life sciences (except biotechnology) R&D	541712	2,384	1,988	396
Social sciences and humanities R&D	541720	51	30	21
Other professional, scientific, and technical services	other 54	D	3,637 i	D
Health care services	621-23	474	439 i	35 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	D	D
All companies (number of domestic employees)	-	399,321	351,926	47,395
Small companies ^a				
5-499	-	53,455	46,788	6,668
5-99	-	27,069	22,876 i	4,192
5-49	-	17,392	14,825 i	2,568
5-9	-	3,072	2,514 i	558 i
10-24	-	6,723	5,770 i	953
25-49	-	7,597	6,540 i	1,056
50-99	-	9,677	8,052	1,625
100-249	-	13,909	12,385	1,524
250-499	-	12,477	11,526	951
Medium and large companies				
500-999	-	15,310	13,934	1,376
1,000-4,999	-	68,936	60,665	8,271
5,000-9,999	-	43,496	39,991	3,504
10,000-24,999	-	69,784	55,818	13,966
25,000 or more	-	148,340	134,730	13,610

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: 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 R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.