

TABLE 48. Domestic R&D performance by performer and source of funds, by industry and company size: 2013
(Millions of U.S. dollars)

Industry and company size	NAICS code	Performed by the company			Performed by others		
		Total	Paid for by the company	Paid for by others	Total	Paid for by the company	Paid for by others
All industries	21-23, 31-33, 42-81	322,528	264,913	57,615	43,102	33,165	9,938
Manufacturing industries	31-33	221,476	181,170	40,306	37,778	29,974	7,804
Food	311	5,028	4,801	227	541	533	8
Beverage and tobacco products	312	827	727	100 i	221	217	5
Textile, apparel, and leather products	313-16	662	642	21 i	25	25	* i
Wood products	321	220	209	11	10	9	1 i
Paper	322	920	907	13 i	18	17	1
Printing and related support activities	323	252 i	224 i	28 i	19 i	8	11 i
Petroleum and coal products	324	242	236	5	331	331	*
Chemicals	325	61,664	54,285	7,379	24,840	21,205	3,634
Basic chemicals	3251	2,658	2,341	317	174	163	10
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1,065	954	111	54	54	*
Pesticide, fertilizer, and other agricultural chemicals	3253	1,691 i	1,325 i	366	32 i	32 i	1
Pharmaceuticals and medicines	3254	52,426	45,891	6,534	24,227	20,614	3,613
Soap, cleaning compound, and toilet preparation	3256	2,469	2,458	11 i	307	307	* i
Paint, coating, adhesive, and other chemicals	3255, 3259	1,355	1,315	40	45	36	10
Plastics and rubber products	326	3,650	3,496	154 i	190	177	14
Nonmetallic mineral products	327	1,329 i	1,303 i	26 i	162 i	158 i	4 i
Primary metals	331	624	605	19	60	59	*
Fabricated metal products	332	2,212 i	1,934 i	278 i	125 i	39 i	86 i
Machinery	333	12,650	12,092	558	566	527	39
Agricultural implement	33311	1,597	1,561	36	309	296	13
Semiconductor machinery	333295	3,194	3,097	97	20	17	3
Engine, turbine, and power transmission equipment	3336	1,448	1,336	113	54 i	40 i	14
Other machinery	other 333	6,411	6,098	312	183	174	9 i
Computer and electronic products	334	67,205	57,364	9,841	2,048	1,514	534
Communications equipment	3342	15,658	13,693	1,964 i	666	571	95 i
Semiconductor and other electronic components	3344	30,800	28,576	2,224	D	396	D
Navigational, measuring, electromedical, and control instruments	3345	14,478	9,001	5,477	704	347	357
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	2,634	2,470	164	170	162	8
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	8,106	3,037	5,069	430	90	339
Other measuring and controlling device	other 3345	3,738	3,494	245	104	95	9
Other computer and electronic products	other 334	6,269	6,093	176	D	199	D
Electrical equipment, appliances, and components	335	4,136	3,660	475 i	118	106	11 i
Transportation equipment	336	45,972	25,165	20,807 i	7,683	4,269	3,414 i
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	16,729	14,081	2,647	2,576	2,405	172
Aerospace products and parts	3364	27,114	10,042	17,072 i	5,068	1,830	3,239 i
Aircraft, aircraft engine, and aircraft parts	336411-13	D	9,765	D	D	D	3,238 i

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Guided missile, space vehicle, and related parts	336414-15, 336419	D	278	D	D	D	1
Military armored vehicle, tank, and tank components	336992	9 i	7 i	2 i	*	*	0
Other transportation	other 336	2,121	1,035	1,086	39	34	4
Furniture and related products	337	374	374	1 i	23	23	* i
Miscellaneous manufacturing	339	13,509	13,147	362	797	758	39
Medical equipment and supplies	3391	10,954	10,638	317	625	594	31
Other miscellaneous manufacturing	3399	2,555	2,509	46 i	172	164	8 i
Nonmanufacturing industries	21-23, 42-81	101,052	83,742	17,310	5,324	3,191	2,133
Mining, extraction, and support activities	21	3,997	3,602	395	634	390	244
Utilities	22	294	243	50	216	201	15
Wholesale trade	42	529 i	510 i	18 i	150 i	149 i	1
Electronic shopping and electronic auctions	454111-12	1,357 i	1,356 i	1 i	0	0	0
Transportation and warehousing	48-49	D	411	D	27	27	*
Information	51	57,207	56,039	1,168	1,536	1,500	36
Publishing	511	35,675	34,637	1,038	1,087	1,058	29
Newspaper, periodical, book, and directory publishers	5111	342 i	341 i	1 i	17 i	17 i	* i
Software publishers	5112	35,333	34,296	1,037	1,070	1,041	29
Telecommunications	517	3,041	3,037	4 i	163	162	* i
Data processing, hosting, and related services	518	6,446	6,333	113	168	162	7 i
Other information	other 51	12,046	12,032	14	118	118	* i
Finance and insurance	52	4,308	4,298	10	80	80	0
Real estate and rental and leasing	53	150	150	* i	3	3	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	58 i	58 i	0	* i	* i	0
Other real estate and rental and leasing	other 53	92	92	* i	3	3	0
Professional, scientific, and technical services	54	31,017	15,617 i	15,400	2,588	786	1,802
Architectural, engineering, and related services	5413	3,133	1,261	1,872	241	63	178
Computer systems design and related services	5415	9,268 i	8,107 i	1,161 i	276 i	166 i	110 i
Scientific research and development services	5417	14,201	2,838	11,363	1,873	471	1,402
Biotechnology research and development	541711	4,499	1,331	3,168 i	348	255	94
Physical, engineering, and life sciences (except biotechnology) research and development	541712	8,910	1,470	7,440	1,343	216	1,127
Social sciences and humanities research and development	541720	792	36 i	756	182	0	182
Other professional, scientific, and technical services	other 54	4,415	3,411	1,003	198	87	111
Health care services	621-23	526 i	430 i	96	6	2 i	4
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	1,086 i	D	85	53 i	32

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All companies (number of domestic employees)	-	322,528	264,913	57,615	43,102	33,165	9,938
Small companies ^a							
5-499	-	53,002	42,106	10,897	6,628	4,955	1,673
5-99	-	27,148 i	20,886 i	6,262 i	4,205	3,229	977
5-49	-	18,238 i	13,726 i	4,513 i	2,897	2,202	695
5-9	-	3,402 i	2,195 i	1,207 i	448 i	282 i	165 i
10-24	-	6,895 i	5,290 i	1,605 i	1,208	984	224 i
25-49	-	7,941 i	6,241 i	1,700	1,241	936	305
50-99	-	8,910	7,161	1,749	1,308	1,026	282
100-249	-	13,666	10,922	2,743	1,463	1,035	428
250-499	-	12,189	10,297	1,892	960	692	268
Medium and large companies							
500-999	-	12,002	10,280	1,722	1,067	814	253
1,000-4,999	-	55,517	45,342	10,175	7,868	5,762	2,106
5,000-9,999	-	31,514	25,009	6,505	2,376	1,148	1,228
10,000-24,999	-	51,218	44,275	6,942	10,679	9,830	848
25,000 or more	-	119,275	97,901	21,374 i	14,485	10,655	3,830 i

* = 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 Upper bound based on U.S. Small Business Administration's definition of a small business; 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. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, 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, 2013.