

TABLE 23

Domestic R&D paid for 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	296,677	171,715	19,059	12,711	4,868	21,210	4,829	11,348	6,172	44,764
Manufacturing industries	31-33	195,792	107,556	8,508	7,232	3,126	18,289	2,618	8,268	4,650	35,545
Food	311	4,644	2,814	89	93	21	354	40	207	162	864
Beverages and tobacco products	312	885	459	14	25	3	64	2	37	1	280
Textiles, apparel, and leather products	313-16	715	473	10	16	4	84	5	17	14	93
Wood products	321	188	124	0	9	2	40	2	2	2	7
Paper	322	763	315	*	7	3	351	2	8	5	70
Printing and related support activities	323	189	138	2	5	1	13	6	9	*	15
Petroleum and coal products	324	200	129	*	11	1	18	4	7	7	22
Chemicals	325	58,769	27,874	2,815	2,895	300	5,156	892	2,646	1,430	14,761
Basic chemicals	3251	2,574	1,553	13	60	26	203	56	206	82	375
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,172	772	2	42	15	63	30	77	7	163
Pesticides, fertilizers, and other agricultural chemicals	3253	2,157	1,167	D	109	1	150	59	210	169	D
Pharmaceuticals and medicines	3254	50,242	22,624	2,741	2,625	235	4,632	684	2,050	1,143	13,509
Soaps, cleaning compounds, and toilet preparations	3256	1,283	877	14	32	7	47	22	54	15	216
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,339	882	D	28	16	61	41	49	14	D
Plastics and rubber products	326	2,390	1,348	25	45	63	419	15	60	26	389
Nonmetallic mineral products	327	1,239	675	1	54	8	113	5	54	28	300
Primary metals	331	579	306	7	4	3	69	3	29	7	153
Fabricated metal products	332	2,039	1,409	9	27	13	255	7	36	39	243
Machinery	333	12,544	7,387	92	799	94	1,763	67	475	139	1,728
Agricultural implements	33311	1,516	743	0	123	6	317	5	52	2	268
Semiconductor machinery	333242	2,917	1,412	39	133	15	422	4	191	13	687
Engines, turbines, and power transmission equipment	3336	2,381	1,425	3	343	3	278	3	105	14	208
Other machinery	other 333	5,731	3,808	51	200	71	745	55	127	109	565
Computer and electronic products	334	63,765	37,542	5,064	1,255	1,366	4,035	1,197	3,295	1,827	8,183
Communications equipment	3342	17,999	8,667	2,330	213	837	1,138	668	1,018	886	2,243
Semiconductors and other electronic components	3344	28,597	18,119	2,156	473	237	1,555	382	1,521	703	3,451
Navigational, measuring, electromedical, and control instruments	3345	9,218	5,894	205	333	119	901	102	233	127	1,303
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	2,525	1,383	146	126	26	294	45	73	9	422
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	2,881	1,990	18	92	15	261	11	63	21	410
Other measuring and controlling devices	other 3345	3,813	2,521	41	115	78	346	47	98	97	471
Other computer and electronic products	other 334	7,951	4,862	372	236	174	442	45	523	111	1,186
Electrical equipment, appliances, and components	335	3,852	2,670	27	129	40	276	62	114	101	433
Transportation equipment	336	29,224	15,530	7	1,258	886	4,279	203	716	437	5,907

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Automobiles, bodies, trailers, and parts	3361-63	16,636	9,715	6	1,063	770	2,446	165	503	236	1,732
Aerospace products and parts	3364	11,138	4,986	*	141	112	1,439	26	178	166	4,090
Aircraft, aircraft engines, and aircraft parts	336411-13	10,754	4,780	*	135	110	1,352	23	177	166	4,010
Guided missiles, space vehicles, and related parts	336414-15, 336419	385	206	0	6	2	86	3	1	*	80
Military armored vehicles, tanks, and tank components	336992	5	2	0	*	0	2	*	0	0	*
Other transportation	other 336	1,445	827	1	54	5	392	12	36	34	84
Furniture and related products	337	443	290	0	13	6	79	2	8	2	44
Miscellaneous	339	13,365	8,070	345	587	312	922	104	549	423	2,053
Medical equipment and supplies	3391	11,211	6,662	294	510	307	826	84	485	406	1,637
Other miscellaneous manufacturing	3399	2,154	1,409	51	77	5	95	20	65	17	416
Nonmanufacturing industries	21-23, 42-81	100,885	64,160	10,551	5,479	1,742	2,921	2,212	3,080	1,522	9,219
Mining, extraction, and support activities	21	3,393	2,003	42	192	48	236	74	97	301	400
Utilities	22	446	118	2	15	44	53	1	142	11	60
Wholesale trade	42	1,684	849	*	127	4	63	30	78	63	471
Electronic shopping and electronic auctions	454111-12	1,517	1,046	D	1	*	5	*	187	0	D
Transportation and warehousing	48-49	403	257	0	56	5	39	3	10	1	31
Information	51	64,578	40,232	9,359	3,083	1,244	1,451	1,674	1,808	526	5,202
Publishing	511	32,598	22,230	2,689	1,343	264	525	613	739	460	3,735
Newspaper, periodical, book, and directory publishers	5111	98	80	0	2	1	8	1	6	0	*
Software publishers	5112	32,500	22,149	2,689	1,341	264	517	612	732	460	3,734
Telecommunications	517	3,537	2,069	206	213	19	745	186	33	2	64
Data processing, hosting, and related services	518	9,314	6,782	699	340	174	97	123	221	41	838
Other information	other 51	19,129	9,151	5,765	1,187	787	84	752	815	22	566
Finance and insurance	52	5,329	3,272	299	987	17	5	36	47	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	232	178	8	*	*	1	7	6	*	32
Professional, scientific, and technical services	54	21,915	15,287	683	957	359	956	363	682	256	2,371
Architectural, engineering, and related services	5413	2,247	1,813	3	128	10	69	23	28	7	167
Computer systems design and related services	5415	12,418	8,797	461	523	282	379	108	409	112	1,347
Scientific research and development services	5417	3,896	2,175	143	191	54	467	132	114	107	514
Biotechnology research and development	541711	1,536	764	109	82	10	211	61	46	50	204
Physical, engineering, and life sciences (except biotechnology) research and development	541712	2,348	1,402	34	109	44	256	69	68	57	309
Social sciences and humanities research and development	541720	12	9	0	*	*	*	1	*	*	*
Other professional, scientific, and technical services	other 54	3,354	2,502	75	116	13	41	101	131	30	344

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Health care services	621-23	460	252	18	19	6	73	9	12	2	69
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	861	616	D	37	14	39	13	10	8	D
All companies (number of domestic employees)	-	296,677	171,715	19,059	12,711	4,868	21,210	4,829	11,348	6,172	44,764
Micro companies ^a											
5-9	-	1,972	1,218	50	98	22	153	36	58	47	289
Small companies											
10-19	-	4,434	2,727	135	211	50	383	111	132	84	600
20-49	-	7,933	4,865	251	357	88	629	175	232	141	1,196
Medium companies											
50-99	-	8,803	5,588	341	435	79	703	189	231	120	1,117
100-249	-	11,037	6,906	537	405	127	891	221	288	145	1,517
Large companies											
250-499	-	11,368	7,356	465	441	147	939	185	375	217	1,243
500-999	-	13,194	7,893	806	554	158	861	231	468	236	1,987
1,000-4,999	-	48,264	28,187	3,305	1,438	654	2,892	588	1,852	741	8,607
5,000-9,999	-	34,660	19,297	3,858	1,590	539	2,086	717	1,472	376	4,724
10,000-24,999	-	48,450	27,869	1,355	1,844	467	4,463	419	2,224	1,423	8,386
25,000 or more	-	106,562	59,810	7,956	5,339	2,537	7,210	1,957	4,015	2,641	15,097

* = 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.