

TABLE 11

Domestic R&D paid for by the company and others and performed by the company, by industry and company size: 2015

(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)												
		All companies	5-9 <sup>a</sup>	10-19	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	355,821	2,988 i	5,680 i	10,249 i	11,509	13,602	13,553	15,217	58,094	38,838	59,328	126,763	
Manufacturing industries	31-33	236,132	898 i	1,977 i	4,315 i	5,116	7,939	7,819	9,913	41,077	24,382	51,932	80,764	
Food	311	4,838	35 i	11 i	19 i	41 i	192 i	150	177	605	338	1,271 i	1,998	
Beverages and tobacco products	312	1,002	5 i	* i	3 i	3 i	9	D	7	D	161	39	594	
Textiles, apparel, and leather products	313-16	748	11 i	20 i	48 i	27 i	46 i	42	20	205	245	83	0	
Wood products	321	195	2 i	1 i	17 i	16 i	10 i	10 i	38	39	64	0	0	
Paper	322	766	0	1 i	14 i	D	28 i	D	23	66	123	446	27	
Printing and related support activities	323	196 i	D	D	25 i	D	26 i	D	15	61 i	32	D	* i	
Petroleum and coal products	324	214	D	D	D	30	10 i	14	47	20	0	D	0	
Chemicals	325	68,196	D	859 i	1,796	2,017	2,888	2,838	2,175	11,798	9,328	21,477	D	
Basic chemicals	3251	3,042	3 i	D	D	141	D	360	130	D	505	D	0	
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,201	D	D	D	D	D	86	60	93 i	159	D	337	
Pesticides, fertilizers, and other agricultural chemicals	3253	D	2 i	D	D	27 i	D	D	0	D	D	D	0	
Pharmaceuticals and medicines	3254	58,675	D	663 i	1,537	1,695	2,615	2,295	1,924	9,431	7,891	18,056	D	
Soaps, cleaning compounds, and toilet preparations	3256	1,398	D	D	D	D	D	17	52	267	485	D	19	
Paints, coatings, adhesives, and other chemicals	3255, 3259	D	8 i	D	D	D	D	D	8	543	D	D	57	
Plastics and rubber products	326	2,541	D	D	68 i	113 i	326 i	205 i	336	655	655	D	0	
Nonmetallic mineral products	327	1,259	9 i	D	6 i	37 i	78 i	D	66	108	105	830	0	
Primary metals	331	628	1 i	16 i	19 i	25 i	61	27	52	176	33	217	0	
Fabricated metal products	332	2,261 i	41 i	117 i	219 i	196 i	463 i	265	188	459	236	78	0	
Machinery	333	13,426	67 i	216 i	591 i	443 i	632	678	937	3,211	2,294	1,013	3,344	
Agricultural implements	33311	1,531	19 i	2 i	20 i	8 i	44	19 i	57	71	177	0	1,113	
Semiconductor machinery	333242	3,214	1 i	4 i	6	19	110	34	101	1,724 i	1,215	0	0	
Engines, turbines, and power transmission equipment	3336	2,535	2	* i	36 i	21	30	104	18	119	291	0	1,914	
Other machinery	other 333	6,146	45 i	209 i	530 i	395 i	448	520	762	1,296	611	1,013	317	
Computer and electronic products	334	72,110	167 i	338 i	841 i	925	1,835	2,301	3,809	14,663	6,502	12,883	27,845	
Communications equipment	3342	19,424	D	18 i	D	153	319	D	1,197	D	D	D	D	
Semiconductors and other electronic components	3344	30,451	D	D	D	321	841	1,126	1,346	7,270	D	D	D	
Navigational, measuring, electromedical, and control instruments	3345	14,128	85 i	204	D	335	467	576	680	2,870	D	D	D	
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	2,758	36 i	139	75	112	194	345 i	307	687	0	171	692	
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	7,360	3	D	D	18	D	38	21	701	D	D	D	
Other measuring and controlling devices	other 3345	4,011	46 i	D	D	205	D	193	351	1,482	D	D	387	
Other computer and electronic products	other 334	8,106	D	D	D	116	207	D	587	D	D	D	D	
Electrical equipment, appliances, and components	335	4,335	21 i	85	143 i	180	224	237	363 i	848	543	1,123 i	568	
Transportation equipment	336	49,274	D	D	134 i	340	498	551	787	4,811	2,461	7,072	32,498	
Automobiles, bodies, trailers, and parts	3361-63	19,078	D	D	D	D	D	415	497	2,902	D	2,560	D	

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		All companies	5-9 <sup>a</sup>	10-19	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
Aerospace products and parts	3364	27,464	D	D	39 i	D	209	D	198	1,542 i	D	D	20,242
Aircraft, aircraft engines, and aircraft parts	336411-13	25,817	D	D	D	D	209	D	174	D	D	D	20,242
Guided missiles, space vehicles, and related parts	336414-15, 336419	1,647 i	D	D	D	3	0	0	24	D	0	D	0
Military armored vehicles, tanks, and tank components	336992	16	* i	*	D	0	D	1 i	0	0	0	0	0
Other transportation	other 336	2,716	D	D	D	D	D	D	93	367	D	D	D
Furniture and related products	337	452	35 i	D	27 i	D	32 i	D	4 i	146	157	0	0
Miscellaneous manufacturing	339	13,690	D	D	D	D	581	D	868	D	1,106 i	5,181	D
Medical equipment and supplies	3391	11,382	D	135 i	249	607	462	175	734	2,118	815 i	5,181	D
Other miscellaneous manufacturing	3399	2,309 i	D	D	D	D	119	D	134	D	291 i	0	360 i
Nonmanufacturing industries	21-23, 42-81	119,690	2,090 i	3,703 i	5,934 i	6,393 i	5,664	5,734	5,304	17,017	14,456	7,396	45,999
Mining, extraction, and support activities	21	4,012	3 i	38 i	16	14 i	186	52	29 i	D	D	1,714	D
Utilities	22	480	6	6 i	D	0	1 i	* i	5	32	142	D	54
Wholesale trade	42	1,768 i	117 i	208 i	764 i	198 i	231 i	97 i	24 i	123 i	6 i	1 i	0
Electronic shopping and electronic auctions	454111-12	1,533 i	31 i	48 i	40 i	* i	34 i	D	48 i	6	D	0	D
Transportation and warehousing	48-49	403	D	0	D	D	3	D	D	D	0	D	226
Information	51	65,513	D	D	746 i	1,926 i	1,753	2,221	2,693	10,299	11,636	D	31,993
Publishing	511	33,346	71 i	D	305 i	1,067 i	812	874	777	5,993	4,985	D	D
Newspaper, periodical, book, and directory publishers	5111	98 i	0	11 i	2 i	2 i	20 i	45	18 i	* i	0	0	0
Software publishers	5112	33,248	71 i	D	304 i	1,065 i	791	829	759	5,993	4,985	D	D
Telecommunications	517	3,607	11 i	D	54 i	330	51	D	179	61	0	28	D
Data processing, hosting, and related services	518	9,416	D	D	D	480	817	1,083	1,528	3,223	D	1,302	D
Other information	other 51	19,144	0	D	D	50	73	D	209	1,022	D	0	D
Finance and insurance	52	5,366	2 i	62 i	3	10	55	17	534	797	296	670	2,921
Real estate and rental and leasing	53	301	0	1 i	4	3 i	31	D	D	220	0	D	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	68	0	1 i	3	D	D	D	D	* i	0	0	0
Other real estate and rental and leasing	other 53	233	0	* i	1 i	D	D	D	0	220	0	D	0
Professional, scientific, and technical services	54	38,626	1,803 i	2,864 i	4,255 i	4,099	3,114	2,958	1,812 i	5,011 i	1,381	3,020	8,310
Architectural, engineering, and related services	5413	4,128 i	265 i	340 i	698 i	627 i	504 i	250	180	281	129	158	696
Computer systems design and related services	5415	14,333	527 i	783 i	1,000 i	997 i	982	1,668	496	2,333 i	129 i	745	4,673
Scientific research and development services	5417	16,329	867 i	1,578 i	2,321	1,916	1,331	566	910 i	2,013 i	1,086	2,081	1,661
Biotechnology research and development	541711	5,693 i	292	570 i	742	337	345	69	727 i	951 i	0	0	1,661
Physical, engineering, and life sciences (except biotechnology) research and development	541712	9,931	566 i	1,002	1,557	1,551	986	496	183	837	671	2,081	0
Social sciences and humanities research and development	541720	705	9 i	6 i	22	28	*	0	0	225	415	0	0
Other professional, scientific, and technical services	other 54	3,835	144 i	162 i	236 i	559	297	475	225	385	38	36	1,280
Health care services	621-23	758 i	6 i	D	40	61 i	149 i	121	64	222 i	0	D	D

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Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	930	D	D	D	D	106	D	D	D	D	D	D

\* = 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.

<sup>a</sup> Business R&D and Innovation Survey does not include companies with fewer than five 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.

**Source(s)**

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.