

TABLE 18. Domestic R&D paid for and performed by the company, by type of cost, industry, and company size: 2012
(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 ^a
All industries	21-23, 31-33, 42-81	247,280	142,979	11,994	10,984	3,372	17,853	4,082	11,016	4,543	40,455
Manufacturing industries	31-33	170,197	94,795	6,107	6,380	2,418	15,906	2,860	7,919	3,406	30,406
Food	311	3,921	3,075	58	65	8	186	30	85	72	341
Beverage and tobacco products	312	688	403	10	23	9	32	6	55	5	144
Textile, apparel, and leather products	313-16	537	357 i	0	24 i	4 i	60 i	5 i	11 i	9 i	68
Wood products	321	453 i	304 i	0	17 i	3 i	98 i	5 i	8 i	D	D
Paper	322	743	491 i	* i	34	3 i	81 i	3 i	18 i	18 i	94 i
Printing and related support activities	323	253 i	193 i	* i	2 i	D	23 i	1 i	6 i	D	D
Petroleum and coal products	324	880	494	*	16	D	35	5	28	D	D
Chemicals	325	50,867	24,980	1,383	2,289	238	4,192	1,088	2,470	1,625	12,601
Basic chemicals	3251	2,536	1,540	8	63	31	239	48	132	62	412
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	844	488	1	20	3	78	20	49	11	175
Pesticide, fertilizer, and other agricultural chemical	3253	1,328	494	9	36	2	101	50	145	134	356
Pharmaceuticals and medicines	3254	42,594	20,215	1,350	2,107	184	3,590	929	2,008	1,354	10,856
Soap, cleaning compound, and toilet preparation	3256	2,339	1,420	10	48	2	136	27	90	37	568
Paint, coating, adhesive, and other chemicals	3255, 3259	1,227	824	5	15	15	48	13	46	27	233
Plastics and rubber products	326	3,171	1,859	55	110	13	386	34	147	104	463
Nonmetallic mineral products	327	1,293 i	726 i	13 i	71 i	13 i	184 i	13 i	75 i	51 i	149 i
Primary metals	331	686	380	5	11	D	114	1	23	8	D
Fabricated metal products	332	1,720 i	1,231 i	7	18 i	17	174 i	6	41 i	22	203
Machinery	333	13,294	7,421	96 i	880	194	2,103	130	592	281	1,596
Agricultural implement	33311	1,503	741	1	91	7	329	7	47	3	278
Semiconductor machinery	333295	2,078	824 i	76 i	107 i	6 i	329 i	24	189 i	62 i	461 i
Engine, turbine, and power transmission equipment	3336	3,757	2,202	3	273	165	453	50	179	177	256
Other machinery	other 333	5,956	3,654	17	410	17	991	49	177	40	602
Computer and electronic products	334	56,677	33,434	4,248	1,308	850	3,795	1,023	3,390	591	8,038
Communications equipment	3342	12,549	6,905	1,401	221	356	838	430	987	165	1,246
Semiconductor and other electronic components	3344	25,957	15,043	2,438	494	231	1,812	423	1,598	317	3,602
Navigational, measuring, electromedical, and control instruments	3345	10,603	6,555	172	390	124	830	94	405	79	1,955
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	4,166	2,413	52 i	153	28	276	39	246	46	911 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	2,810	1,822	16	159	54	251	12	52	16	428
Other measuring and controlling device	other 3345	3,628	2,320	103	78	42	303	43 i	107	17	616
Other computer and electronic products	other 334	7,568	4,932	236	204	139	317	75	399	30	1,235
Electrical equipment, appliances, and components	335	2,900	1,989	11	144	55	202	50	102	74	274
Transportation equipment	336	21,344	10,960	11	962	861	3,444	374	467	155	4,111
Automobiles, bodies, trailers, and parts	3361-63	13,191	7,479	7	877	841	2,212	353	393	63	967
Aerospace products and parts	3364	7,140	2,783	3	66	16	1,059	18	57	81	3,056
Aircraft, aircraft engine, and aircraft parts	336411-13	6,695	2,534	3	55	14	977	17	46	81	2,967

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Guided missile, space vehicle, and related parts	336414-15, 336419	445 i	249	0	12	2	82 i	1	11	0	88 i
Military armored vehicle, tank, and tank component	336992	21	12	0	1	*	8	1	*	0	1
Other transportation	other 336	992	686 i	0	18	4	165 i	3	17	10	88 i
Furniture and related products	337	348	240	0	1 i	8	54	1	5	D	D
Miscellaneous	339	10,423	6,259	210	405	D	742	85	397	D	1,990
Medical equipment and supplies	3391	7,885	4,683	182	350	117	598	69	329	181	1,376
Other miscellaneous manufacturing	3399	2,538	1,576	27	55	D	144	16	68	D	614
Nonmanufacturing industries	21-23, 42-81	77,083	48,184	5,887	4,604	955	1,947	1,222	3,097	1,138	10,049
Mining, extraction, and support activities	21	2,443	1,376	40	144	31	260	74	51	74	394
Utilities	22	245	142	3	40	*	13	1	23	1	20
Wholesale trade	42	1,580 i	1,108 i	4 i	113 i	13 i	34 i	28 i	21 i	28 i	230 i
Electronic shopping and electronic auctions	454111-12	1,346	957	7	D	4	4	17	194	71	D
Transportation and warehousing	48-49	177	127	0	43 i	0	4	0	2	0	1
Information	51	45,851	28,025	5,185	2,074	649	611	657	1,974	313	6,364
Publishing	511	28,253	18,202	1,919	1,353	146	479	212	917	204	4822
Newspaper, periodical, book, and directory publishers	5111	241 i	128 i	0	43 i	2 i	8 i	2 i	2 i	9 i	45 i
Software publishers	5112	28,012	18,074	1,919	1,309	144	471	209	914	194	4,777
Telecommunications	517	2,768 i	1,926 i	77 i	64 i	24	13	16 i	378 i	7	262
Data processing, hosting, and related services	518	4,801	3,046	554 i	135	104	50	58	139 i	81	633
Other information	other 51	10,030	4,851	2,635	522	375	68	371	540	21	647
Finance and insurance	52	3,507	1,825	37	1,059	11	10	17	43	267	236
Real estate and rental and leasing	53	359	190	40	19	1	10	1	21	2	76
Lessors of nonfinancial intangible assets (except copyrighted works)	533	338	180	38	18	1	9	1	20	2	69
Other real estate and rental and leasing	other 53	21 i	10 i	2 i	1 i	* i	* i	* i	1 i	* i	7 i
Professional, scientific, and technical services	54	20,166	13,518 i	547	991 i	228 i	925	391	717	325	2,523
Architectural, engineering, and related services	5413	1,123	824	17	45	5	55	27	5	1	145
Computer systems design and related services	5415	9,163 i	7,098 i	292 i	407 i	158 i	127 i	149 i	233 i	43 i	656 i
Scientific research and development services	5417	6,788	3,136	210	406	47	646	198	406	237	1,503
Biotechnology research and development	541711	4,370	1,842	185	131	19	456	145	330	199	1,062
Physical, engineering, and life sciences (except biotechnology) research and development	541712	2,398	1,277	25	272	28	189	52	76	37	441
Social sciences and humanities research and development	541720	20 i	17 i	0	3 i	*	1	* i	0	0	* i
Other professional, scientific, and technical services	other 54	3,092	2,460	29	133	19 i	97	18	73	45	219
Health care services	621-23	416	226	11	11	9 i	41 i	27	34 i	21	35
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	992 i	690 i	13	D	8	35	9	17	34 i	D

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All companies (number of domestic employees)	-	247,280	142,979	11,994	10,984	3,372	17,853	4,082	11,016	4,543	40,455
Small companies ^b											
5-499	-	39,388	25,276 i	1,122	1,772 i	427 i	2,872	798	1,198 i	620	5,303
5-99	-	19,958 i	12,772 i	433 i	992 i	228 i	1,536 i	418	583 i	358 i	2,637 i
5-49	-	12,670 i	8,083 i	258 i	680 i	149 i	982 i	275 i	361 i	259 i	1,622 i
5-9	-	1,966 i	1,279 i	41 i	153 i	22 i	115 i	43 i	56 i	29 i	228 i
10-24	-	4,985 i	3,193 i	96 i	221 i	50 i	371 i	99 i	137 i	120 i	699 i
25-49	-	5,718 i	3,611 i	121 i	305 i	77 i	496 i	134	168 i	111 i	695 i
50-99	-	7,288 i	4,689 i	175 i	312	79 i	553	143	222 i	98	1,016
100-249	-	9,899	6,354	331	416	92	737	224	315	137	1,294
250-499	-	9,531	6,150	359	364	107	600	156	300	124	1,371
Medium and large companies											
500-999	-	10,227	6,155	367	399	171	738	159	430	251	1,558
1,000-4,999	-	43,025	23,645	3,055	1,474	665 i	2,588	797	1,814	998	7,989
5,000-9,999	-	23,821	13,807	1,177	677	336	1,477	425	1,168	628	4,126
10,000-24,999	-	43,119	25,007	2,610	1,641	577	3,212	868	2,694	658	5,851
25,000 or more	-	87,698	49,089	3,662	5,020	1,196	6,966	1,035	3,714	1,388	15,628

* = 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 = 2007 North American Industry Classification System.

^a May include R&D costs allocated to subsidiaries by parent companies.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. The 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: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2012.