

TABLE 10

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

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Salaries, wages, and fringe benefits	Stock-based compensation	Temporary staffing	Expensed equipment	Materials and supplies	Lease and rental payments	Depreciation	Other purchased services (except R&D)	Other
All industries	21-23, 31-33, 42-81	355,821	204,170	19,579	14,462	5,219	27,018	5,709	12,433	8,352	58,880
Manufacturing industries	31-33	236,132	129,375	8,959	8,282	3,401	22,949	3,167	9,080	5,366	45,553
Food	311	4,838	2,945	89	96	22	364	46	213	170	893
Beverages and tobacco products	312	1,002	532	14	28	8	73	6	46	10	285
Textiles, apparel, and leather products	313-16	748	481	10	16	12	91	5	17	14	101
Wood products	321	195	127	*	9	2	41	2	2	2	9
Paper	322	766	317	*	7	3	351	2	8	6	71
Printing and related support activities	323	196	141	3	5	1	13	7	9	*	17
Petroleum and coal products	324	214	139	*	12	1	19	5	8	8	22
Chemicals	325	68,196	32,215	3,240	3,295	357	5,708	1,158	3,022	1,819	17,382
Basic chemicals	3251	3,042	1,830	14	82	46	257	65	252	90	405
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,201	790	2	44	15	68	31	78	8	165
Pesticides, fertilizers, and other agricultural chemicals	3253	D	D	D	D	1	D	D	D	169	258
Pharmaceuticals and medicines	3254	58,675	26,414	3,166	2,879	273	5,099	898	2,346	1,520	16,079
Soaps, cleaning compounds, and toilet preparations	3256	1,398	951	14	D	7	52	D	D	18	D
Paints, coatings, adhesives, and other chemicals	3255, 3259	D	D	D	D	16	D	D	49	14	D
Plastics and rubber products	326	2,541	1,361	25	46	136	480	15	61	27	392
Nonmetallic mineral products	327	1,259	685	1	55	11	116	6	55	28	303
Primary metals	331	628	327	7	4	3	83	3	29	9	164
Fabricated metal products	332	2,261	1,495	9	27	13	282	10	37	39	349
Machinery	333	13,426	7,957	93	820	98	1,864	78	493	147	1,876
Agricultural implements	33311	1,531	753	*	123	6	319	5	53	2	270
Semiconductor machinery	333242	3,214	1,610	39	134	16	428	12	203	14	757
Engines, turbines, and power transmission equipment	3336	2,535	1,507	3	345	4	299	3	107	17	250
Other machinery	other 333	6,146	4,087	51	218	73	818	58	129	113	599
Computer and electronic products	334	72,110	43,057	5,087	1,655	1,437	4,879	1,297	3,534	1,936	9,227
Communications equipment	3342	19,424	9,652	2,331	349	847	1,205	706	1,056	914	2,364
Semiconductors and other electronic components	3344	30,451	19,406	2,168	516	268	1,646	419	1,635	722	3,672
Navigational, measuring, electromedical, and control instruments	3345	14,128	9,034	216	533	146	1,581	125	316	185	1,992
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	2,758	1,514	146	142	29	334	48	76	32	436
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	7,360	4,881	28	270	D	884	28	137	43	D
Other measuring and controlling devices	other 3345	4,011	2,638	42	121	D	363	49	103	111	D
Other computer and electronic products	other 334	8,106	4,964	372	257	176	447	47	527	115	1,199
Electrical equipment, appliances, and components	335	4,335	3,015	27	132	42	357	71	123	107	462
Transportation equipment	336	49,274	26,044	7	1,452	932	7,192	348	861	612	11,826

TABLE 10

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

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Salaries, wages, and fringe benefits	Stock-based compensation	Temporary staffing	Expensed equipment	Materials and supplies	Lease and rental payments	Depreciation	Other purchased services (except R&D)	Other
Automobiles, bodies, trailers, and parts	3361-63	19,078	10,905	6	1,198	806	3,067	273	585	268	1,970
Aerospace products and parts	3364	27,464	13,685	*	179	115	3,483	D	222	303	D
Aircraft, aircraft engines, and aircraft parts	336411-13	25,817	12,916	*	155	112	2,851	D	221	302	D
Guided missiles, space vehicles, and related parts	336414-15, 336419	1,647	769	0	24	3	632	D	1	*	D
Military armored vehicles, tanks, and tank components	336992	16	8	0	*	0	4	1	*	*	2
Other transportation	other 336	2,716	1,446	1	75	10	638	D	54	41	D
Furniture and related products	337	452	295	*	13	6	80	2	8	2	46
Miscellaneous	339	13,690	8,243	345	612	316	954	106	556	431	2,128
Medical equipment and supplies	3391	11,382	6,756	294	524	310	849	87	486	414	1,663
Other miscellaneous manufacturing	3399	2,309	1,488	51	87	6	105	20	70	17	465
Nonmanufacturing industries	21-23, 42-81	119,690	74,794	10,620	6,180	1,818	4,069	2,541	3,353	2,987	13,327
Mining, extraction, and support activities	21	4,012	2,290	44	222	48	270	93	103	324	617
Utilities	22	480	133	3	17	47	60	1	142	11	65
Wholesale trade	42	1,768	927	*	128	4	65	30	78	63	473
Electronic shopping and electronic auctions	454111-12	1,533	1,062	D	1	*	5	*	187	0	D
Transportation and warehousing	48-49	403	257	0	56	5	39	3	10	1	31
Information	51	65,513	41,066	9,376	3,103	1,248	1,464	1,686	1,816	529	5,226
Publishing	511	33,346	22,903	2,703	1,358	268	534	623	743	460	3,754
Newspaper, periodical, book, and directory publishers	5111	98	80	0	2	1	8	1	6	0	*
Software publishers	5112	33,248	22,822	2,703	1,357	267	526	622	737	460	3,753
Telecommunications	517	3,607	2,128	207	215	19	746	188	35	2	66
Data processing, hosting, and related services	518	9,416	6,871	700	341	174	100	123	224	44	839
Other information	other 51	19,144	9,164	5,765	1,189	787	84	752	815	22	567
Finance and insurance	52	5,366	3,309	299	988	17	5	36	48	354	310
Real estate and rental and leasing	53	301	228	11	5	1	1	7	7	*	40
Lessors of nonfinancial intangible assets (except copyrighted works)	533	68	49	3	5	*	*	1	1	*	8
Other real estate and rental and leasing	other 53	233	179	8	*	*	1	7	6	*	32
Professional, scientific, and technical services	54	38,626	24,396	732	1,598	427	2,016	660	937	1,691	6,168
Architectural, engineering, and related services	5413	4,128	2,805	4	182	12	134	36	33	21	902
Computer systems design and related services	5415	14,333	9,877	461	567	289	453	129	412	130	2,016
Scientific research and development services	5417	16,329	8,877	191	720	104	1,369	374	354	1,493	2,848
Biotechnology research and development	541711	5,693	2,976	109	352	23	596	172	86	710	668
Physical, engineering, and life sciences (except biotechnology) research and development	541712	9,931	5,398	76	349	75	772	183	259	777	2,043
Social sciences and humanities research and development	541720	705	502	6	19	6	1	19	9	5	137
Other professional, scientific, and technical services	other 54	3,835	2,838	75	130	23	61	121	138	47	402

TABLE 10

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

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Salaries, wages, and fringe benefits	Stock-based compensation	Temporary staffing	Expensed equipment	Materials and supplies	Lease and rental payments	Depreciation	Other purchased services (except R&D)	Other
Health care services	621-23	758 i	461 i	18	24 i	6 i	98 i	10 i	15 i	5 i	121 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	930	665 i	D	37	15	46	13	11	8	D
All companies (number of domestic employees)	-	355,821	204,170	19,579	14,462	5,219	27,018	5,709	12,433	8,352	58,880
Micro companies ^a											
5-9	-	2,988 i	1,843 i	55 i	134 i	41 i	228 i	64 i	66 i	76 i	481 i
Small companies											
10-19	-	5,680 i	3,448 i	142 i	251 i	57 i	481 i	152 i	153 i	127 i	869 i
20-49	-	10,249 i	6,215 i	272	470 i	114 i	862 i	219	265 i	253 i	1,578 i
Medium companies											
50-99	-	11,509	7,048 i	353	531	101 i	901	273	284 i	161 i	1,858
100-249	-	13,602	8,426	551	479	147	1,102	271	323	242	2,060
Large companies											
250-499	-	13,553	8,563	556	530	188	1,192	243	498	286	1,497
500-999	-	15,217	8,941	837	636	214	1,079	278	519	429	2,284
1,000-4,999	-	58,094	33,306	3,587	1,884	732	4,030	862	2,162	1,394	10,137
5,000-9,999	-	38,838	21,645	3,886	1,750	561	2,242	753	1,527	539	5,936
10,000-24,999	-	59,328	33,475	1,382	2,200	492	6,164	570	2,507	2,167	10,371
25,000 or more	-	126,763	71,259	7,959	5,598	2,572	8,737	2,024	4,128	2,677	21,809

* = 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 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.