

TABLE 52  
**Capital expenditures in the United States and for domestic R&D paid for and performed by the company, by type of expenditure, industry, and company size: 2017**  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Domestic R&D				
			Total	Structures	Equipment	Capitalized software	All other
All industries	21-23, 31-33, 42-81	587,332	31,885	3,541	14,898	8,539	4,907
Manufacturing industries	31-33	237,691	15,659	2,662	9,265	1,611	2,122
Food	311	19,410	552	140	377	26	9
Beverage and tobacco products	312	10,247	132	52	63	13	3
Textile, apparel, and leather products	313-16	2,508	109	43	31	29	6
Wood products	321	1,184	12	1	11	*	*
Paper	322	8,314	123	3	117	*	3
Printing and related support activities	323	1,975	19	*	7	11	1
Petroleum and coal products	324	8,601	235	68	164	*	3
Chemicals	325	41,932	5,394	1,788	2,250	469	887
Basic chemicals	3251	12,939	224	15	193	2	15
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,603	83	6	38	*	38
Pesticide, fertilizer, and other agricultural chemicals	3253	3,421	199	133	51	*	15
Pharmaceuticals and medicines	3254	16,211	4,394	1,565	1,641	399	789
Soap, cleaning compound, and toilet preparation	3256	4,633	158	8	119	4	27
Paint, coating, adhesive, and other chemicals	3255, 3259	3,124	336	61	209	63	3
Plastics and rubber products	326	13,162	318	18	236	4	61
Nonmetallic mineral products	327	3,249	74	11	35	1	28
Primary metals	331	3,441	93	*	21	1	70
Fabricated metal products	332	5,919	189	14	129	8	37
Machinery	333	11,707	866	90	548	101	127
Agricultural implement	33311	1,810	50	4	28	1	17
Semiconductor machinery	333242	733	338	63	224	23	27
Engine, turbine, and power transmission equipment	3336	1,193	91	5	65	6	15
Other machinery	other 333	7,971	388	18	231	71	68
Computer and electronic products	334	30,411	4,590	224	3,529	527	310
Communications equipment	3342	2,920	843	32	653	59	99
Semiconductor and other electronic components	3344	13,312	2,173	126	1,763	212	73
Navigational, measuring, electromedical, and control instruments	3345	7,018	571	46	277	147	101
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,029	109	9	80	16	4
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	2,138	302	11	106	120	65
Other measuring and controlling device	other 3345	3,852	160	26	91	11	32
Other computer and electronic products	other 334	7,161	1,004	20	837	109	38
Electrical equipment, appliances, and components	335	3,067	227	7	130	15	76

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Transportation equipment	336	60,636	1,791	158	1,141	222	271
Automobiles, bodies, trailers, and parts	3361-63	46,164	1,177	103	759	143	173
Aerospace products and parts	3364	11,396	522	39	340	77	67
Aircraft, aircraft engine, and aircraft parts	336411-13	10,426	513	38	338	77	60
Guided missile, space vehicle, and related parts	336414-15, 336419	969	9	1	2	*	7
Military armored vehicle, tank, and tank component	336992	11	*	0	*	*	*
Other transportation	other 336	3,066	92	16	42	2	31
Furniture and related products	337	1,574	48	17	23	*	8
Miscellaneous	339	10,354	888	28	452	184	224
Medical equipment and supplies	3391	7,689	747	24	361	178	184
Other miscellaneous manufacturing	3399	2,665	141	4	91	6	40
Nonmanufacturing industries	21-23, 42-81	349,640	16,226	879	5,633	6,928	2,785
Mining, extraction, and support activities	21	28,701	409	7	196	102	104
Utilities	22	104,854	97	i 2	i 9	i 12	i 75
Wholesale trade	42	4,597	i 47	4	18	10	16
Electronic shopping and electronic auctions	454111-12	17,663	i 122 - 811	0 - 90	i 82	i 41	i 0 - 599
Transportation and warehousing	48-49	19,816	344	i 13	183	i 107	41
Information	51	117,469	7,730	555	3,637	2,739	800
Publishing	511	18,330	1,132	113	714	210	95
Newspaper, periodical, book, and directory publishers	5111	114	4	0	*	1	3
Software publishers	5112	18,215	1,128	113	714	209	92
Telecommunications	517	71,766	3,189	312 - 429	850	1,443	466 - 583
Data processing, hosting, and related services	518	7,938	1,556	15	559	859	124
Other information	other 51	19,435	1,854	0 - 115	1,514	227	0 - 115
Finance and insurance	52	20,670	2,753	25	i 426	1,758	544
Real estate and rental and leasing	53	2,460	35	0	3	i 32	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	47	i 3	i 0	3	i 0	0
Other real estate and rental and leasing	other 53	2,412	33	0	*	32	*
Professional, scientific, and technical services	54	13,853	3,072	187	881	1,402	602
Architectural, engineering, and related services	5413	3,040	71	10	38	8	15
Computer systems design and related services	5415	6,156	2,020	97	552	1,128	243
Scientific research and development services	5417	2,593	717	79	260	60	318
Biotechnology research and development	541711	739	209	26	50	3	130

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			Total	Structures	Equipment	Capitalized software	All other
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,845	499	52	203	55	189
Social sciences and humanities research and development	541720	10	9	1	6	2	*
Other professional, scientific, and technical services	other 54	2,064	264	1	32	206	26
Health care services	621-23	3,638	i 242	i 1	i 168	i 64	i 9
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	15,919	691 - 1,380	0 - 90	i 31	i 661	0 - 599
All companies (number of domestic employees)	-	587,332	31,885	3,541	14,898	8,539	4,907
Small companies							
10-19 <sup>a</sup>	-	1,642	319	13	133	64	109
20-49	-	6,837	924	43	413	104	364
Medium companies							
50-99	-	7,618	855	200	391	180	84
100-249	-	12,045	1,989	136	1,265	237	351
Large companies							
250-499	-	10,452	1,109	78	549	252	231
500-999	-	21,640	1,705	207	572	428	497
1,000-4,999	-	61,271	4,733	589	2,021	1,376	747
5,000-9,999	-	68,790	4,019	667	1,371	1,157	823
10,000-24,999	-	124,057	5,790	688	2,553	1,558	991
25,000 or more	-	272,980	10,442	919	5,630	3,182	710

\* = amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

<sup>a</sup> Business 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 R&D. The "undistributed" column shown in prior years is no longer necessary because of processing improvements implemented beginning in 2015. 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 U.S. Census Bureau, Business Research and Development Survey, 2017.