

TABLE 26

Domestic R&D paid for and performed by the company, by industry, and company size: 2017

(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)										
		All companies	10-19 ^a	20-49	50-99	100-249	250-499	500-999	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more
All industries	21-23, 31-33, 42-81	339,036	2,402	7,593	8,070	13,514	11,773	16,295	52,341	32,701	63,415	130,931
Manufacturing industries	31-33	216,155	991	4,138	4,866	8,920	7,485	9,797	34,226	20,619	46,603	78,510
Food	311	4,453 i	0	0 - 53	31	139	176	143	477	0 - 436	2,325 i	880 i
Beverage and tobacco products	312	968	0	5	14	10	13	17	41	177	140	553
Textile, apparel, and leather products	313-16	919	0 - 53	10	28	37	46	22	222	284	89	82 - 208
Wood products	321	170	2	4	4	8	7	28	57	22	38	0
Paper	322	1,292	0	2	10	0 - 41	19	22	88	255	326	457 - 617
Printing and related support activities	323	218	0	9	13	20	26	42	51 i	31	26	0
Petroleum and coal products	324	301	2	8	23	0 - 22	84 i	46	0 - 175	0	30 - 190	0
Chemicals	325	63,285	35 - 759	1,730	2,338	4,012	3,181	2,749	11,099	2,142 - 7,670	19,571	12,969 - 13,901
Basic chemicals	3251	2,393	0 - 105	111 - 129	99	0 - 150	254	105	469 - 1,004	284	522	0
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	612	9	15	22	39	73	54	112	0	287	0
Pesticide, fertilizer, and other agricultural chemicals	3253	1,092	1	1 - 19	0 - 60	53	15	0	0 - 535	0 - 709	0 - 1,141	0
Pharmaceuticals and medicines	3254	55,229	0 - 724	1,488	2,126	3,686	2,637	2,461	9,106	382 - 6,970	16,496	10,947 - 13,901
Soap, cleaning compound, and toilet preparation	3256	2,488	4	28	34	62	63	76	315	417 i	430 - 1,758	0 - 1,328 i
Paint, coating, adhesive, and other chemicals	3255, 3259	1,471	23	50 - 68	0 - 60	19 - 175	138	52	565	0 - 350	0 - 694	0 - 694
Plastics and rubber products	326	3,637	18	109	106	176	251	215	717	494	241	1,310
Nonmetallic mineral products	327	1,303	0 - 7	0 - 21	35	34	9	69	247	69	826	0
Primary metals	331	741	1	0 - 17	28	87	31	39	111	103	255 - 399	0
Fabricated metal products	332	2,099	0 - 103	123 - 194	0 - 269	485	200	329	385	217	63	0
Machinery	333	12,257	0 - 266	304	472	930	444	706	1,906	2,207 - 3,778	1,146	3,058
Agricultural implement	33311	1,511	0 - 159	44	0 - 438	0 - 124	18	44	221	0 - 1,219 i	0	0 - 1,380
Semiconductor machinery	333242	3,228	1	3	18	0 - 173	45	0 - 660	0 - 1,686	341 - 3,007	0	0

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Engine, turbine, and power transmission equipment	3336	1,921	0	30	18	68	0 - 270	4	0 - 1,686	0 - 1,747	0 - 1,147	0 - 1,873	
Other machinery	other 333	5,596	0 - 227	227	0 - 438	600 - 777	109 - 383	0 - 660	0 - 1,686	0 - 1,845	0 - 1,147	0 - 3,059	
Computer and electronic products	334	69,942	99 - 460	856	829	1,430	1,628	3,168	11,825	6,358 - 8,343	10,522	i 32,662	
Communications equipment	3342	10,972	19	127	0 - 208	293	0 - 633	918 - 1,405	2,460	1,362	0 - 1,834	i 3,277 - 6,550	
Semiconductor and other electronic components	3344	27,859	35	352	270	484	923	1,037	4,825	1,954	i 8,192	i 9,786	
Navigational, measuring, electromedical, and control instruments	3345	10,089	0 - 357	305	353	501	73 - 706	94 - 488	3,459	0 - 1,982	497 - 1,719	3,051	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	2,545	0 - 150	122	i 101	226	74	72	1,151	0	497 - 900	0	
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	3,214	0 - 313	27	0 - 253	0 - 234	0 - 377	23	0 - 1,149	0 - 1,149	0 - 1,097	2,171	i
Other measuring and controlling device	other 3345	4,329	0 - 216	157	0 - 253	40 - 276	0 - 374	0 - 392	1,158 - 2,309	0 - 833	0 - 1,222	880	
Other computer and electronic products	other 334	21,022	47	71	0 - 208	152	0 - 609	476 - 861	1,081	3,044	0 - 1,834	13,273 - 16,547	
Electrical equipment, appliances, and components	335	4,110	64	132	156	307	332	601	970	286	807	453	i
Transportation equipment	336	34,629	48	251	123	351	674	891	2,730	1,925	5,402	22,236	
Automobiles, bodies, trailers, and parts	3361-63	21,137	0 - 24	178	0 - 122	0 - 287	304	660	1,945	1,097	3,254	13,206 - 14,064	
Aerospace products and parts	3364	11,903	24	55	0 - 122	65	211	0 - 232	612	399	2,148	8,173	
Aircraft, aircraft engine, and aircraft parts	336411-13	11,473	24	46	0 - 122	62	211	0 - 232	477	314	2,009	8,173	
Guided missile, space vehicle, and related parts	336414-15, 336419	430	*	9	0 - 122	3	0	0 - 66	135	85	138	0	
Military armored vehicle, tank, and tank components	336992	4	2	*	2	0 - 3	0 - 3	0	0	0	0	0	
Other transportation	other 336	1,585	0 - 24	18	0 - 122	0 - 287	154 - 161	0 - 232	173	428	0	0 - 856	
Furniture and related products	337	419	1	8	13	44	22	16	79	220	14	0	

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Miscellaneous manufacturing	339	15,410	0-389	489	366-652	780-858	342	695	3,038-3,230	306-1,831	4,631	2,920-3,561
Medical equipment and supplies	3391	13,348	0-279	400	363	601	221	522	2,359	0-1,523	4,631	2,921
Other miscellaneous manufacturing	3399	2,062	0-113	89	2-289	179-258	122	172	678-871	307	0	0-639
Nonmanufacturing industries	21-23, 42-81	122,881	1,411	3,455	3,204	4,593	4,288	6,498	18,115	12,083	16,812	52,422
Mining, extraction, and support activities	21	2,841	1	0-91	60	0-151	0-164	44	88	222	1,527	0-1,203
Utilities	22	281	0	7	*	1	*	6	48	10	115	94
Wholesale trade	42	503	35	88	110	138	75	41	11	1	4	0
Electronic shopping and electronic auctions	454111-12	9,318	3	4	0	26	23	24	5	379-1,481	0	6,720-8,860
Transportation and warehousing	48-49	1,116	4	1	2	78	3	605	44	0	24	356
Information	51	78,898	278-544	1,360	1,355	2,313	2,808	4,008	11,548-13,044	8,176	10,833	34,892
Publishing	511	33,276	195	678	529	830	636	876	6,466	5,806	0	17,260
Newspaper, periodical, book, and directory publishers	5111	74	0	14	2	10	39	9	0	0	0	0
Software publishers	5112	33,201	195	664	526	821	598	867	6,466	5,806	0	17,260
Telecommunications	517	3,643	6	26	0-541	0-250	0-346	36	0-1,810	0	0-3,460	0-3,814
Data processing, hosting, and related services	518	16,037	9-279	0-658	0-827	1,234-1,463	1,827	2,851	4,769	1,492	0-3,565	0-4,096
Other information	other 51	25,943	66	0-658	0-827	0-250	0-346	246	0-1,810	878	3,833-10,834	9,721-17,633
Finance and insurance	52	7,565	53	21	30	118	118	139	1,376	1,601	1,693	2,417
Real estate and rental and leasing	53	708	0-7	144	10	32	0-9	13	507	0	0	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	138	0-7	125	0-11	0-17	0	0	0	0	0	0
Other real estate and rental and leasing	other 53	570	0	19	0-11	15-33	0-9	13	507	0	0	0
Professional, scientific, and technical services	54	18,972	764	1,682	1,535	1,561	873	1,160	2,950	515	2,602	5,330
Architectural, engineering, and related services	5413	1,561	76	207	210	260	220	83	287	22	194	*
Computer systems design and related services	5415	11,669	241	525	505	645	424	557	2,096	449	2,140	4,087

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Scientific research and development services	5417	2,817	377	800	616	400	46	122	234	7	172	43		
Biotechnology research and development	541711	795	146	220	145	32	3	0	207	0	0	43		
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,936	230	577	468	289	44	122	27	7	172	0		
Social sciences and humanities research and development	541720	86	1	3	2	79	0	0	0	0	0	0		
Other professional, scientific, and technical services	other 54	2,925	70	149	204	256	183	399	333	37	95	1,200		
Health care services	621–23	958	i	11	62	26	180	i	228	217	47	81	0	105
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	1,722	0–252	0–91	76	0–151	0–164	239	0–1,486	0–1,094	17	0–1,486		

* = 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.

^a 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. 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.