

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Companies						
		(number) <sup>a</sup>	United States	Alabama	Alaska	Arizona	Arkansas	California
All industries	21–23, 31–33, 42–81	55,716	247,280	779	23 e	3,864	275	69,493
Manufacturing industries	31–33	24,189	170,197	556	4 e	3,191	166	43,327
Food	311	1,871	3,921	5 i	2 e	2 e	44	111
Beverage and tobacco products	312	80	688	* e	* e	* e	* e	11
Textile, apparel, and leather products	313–16	750	537	3 i	* e	* e	* e	72 i
Wood products	321	529	453 i	4 e	* e	1 e	5	23
Paper	322	344	743	13	* e	1	1	13 i
Printing and related support activities	323	600	253 i	1 e	D	9	1 i	20 i
Petroleum and coal products	324	94	880	D	* e	* e	D	2
Chemicals	325	2,119	50,867	130	D	115	15	11,330 i
Basic chemicals	3251	290	2,536	17	0	6	7	205
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	164	844	7	0	2 i	* e	11 i
Pesticide, fertilizer, and other agricultural chemical	3253	78	1,328	3	D	10	5	91
Pharmaceuticals and medicines	3254	673	42,594	101	*	79	2 e	10,835 i
Soap, cleaning compound, and toilet preparation	3256	397	2,339	* e	D	* e	* e	126
Paint, coating, adhesive, and other chemicals	3255, 3259	518	1,227	3	0	18	1 i	64
Plastics and rubber products	326	1,608	3,171	17	* e	128 i	8	147
Nonmetallic mineral products	327	699	1,293 i	6 i	* e	1 e	1 e	40
Primary metals	331	392	686	8	* e	9	1 i	16
Fabricated metal products	332	3,255	1,720 i	8 e	* e	19	6 i	160 i
Machinery	333	3,138	13,294	38	* e	86	15	2,160 i
Agricultural implement	33311	120	1,503	*	0	4	* i	17
Semiconductor machinery	333295	59	2,078	* e	0	4 e	0	1,739 i
Engine, turbine, and power transmission equipment	3336	132	3,757	19	* e	9	* e	55
Other machinery	other 333	2,827	5,956	18	* e	68	15	349
Computer and electronic products	334	3,024	56,677	225	* e	2,496	18	25,052
Communications equipment	3342	369	12,549	95	0	61	12	6,845
Semiconductor and other electronic components	3344	819	25,957	8	0	1,614	1 e	12,397
Navigational, measuring, electromedical, and control instruments	3345	1,318	10,603	34	* e	807 i	4	2,652
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	162	4,166	15	0	* e	0	856
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	156	2,810	3 i	0	754 i	* e	346
Other measuring and controlling device	other 3345	1,000	3,628	16	* e	52 i	4	1,450
Other computer and electronic products	other 334	518	7,568	88	0	14 i	*	3,159
Electrical equipment, appliances, and components	335	1,116	2,900	10 e	*	22	4 e	384
Transportation equipment	336	1,541	21,344	73	1	199	19	1,563
Automobiles, bodies, trailers, and parts	3361–63	1,014	13,191	18	*	31	11	489 i
Aerospace products and parts	3364	265	7,140	34	1	34	6	1,045
Aircraft, aircraft engine, and aircraft parts	336411–13	248	6,695	D	1	14	5	1,015
Guided missile, space vehicle, and related parts	336414–15, 336419	17	445 i	D	0	20	1	30
Military armored vehicle, tank, and tank component	336992	11	21	0	0	D	0	0
Other transportation	other 336	251	992	21 i	* e	D	2 i	30
Furniture and related products	337	497	348	5	D	2 i	* e	13 i

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Companies							
		(number) <sup>a</sup>	United States	Alabama	Alaska	Arizona	Arkansas	California	
Miscellaneous	339	2,533	10,423	D	D	101	D	2,211	
Medical equipment and supplies	3391	1,157	7,885	3 e	* e	85	23 i	1,894	
Other miscellaneous manufacturing	3399	1,376	2,538	D	D	16	D	316	
Nonmanufacturing industries	21–23, 42–81	31,527	77,083	223	19 e	673	109	26,166	
Mining, extraction, and support activities	21	335	2,443	2 e	3 e	31	2 e	238	
Utilities	22	45	245	8	*	* e	* e	98	
Wholesale trade	42	6,021	1,580 i	8 e	1 e	35 i	4 e	324 i	
Electronic shopping and electronic auctions	454111–12	582	1,346	* e	* e	1 e	* e	1,169	
Transportation and warehousing	48–49	367	177	1 e	* e	1 e	1 e	7 e	
Information	51	3,581	45,851	56	2 e	176	60	18,640	
Publishing	511	1,647	28,253	30	1	102	5 e	7,954	
Newspaper, periodical, book, and directory publishers	5111	414	241 i	* e	* e	* e	* e	68 i	
Software publishers	5112	1,233	28,012	30	1	101	4 e	7,887	
Telecommunications	517	312	2,768 i	1 e	1 e	4 e	1 e	202	
Data processing, hosting, and related services	518	1,180	4,801	22	* e	56	54	2,263	
Other information	other 51	442	10,030	2 e	* e	13	1 e	8,221	
Finance and insurance	52	1,139	3,507	3	* e	261	23	182	
Real estate and rental and leasing	53	157	359	* e	D	1 i	D	263	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	69	338	* e	* e	* i	D	259	
Other real estate and rental and leasing	other 53	88	21 i	* e	D	1 i	D	4 i	
Professional, scientific, and technical services	54	12,644	20,166	137	9 e	157 i	15 e	4,768 i	
Architectural, engineering, and related services	5413	2,026	1,123	20	4 i	20	1 e	111 i	
Computer systems design and related services	5415	5,576	9,163 i	88	3 e	65 i	9 i	2,151 i	
Scientific research and development services	5417	1,576	6,788	20 e	1 e	58 i	2 e	2,028	
Biotechnology research and development	541711	603	4,370	6	* e	27 i	1 e	1,304	
Physical, engineering, and life sciences (except biotechnology) research and development	541712	944	2,398	13 e	* e	31	1 e	713	
Social sciences and humanities research and development	541720	29	20 i	0	0	0	0	10	
Other professional, scientific, and technical services	other 54	3,466	3,092	9 e	2 e	15 e	4 e	478 i	
Health care services	621–23	1,432	416	1 i	* e	3 i	1 i	274	
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	5,226	992 i	7 i	D	8 e	D	204	
All companies (number of domestic employees)	–	55,716	247,280	779	23 e	3,864	275	69,493	
Small companies <sup>b</sup>									
5–499	–	53,539	39,388	296 i	21 e	437 i	75 e	10,777	
5–99	–	47,113	19,958 i	140 e	17 e	256 e	53 e	5,076 i	
5–49	–	41,321	12,670 i	99 e	14 e	154 e	37 e	3,039 i	
5–9	–	14,086	1,966 i	18 e	2 e	34 e	6 e	422 i	
10–24	–	17,067	4,985 i	44 e	10 e	52 e	16 e	1,129 i	
25–49	–	10,169	5,718 i	37 e	3 e	67 e	15 e	1,488 i	
50–99	–	5,792	7,288 i	41 e	3 e	102 i	17 e	2,036	
100–249	–	4,852	9,899	41 i	2 e	88	10 e	2,867	

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Companies						
		(number) <sup>a</sup>	United States	Alabama	Alaska	Arizona	Arkansas	California
250-499	-	1,574	9,531	114	2	93	12	2,834
Medium and large companies								
500-999	-	845	10,227	86	* e	57	53	3,484
1,000-4,999	-	919	43,025	238	1 i	448	41	14,886
5,000-9,999	-	182	23,821	54	*	349	15	9,432
10,000-24,999	-	127	43,119	21	1	158	30	14,422
25,000 or more	-	105	87,698	83	* i	2,415	61	16,492

  

Industry and company size	NAICS code	District of Columbia							
		Colorado	Connecticut	Delaware	Florida	Georgia	Hawaii		
All industries	21-23, 31-33, 42-81	3,462	5,527	1,866	153 i	3,353	3,295	130	
Manufacturing industries	31-33	2,382	4,924	1,280	29	1,931	1,761	86	
Food	311	30	25	968	* e	14 i	18 i	1 e	
Beverage and tobacco products	312	3	* e	* e	0	4	D	D	
Textile, apparel, and leather products	313-16	1 e	4 i	D	* e	18	33	* e	
Wood products	321	1 e	D	D	0	2 e	10	D	
Paper	322	*	5	D	0	16	81	* e	
Printing and related support activities	323	3	8 i	* e	D	4 e	4 e	* e	
Petroleum and coal products	324	14	2	1 i	0	1 i	D	* e	
Chemicals	325	243 i	3,630	203	19	307	278	D	
Basic chemicals	3251	39	54	D	0	8	75	0	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	* e	5	D	0	17	39	* e	
Pesticide, fertilizer, and other agricultural chemical	3253	13	* e	D	1	7	5	D	
Pharmaceuticals and medicines	3254	184 i	3,413	122	18	229	140 i	1 e	
Soap, cleaning compound, and toilet preparation	3256	1 e	130	* e	0	7 i	12	D	
Paint, coating, adhesive, and other chemicals	3255, 3259	6 i	27	* e	* e	39	8 i	* e	
Plastics and rubber products	326	38	22	4	0	13 i	47	8	
Nonmetallic mineral products	327	1 e	4	2	* e	10	11 i	* e	
Primary metals	331	22	2 e	6	0	1 e	10	* e	
Fabricated metal products	332	21	52 i	3 i	* e	30 i	25 i	* e	
Machinery	333	39	210	4	0	171	235	1	
Agricultural implement	33311	2	* e	0	0	* e	27	0	
Semiconductor machinery	333295	11	5	0	0	4	* e	0	
Engine, turbine, and power transmission equipment	3336	8	82	4	0	76	D	0	
Other machinery	other 333	18	123	1 e	0	91	D	1	
Computer and electronic products	334	1,662	189	59	10	941	453	12	
Communications equipment	3342	349	41	1	8	417	291	11	
Semiconductor and other electronic components	3344	551	17	10	1	132	85	0	
Navigational, measuring, electromedical, and control instruments	3345	247	114 i	48	1	345	51	* e	
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	39	12	0	0	231	2 i	* e	
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	50	13 i	* e	1	59	24	0	
Other measuring and controlling device	other 3345	157	89 i	48	0	55	25	* e	
Other computer and electronic products	other 334	515	17	* e	* e	47	26	1	

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Colorado	Connecticut	Delaware	District of Columbia	Florida	Georgia	Hawaii
Electrical equipment, appliances, and components	335	10 i	100	7	D	42	57 i	0
Transportation equipment	336	142	455	1	0	253	233	1 e
Automobiles, bodies, trailers, and parts	3361-63	2 e	2 e	* e	0	6 e	D	0
Aerospace products and parts	3364	140	442	*	0	223	21	*
Aircraft, aircraft engine, and aircraft parts	336411-13	D	442	*	0	223	21	*
Guided missile, space vehicle, and related parts	336414-15, 336419	D	* e	0	0	*	0	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0	D	0	0
Other transportation	other 336	* e	11	* e	0	D	D	* e
Furniture and related products	337	23	D	* e	* e	2 e	11	D
Miscellaneous	339	130	214	23 i	D	99	D	D
Medical equipment and supplies	3391	123	198	23 i	*	86	81	3
Other miscellaneous manufacturing	3399	6 e	16	* e	D	13 e	D	D
Nonmanufacturing industries	21-23, 42-81	1,080	604 i	586	124 i	1,421	1,534	44
Mining, extraction, and support activities	21	55	3	D	* e	1 e	9	1
Utilities	22	1 i	* i	* e	* e	2	9	4
Wholesale trade	42	46 i	23 i	1 e	* e	29 e	23 e	1 e
Electronic shopping and electronic auctions	454111-12	7	2 e	* e	* e	5 e	2 e	* e
Transportation and warehousing	48-49	6	1 e	D	D	7	3 e	* e
Information	51	569 i	106 i	522	75 i	815	648	10
Publishing	511	419 i	86 i	2 e	55 i	622	479	6
Newspaper, periodical, book, and directory publishers	5111	1 e	1 e	* e	49 i	2 e	1 e	* e
Software publishers	5112	418 i	85 i	2 e	5 e	620	479	6
Telecommunications	517	66	2 e	516	1 e	25	12	* e
Data processing, hosting, and related services	518	46	15	4	2	149	110	3
Other information	other 51	38	3 e	1 e	17	20 e	47	1 e
Finance and insurance	52	6 i	78 i	20	* e	166	463	* e
Real estate and rental and leasing	53	* e	* e	D	D	1 e	1 e	D
Lessors of nonfinancial intangible assets (except copyrighted works)	533	* e	* e	D	* e	* e	1 e	* e
Other real estate and rental and leasing	other 53	* e	* e	D	D	1 e	* e	D
Professional, scientific, and technical services	54	371	379 i	42 i	47 e	362 i	337	24 i
Architectural, engineering, and related services	5413	35	22 i	1 i	2 e	19 i	6 e	1 e
Computer systems design and related services	5415	192 i	182	32 i	20 e	187 i	222	12
Scientific research and development services	5417	120	156 i	6 e	2	84	38 i	9
Biotechnology research and development	541711	75	35	2 e	1	37	19 i	7
Physical, engineering, and life sciences (except biotechnology) research and development	541712	45	122 i	4 e	* e	46	19	2 e
Social sciences and humanities research and development	541720	* e	* e	0	*	* e	* e	* e
Other professional, scientific, and technical services	other 54	24 e	19 e	3 e	23 e	72 e	71	2 e
Health care services	621-23	1 e	1	* e	D	3 e	1 e	* e
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	19	9	D	D	31 e	38	D

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Colorado	Connecticut	Delaware	District of Columbia	Florida	Georgia	Hawaii
All companies (number of domestic employees)	–	3,462	5,527	1,866	153 i	3,353	3,295	130
Small companies <sup>b</sup>								
5–499	–	816	613 i	190	63 e	861 i	613 i	36 e
5–99	–	450 i	281 e	58 i	57 e	501 e	347 e	32 e
5–49	–	255 e	171 e	27 e	45 e	349 e	237 e	25 e
5–9	–	34 e	26 e	6 e	8 e	66 e	46 e	4 e
10–24	–	89 e	64 e	11 e	14 e	153 e	95 e	11 e
25–49	–	132 i	82 e	10 e	23 e	129 e	96 e	9 e
50–99	–	194	110 i	31	12 e	152 e	110 e	8 i
100–249	–	172	141	5 i	4 e	185	151	3 e
250–499	–	195	191 i	127	3 e	175	116	1 e
Medium and large companies								
500–999	–	113	313	4	11	154	87	11
1,000–4,999	–	634	357	75 i	13	802	799	18
5,000–9,999	–	516	265	70	1	302	124	* e
10,000–24,999	–	517	1,510	7	54 i	473	305	57
25,000 or more	–	865	2,468	1,520	10	761	1,365	7
Industry and company size	NAICS code	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana
All industries	21–23, 31–33, 42–81	833	11,769	5,223	1,186	1,446	772	282
Manufacturing industries	31–33	785	9,841	4,918	1,047	1,239	668	172
Food	311	39	180	55	35	16	15	6 e
Beverage and tobacco products	312	* e	D	* e	* e	* e	31	* e
Textile, apparel, and leather products	313–16	* e	5 e	2 e	1 i	1 e	2	1 e
Wood products	321	4	D	16	4 i	D	3 e	2 e
Paper	322	* e	6	1 e	D	6	3	10
Printing and related support activities	323	* e	15 i	2 e	3 i	2 e	2 e	2
Petroleum and coal products	324	* e	6	3 i	D	3	2	1
Chemicals	325	13 i	3,929	2,455	100	166	358	53
Basic chemicals	3251	* e	108	25	17	11	29	49
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	* e	15 i	3	* e	6	14	*
Pesticide, fertilizer, and other agricultural chemical	3253	5	83	9	D	7	D	*
Pharmaceuticals and medicines	3254	7 i	3,579	2,402	16 i	44	4	2
Soap, cleaning compound, and toilet preparation	3256	1 e	93	3 i	* e	58 i	D	1 i
Paint, coating, adhesive, and other chemicals	3255, 3259	* e	51	14	D	40	D	1 e
Plastics and rubber products	326	2 i	73	373	24	8 i	20	22
Nonmetallic mineral products	327	* e	27	8	5	1 e	1 e	1 e
Primary metals	331	* e	27 i	39	22	13 i	3 e	15 i
Fabricated metal products	332	1 e	205	63	14 i	16 i	10 i	7 e
Machinery	333	5 i	2,512	798	487	311	124	32
Agricultural implement	33311	* e	475	1 i	384	257	* e	12
Semiconductor machinery	333295	1 e	0	* e	0	0	0	0
Engine, turbine, and power transmission equipment	3336	*	71	D	3	*	D	2
Other machinery	other 333	4 i	1,966	D	100	53	D	18

TABLE 21. Companies with domestic R&amp;D paid for and performed by the company, by industry and company size, by state: 2012

(Millions of U.S. dollars)

Industry and company size	NAICS code	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana
Computer and electronic products	334	712	1,629	165	276	364	37	7
Communications equipment	3342	6	1,190	14	7	17	5	3
Semiconductor and other electronic components	3344	607	132	35	21	60 i	13	* e
Navigational, measuring, electromedical, and control instruments	3345	5	213 i	41	234	178	8 i	3 e
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	* e	46	5	5	4	* e	* e
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	0	D	21	D	D	2 i	1 i
Other measuring and controlling device	other 3345	4	D	14 i	D	D	6	2 e
Other computer and electronic products	other 334	95	94	75	14	109	12	1 e
Electrical equipment, appliances, and components	335	2 e	116	138	23	9	7	2 e
Transportation equipment	336	3	666	378	16	310	29	6 e
Automobiles, bodies, trailers, and parts	3361-63	1 e	460	277	15	18	29	1 e
Aerospace products and parts	3364	1 e	193	99 i	1	292	* e	2
Aircraft, aircraft engine, and aircraft parts	336411-13	1 e	193	99 i	1	292	* e	2
Guided missile, space vehicle, and related parts	336414-15, 336419	0	0	0	0	0	0	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0	0
Other transportation	other 336	2	12	3 e	* e	*	* e	3 e
Furniture and related products	337	1 i	8 i	11 i	25	2 i	4	1 i
Miscellaneous	339	3 e	362	412	D	D	16 i	4 e
Medical equipment and supplies	3391	2 e	163 i	396	8 i	6 e	10 i	2 e
Other miscellaneous manufacturing	3399	2 e	199	16 i	D	D	5 i	2 e
Nonmanufacturing industries	21-23, 42-81	48	1,928	305	139	207	104 i	111 e
Mining, extraction, and support activities	21	1 e	3 e	2 e	1 e	7	7 e	19 e
Utilities	22	3	* e	* e	D	D	* e	8
Wholesale trade	42	3 e	94 i	12 e	11 e	5 e	7 e	8 e
Electronic shopping and electronic auctions	454111-12	1 e	21	1 e	2 e	1 e	2 e	1 e
Transportation and warehousing	48-49	* e	4 e	1 e	1 e	1 e	1 e	1 e
Information	51	23	399	133	74	59	32	14 e
Publishing	511	19	269 i	47 i	44	35	12	7 e
Newspaper, periodical, book, and directory publishers	5111	* e	19 i	* e	* e	* e	* e	* e
Software publishers	5112	19	249 i	46 i	43	34	12	7 e
Telecommunications	517	* e	21	1 e	1 e	15	1 e	2 e
Data processing, hosting, and related services	518	2	47 i	24	16	6 e	17	4 e
Other information	other 51	1 e	63	62	13	3	2 e	2 e
Finance and insurance	52	* e	879	1 e	1 e	3	1 e	1 e
Real estate and rental and leasing	53	D	4	* e	D	* e	* e	2 i
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	* e	* e	* e	* e	* e	* i
Other real estate and rental and leasing	other 53	D	4	* e	D	* e	* e	2 i
Professional, scientific, and technical services	54	17 i	471 i	146	42 i	120	33 e	49 e
Architectural, engineering, and related services	5413	4	20	8 i	2 e	5 i	7 i	22
Computer systems design and related services	5415	4 e	186 e	100	14 e	45 i	12 e	13 e

TABLE 21. Companies with domestic R&amp;D paid for and performed by the company, by industry and company size, by state: 2012

(Millions of U.S. dollars)

Industry and company size	NAICS code	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana
Scientific research and development services	5417	6	131 i	24	21	60	9 e	2 e
Biotechnology research and development	541711	4	41	8	20	6	2 e	1 e
Physical, engineering, and life sciences (except biotechnology) research and development	541712	2 i	90 i	16	2 e	53	7 e	2 e
Social sciences and humanities research and development	541720	0	* e	* i	* e	1 i	* e	* e
Other professional, scientific, and technical services	other 54	2 e	134 i	15 e	5 e	9 e	6 e	11 e
Health care services	621-23	* e	8 i	1 i	* e	1 i	* e	* e
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	44	7 e	D	D	20 i	6 e
All companies (number of domestic employees)	-	833	11,769	5,223	1,186	1,446	772	282
Small companies <sup>b</sup>								
5-499	-	66 e	1,489 i	430 e	238 i	186 e	170 e	140 e
5-99	-	43 e	802 e	252 e	115 e	108 e	93 e	100 e
5-49	-	30 e	514 e	164 e	70 e	76 e	66 e	78 e
5-9	-	6 e	75 e	26 e	13 e	12 e	11 e	11 e
10-24	-	13 e	247 e	71 e	28 e	34 e	31 e	44 e
25-49	-	11 e	191 e	66 e	29 e	30 e	24 e	23 e
50-99	-	13 i	288 i	88 e	45	32 e	27 e	22 e
100-249	-	13 i	343 i	76 i	60 i	38	42	34
250-499	-	10	344	102	63	40	34	6 e
Medium and large companies								
500-999	-	3 i	272	187	36	29	35	11
1,000-4,999	-	67	1,580	576	148	357	382	56
5,000-9,999	-	529	825	308	45	292	13	1
10,000-24,999	-	3	1,757	3,353	345	297	12	52
25,000 or more	-	165	5,847	370	373	286	160	22
Industry and company size	NAICS code	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri
All industries	21-23, 31-33, 42-81	236	1,929	14,157	13,460	5,616	219	3,282
Manufacturing industries	31-33	190	1,065	9,707	12,674	4,818	187	2,731
Food	311	1 e	64	55	303 i	385	11	30
Beverage and tobacco products	312	* e	* e	5 i	* e	* e	* e	7
Textile, apparel, and leather products	313-16	2 i	1 e	31	21	2 i	1 e	1 e
Wood products	321	1 e	3 i	4 i	8 i	33	3 e	2 e
Paper	322	12	2	16	6 i	7 i	1	2 e
Printing and related support activities	323	* e	8	6 i	6 i	13 i	* e	3 e
Petroleum and coal products	324	* e	* e	2	2 i	1 i	1	1 i
Chemicals	325	13	318	5,104	289	277	34	1,414
Basic chemicals	3251	D	39	90	61 i	13 i	12	32 i
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	* e	* e	34	3 i	3	1	7
Pesticide, fertilizer, and other agricultural chemical	3253	2 i	4	D	2 i	12	17	D
Pharmaceuticals and medicines	3254	11	256	4,838	173	142	1 e	661
Soap, cleaning compound, and toilet preparation	3256	* e	17	113	7	78	1 e	10
Paint, coating, adhesive, and other chemicals	3255, 3259	D	2	D	42	29	2	D

TABLE 21. Companies with domestic R&amp;D paid for and performed by the company, by industry and company size, by state: 2012

(Millions of U.S. dollars)

Industry and company size	NAICS code	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri
Plastics and rubber products	326	1 e	43 i	162	452	62	10	18
Nonmetallic mineral products	327	* e	2 e	73	9	13	30	3 i
Primary metals	331	1	* e	7 i	33	9	1 e	3 e
Fabricated metal products	332	1 e	12	44 i	102	51 i	2 e	37
Machinery	333	3	126 i	377	252	357	22	68
Agricultural implement	33311	* e	* i	4 i	7	86	* e	1 i
Semiconductor machinery	333295	0	1	128	* e	31	0	0
Engine, turbine, and power transmission equipment	3336	1	D	135	37	45	* e	23
Other machinery	other 333	2 e	D	111 i	209	196	22	44
Computer and electronic products	334	68 i	175	2,771	231	1,674	26	122
Communications equipment	3342	2	105	374	43	73 i	3 e	35
Semiconductor and other electronic components	3344	63 i	39	1,013	24	122	6	55
Navigational, measuring, electromedical, and control instruments	3345	3	27	916	88	1,039	16	30
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1 e	9	397	27	853	4	8
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	0	10	146	7 i	92 i	* i	* e
Other measuring and controlling device	other 3345	2	7 i	372 i	54	94	11	22 i
Other computer and electronic products	other 334	1 e	4 e	469	76	440	2 e	2 e
Electrical equipment, appliances, and components	335	* e	2 e	114	353	77	14 e	58
Transportation equipment	336	12	278	132	10,244	242	16	820
Automobiles, bodies, trailers, and parts	3361-63	* e	66	79	10,114	67 i	14 i	D
Aerospace products and parts	3364	D	197	40	59	52	2	D
Aircraft, aircraft engine, and aircraft parts	336411-13	D	197	40	59	D	2	D
Guided missile, space vehicle, and related parts	336414-15, 336419	0	* i	0	0	D	0	* e
Military armored vehicle, tank, and tank component	336992	0	4	* i	6	D	0	0
Other transportation	other 336	D	10	13	66	D	* e	5
Furniture and related products	337	1 i	1 e	1 e	92	26	10	1 e
Miscellaneous	339	73	30 i	803	273 i	1,587	5 e	142
Medical equipment and supplies	3391	72	24 i	672	237 i	1,560	1 e	133
Other miscellaneous manufacturing	3399	1 e	6 i	131	36	26	3 e	9 i
Nonmanufacturing industries	21-23, 42-81	47	864	4,450	787	797 i	32 e	551 i
Mining, extraction, and support activities	21	* e	* e	D	2 e	2 e	5	4
Utilities	22	* i	D	* e	* e	* e	1	7 i
Wholesale trade	42	2 e	10 e	80 i	71 i	31 i	2 e	13 e
Electronic shopping and electronic auctions	454111-12	* e	1 e	6 e	2 e	2 e	* e	1 e
Transportation and warehousing	48-49	* e	D	1 e	1 e	1 e	* e	1 e
Information	51	20	299	1,728	227	468 i	12	149
Publishing	511	16	222	1,361	190	362 i	9	27
Newspaper, periodical, book, and directory publishers	5111	* e	1 e	24 i	1 e	1 e	* e	* e
Software publishers	5112	16	222	1,337	189	361 i	9	26
Telecommunications	517	1 e	24	32 i	1 e	2 e	* e	1 e
Data processing, hosting, and related services	518	2 e	43 i	165	29	86	1 e	114
Other information	other 51	1 e	10 i	170	7 e	19	1 e	7
Finance and insurance	52	* e	9	43	10	5	1 i	10

TABLE 21. Companies with domestic R&amp;D paid for and performed by the company, by industry and company size, by state: 2012

(Millions of U.S. dollars)

Industry and company size	NAICS code	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri
Real estate and rental and leasing	53	D	* e	5	11	1 i	D	* e
Lessors of nonfinancial intangible assets (except copyrighted works)	533	* e	* e	5	11	1 i	D	* e
Other real estate and rental and leasing	other 53	D	* e	* e	* e	* e	D	* e
Professional, scientific, and technical services	54	16 e	478 i	2,450 i	433	270 i	8 e	340 i
Architectural, engineering, and related services	5413	2 i	9 e	112	42	12	1 e	8 i
Computer systems design and related services	5415	10 i	215 e	1,481 i	106 i	101 i	3 e	295 i
Scientific research and development services	5417	3 e	171	778	79	101 i	1 e	18
Biotechnology research and development	541711	1 e	121	613	21	37 i	*	11
Physical, engineering, and life sciences (except biotechnology) research and development	541712	2 e	50	165 i	58	64	1 e	5
Social sciences and humanities research and development	541720	* e	* i	*	* e	0	0	1 i
Other professional, scientific, and technical services	other 54	2 e	82	79	205	56	3 e	19 e
Health care services	621-23	* e	2 i	15	7 i	2 i	* e	6
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	D	D	23	16 i	D	20
All companies (number of domestic employees)	-	236	1,929	14,157	13,460	5,616	219	3,282
Small companies <sup>b</sup>								
5-499	-	54 e	689 i	3,353	1,195 i	904	107 i	366 i
5-99	-	44 e	469 e	1,602	597 e	454 i	44 e	202 e
5-49	-	25 e	338 e	1,065 i	357 e	307 i	31 e	133 e
5-9	-	5 e	79 e	119 i	48 e	37 e	5 e	25 e
10-24	-	11 e	138 e	371 i	155 e	115 e	13 e	53 e
25-49	-	9 e	121 e	575	154 e	155 i	13 e	55 e
50-99	-	19	132 e	537	241 i	147 i	12 e	69 i
100-249	-	7 e	117	971	291	197	47	122
250-499	-	2 e	103	780	307	254	17 i	42 i
Medium and large companies								
500-999	-	6	207	832	289	308	1 i	36
1,000-4,999	-	145	267	3,858	1,086	687	26	315
5,000-9,999	-	9	85 i	1,363	605	585	29	392 i
10,000-24,999	-	15	321 i	1,210	1,224	1,214	31	873
25,000 or more	-	8	360	3,541	9,062	1,918	25	1,300
Industry and company size	NAICS code	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York
All industries	21-23, 31-33, 42-81	81	539	552	796	13,854	242	8,831
Manufacturing industries	31-33	47	229	440	392	10,882	176	4,349
Food	311	* e	85	1 e	* e	320	1 e	46
Beverage and tobacco products	312	* e	* e	D	* e	D	* e	D
Textile, apparel, and leather products	313-16	2	* e	* i	12	6 i	* e	56
Wood products	321	D	D	D	2 e	D	D	3 e
Paper	322	* e	D	D	3	18	D	16
Printing and related support activities	323	1 i	1 e	* e	1 e	27	* e	9 e
Petroleum and coal products	324	* e	* e	2	* e	D	* e	10

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York
Chemicals	325	3	45 i	10	25	8,509	21	1,624
Basic chemicals	3251	* e	2 e	* e	2	290	15	182
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	0	* e	* e	1 i	1 e	0	2 i
Pesticide, fertilizer, and other agricultural chemical	3253	2	1	D	0	D	* e	2
Pharmaceuticals and medicines	3254	1 e	41 i	2 e	18	7,672	6	1,240
Soap, cleaning compound, and toilet preparation	3256	D	* e	* e	* e	387 i	* e	162
Paint, coating, adhesive, and other chemicals	3255, 3259	D	* e	D	3	D	* e	37
Plastics and rubber products	326	* e	9	2 e	16 i	64	* e	48
Nonmetallic mineral products	327	1	* e	1	5	19	* e	18
Primary metals	331	2	* e	11	4	6	1 i	13
Fabricated metal products	332	1 e	9 i	3 i	18	33	1 e	68 i
Machinery	333	1	25	24	84	235	10	802
Agricultural implement	33311	* e	19	0	3	* e	* e	*
Semiconductor machinery	333295	0	0	* e	1	70	0	28
Engine, turbine, and power transmission equipment	3336	1	1 e	20	D	D	* e	D
Other machinery	other 333	1 e	5 i	4	D	D	10	D
Computer and electronic products	334	4	37	29	182	1,001	131	885
Communications equipment	3342	2	3	2 e	24	544	1	299
Semiconductor and other electronic components	3344	*	4	1 e	98	188	106	173
Navigational, measuring, electromedical, and control instruments	3345	1 i	23	20	40	234	17	383
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	* i	0	* e	4	145	* e	108
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	* e	1 i	D	15	38 i	5	211
Other measuring and controlling device	other 3345	1 i	22	D	21	52 i	13	64
Other computer and electronic products	other 334	1	6	6 i	20	34	7	30 e
Electrical equipment, appliances, and components	335	D	6	8	15	102	4	76 i
Transportation equipment	336	6 i	9	4	9	53	2 e	226
Automobiles, bodies, trailers, and parts	3361-63	* e	8	* e	1 e	11	* e	94
Aerospace products and parts	3364	6 i	*	3	6	35	2 e	129
Aircraft, aircraft engine, and aircraft parts	336411-13	2	*	3	6	35	1 e	129
Guided missile, space vehicle, and related parts	336414-15, 336419	4 i	0	0	0	*	*	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0	0
Other transportation	other 336	* e	1 i	* e	3	7	0	2
Furniture and related products	337	D	* e	D	* e	2 e	1	9 i
Miscellaneous	339	25	D	341	17 i	235 i	D	D
Medical equipment and supplies	3391	2 e	1 e	10 i	13 i	213 i	1 e	188
Other miscellaneous manufacturing	3399	23	D	331	5	22	D	D
Nonmanufacturing industries	21-23, 42-81	33 i	310	112 i	404 i	2,972	66 e	4,483
Mining, extraction, and support activities	21	3 e	* e	24	* e	17	7 e	2 e
Utilities	22	* e	*	6	* e	9 i	D	5 i
Wholesale trade	42	1 e	6 e	4 e	4 e	39 e	1 e	77 i
Electronic shopping and electronic auctions	454111-12	* e	1 e	1 e	1 e	3 e	* e	30 i
Transportation and warehousing	48-49	D	* e	* e	D	3 e	* e	4 e

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York
Information	51	10 e	155	34	225 i	299	10 e	3,055
Publishing	511	7	22 e	24	214 i	174 i	8	2,116
Newspaper, periodical, book, and directory publishers	5111	* e	* e	* e	* e	2 e	* e	24 i
Software publishers	5112	7	21 e	24	214 i	173 i	8	2,092
Telecommunications	517	1 e	1 e	2 e	1 e	17	1 e	18 i
Data processing, hosting, and related services	518	1 e	131	5	9 i	77	1 e	423
Other information	other 51	1 e	1 e	4	1 e	31 i	1 e	498
Finance and insurance	52	* e	24	* e	22	109	* e	590
Real estate and rental and leasing	53	D	* i	* i	D	17	D	3
Lessors of nonfinancial intangible assets (except copyrighted works)	533	D	* e	* e	D	17	D	2
Other real estate and rental and leasing	other 53	D	* i	* i	D	* e	D	1 e
Professional, scientific, and technical services	54	18 i	110 i	38 e	151	2,445	45 i	654 i
Architectural, engineering, and related services	5413	4	3	2 e	9	71	2 e	23 i
Computer systems design and related services	5415	2 e	90 i	20 i	124	394 i	19	290 i
Scientific research and development services	5417	8 i	5	9 i	12	1,470	21 i	226
Biotechnology research and development	541711	1 i	3	2	1	1,331	7 e	192
Physical, engineering, and life sciences (except biotechnology) research and development	541712	7 i	2	7 i	11	139	13 i	33 i
Social sciences and humanities research and development	541720	* i	* e	* e	0	0	1 i	1 e
Other professional, scientific, and technical services	other 54	4 i	11	6 e	6 e	510 i	3 e	115 e
Health care services	621-23	* e	3 i	* i	* e	1 e	* i	2 e
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	D	10	4 e	D	30	D	61
All companies (number of domestic employees)	-	81	539	552	796	13,854	242	8,831
Small companies <sup>b</sup>	-	-	-	-	-	-	-	-
5-499	-	47 e	137 i	147 i	189 i	1,611	82 e	1,761 i
5-99	-	33 e	72 e	78 e	123 e	953 i	72 e	850 e
5-49	-	27 e	42 e	54 e	74 e	592 i	65 e	587 e
5-9	-	4 e	7 e	11 e	13 e	86 e	12 e	116 e
10-24	-	15 e	19 e	25 e	26 e	213 e	21 e	224 e
25-49	-	8 e	15 e	19 e	35 e	294 i	32	248 e
50-99	-	6 e	30 i	24 i	49	361	7 e	262 i
100-249	-	6	21 i	30	27	391	8 i	373
250-499	-	8	44	39	40	266	2 e	538
Medium and large companies	-	-	-	-	-	-	-	-
500-999	-	2	21	6	134	330	13	181
1,000-4,999	-	2	184	342	122	2,987	41	812
5,000-9,999	-	1	26	1	30 i	1,405	14	680
10,000-24,999	-	7 i	160	15	65	3,756	6	839
25,000 or more	-	22	12	40	256 i	3,765	86	4,558

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
All industries	21-23, 31-33, 42-81	5,143	202	5,402	406	4,873 i	8,683	408
Manufacturing industries	31-33	3,444	92	4,865	241	4,227 i	7,050	353
Food	311	226	1 e	103	9	35 i	83	1 e
Beverage and tobacco products	312	D	* e	* e	* e	* e	1 i	* e
Textile, apparel, and leather products	313-16	77	D	10	D	51	9 i	4 i
Wood products	321	9 i	7	4 e	D	13	6 e	D
Paper	322	18	0	23	D	* e	26	6
Printing and related support activities	323	8 i	* e	20	D	1 e	8 e	5
Petroleum and coal products	324	D	0	13	D	4	12	* e
Chemicals	325	1,062 i	D	2,076	34	43 i	4,197	46
Basic chemicals	3251	144 i	D	278	24	* e	194	* e
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	14	0	259	4	3	27	6
Pesticide, fertilizer, and other agricultural chemical	3253	64	D	30	1 i	2	9 i	* e
Pharmaceuticals and medicines	3254	802 i	* i	363	1	18	3,858	35
Soap, cleaning compound, and toilet preparation	3256	14	D	1,034	* e	1 e	3 e	1 i
Paint, coating, adhesive, and other chemicals	3255, 3259	25	D	113	4	18 i	107	4
Plastics and rubber products	326	55	5	220	34	16	209	12
Nonmetallic mineral products	327	10	3	88	1 e	7	60	* e
Primary metals	331	13	* e	56	2 e	13	156	1 e
Fabricated metal products	332	30	1 e	196	6 e	17 i	71 i	14
Machinery	333	172	58	666	31	55	458	15
Agricultural implement	33311	29	51	3	* e	* e	60	0
Semiconductor machinery	333295	0	0	* e	0	5	3	0
Engine, turbine, and power transmission equipment	3336	26	*	D	8	10	D	* e
Other machinery	other 333	117	6	D	23 i	40	D	15
Computer and electronic products	334	1,303	9	706	23	3,319 i	1,144	61
Communications equipment	3342	375	7	112	9	24	109	2
Semiconductor and other electronic components	3344	575	1 e	109	1 e	3,127 i	343	27
Navigational, measuring, electromedical, and control instruments	3345	142	* e	426	11	101	546	24
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	22	0	199	1	1 e	449	* e
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	29 i	0	66 i	6	57	34 i	12 i
Other measuring and controlling device	other 3345	91	* e	162 i	4 i	44	64	12
Other computer and electronic products	other 334	211	* e	60	3 e	67	146	8
Electrical equipment, appliances, and components	335	77	* e	109	4 e	22 i	165	11
Transportation equipment	336	198	5	287	17	187	155	1 e
Automobiles, bodies, trailers, and parts	3361-63	132	1 e	213	11	175	69	* e
Aerospace products and parts	3364	42 i	4	71	7	10 e	74	0
Aircraft, aircraft engine, and aircraft parts	336411-13	42 i	4	70	7	10 e	74	0
Guided missile, space vehicle, and related parts	336414-15, 336419	0	0	1	0	0	* e	0
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0	0
Other transportation	other 336	24	* e	2	* e	1 e	12	1 e

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
Furniture and related products	337	13 i	D	4 i	1 i	3 i	5 i	D
Miscellaneous	339	135	D	282	D	442	283	177
Medical equipment and supplies	3391	90 i	1 e	176 i	5	37 i	213	26
Other miscellaneous manufacturing	3399	45	D	106	D	405	71	151
Nonmanufacturing industries	21–23, 42–81	1,699	110	537	166	646	1,633	55 i
Mining, extraction, and support activities	21	2 i	5 e	6 e	97	* e	8 e	D
Utilities	22	40	5	9	* e	1 i	19	* e
Wholesale trade	42	13 e	2 e	29 e	7 e	16 i	28 e	2 e
Electronic shopping and electronic auctions	454111–12	2 e	* e	4 e	* e	2 e	4 e	* e
Transportation and warehousing	48–49	1 e	* e	2 e	1 e	4	10	D
Information	51	1,170	89	188	23 e	536	602	16 e
Publishing	511	1,107	86	140	9 e	370	455	10 e
Newspaper, periodical, book, and directory publishers	5111	1 e	* e	1 e	1 e	* e	2 e	* e
Software publishers	5112	1,106	86	138	8 e	370	453	9 e
Telecommunications	517	21	1 e	4 e	2 e	12	48	1 e
Data processing, hosting, and related services	518	25	2 e	40	6 e	138	72	5
Other information	other 51	17	1 e	4 e	7	15	26	* e
Finance and insurance	52	11	* e	24	1 e	3	134	5 i
Real estate and rental and leasing	53	4	D	21	2	3	8	D
Lessors of nonfinancial intangible assets (except copyrighted works)	533	3	* e	21	2	3	7	D
Other real estate and rental and leasing	other 53	* e	D	* e	* e	* e	1 i	D
Professional, scientific, and technical services	54	423	7 e	208 i	31 e	66 i	796 i	31 i
Architectural, engineering, and related services	5413	26	1 e	11 e	7	7	72	1 e
Computer systems design and related services	5415	215 i	1 e	110 e	12 e	36 i	441 i	7 e
Scientific research and development services	5417	147	4	54	5 i	15 i	196	19 i
Biotechnology research and development	541711	36	1	14	2	2 e	79	13
Physical, engineering, and life sciences (except biotechnology) research and development	541712	110	3	39	3 e	12 i	116	6 i
Social sciences and humanities research and development	541720	* e	0	* e	0	1	1 i	1
Other professional, scientific, and technical services	other 54	35 e	1 e	32 e	7 e	8 e	86	4 e
Health care services	621–23	15	D	28	* e	4	7	* e
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	17	D	17 i	3 e	11	16 e	D
All companies (number of domestic employees)	–	5,143	202	5,402	406	4,873 i	8,683	408
Small companies <sup>b</sup>								
5–499	–	673 i	41 e	1,073 i	144 e	447 i	1,420 i	95 i
5–99	–	375 e	24 e	557 e	99 e	234 i	786 i	67 e
5–49	–	269 e	19 e	363 e	79 e	148 e	518 e	57 i
5–9	–	42 e	2 e	54 e	13 e	21 e	70 e	8 e
10–24	–	118 e	12 e	125 e	39 e	49 e	186 e	27 i
25–49	–	109 e	5 e	185 e	27 e	78 i	262 i	23 i

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
50-99	-	105 i	5 e	194 i	21 e	86 i	267 i	10 e
100-249	-	187	16	241	29	108	313	18
250-499	-	112	1 e	276	16	104	321	9 i
Medium and large companies								
500-999	-	240	1 i	124	19	101	461	37
1,000-4,999	-	1,065	16	717	48	452	1,596	217
5,000-9,999	-	861	3	478	14	66	731	2
10,000-24,999	-	1,000 i	28	588	113	313	1,955 i	22 i
25,000 or more	-	1,303	113	2,422	69	3,495 i	2,520	35
Industry and company size	NAICS code	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
All industries	21-23, 31-33, 42-81	1,206	94	1,118	12,859	1,546	425 i	2,356
Manufacturing industries	31-33	1,005	73	869	8,180	884	211	1,316
Food	311	5	3	34	41	3 e	14	224
Beverage and tobacco products	312	* e	* e	2	D	3	D	D
Textile, apparel, and leather products	313-16	17	D	4 e	4 e	D	D	3 e
Wood products	321	10	D	5 e	6 e	D	6 i	8
Paper	322	12	D	11	6	D	D	38
Printing and related support activities	323	4	* i	11	5 e	1 e	* e	2 e
Petroleum and coal products	324	D	* e	D	D	* e	0	35
Chemicals	325	127	6	217	731	107	25	236
Basic chemicals	3251	68	1 e	16	171	4	D	94
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	12	0	D	97	* e	* e	23
Pesticide, fertilizer, and other agricultural chemical	3253	1	4	4	7	* e	* e	* i
Pharmaceuticals and medicines	3254	27	1 e	17	357 i	103	19	115
Soap, cleaning compound, and toilet preparation	3256	2 i	* e	3 e	48	* e	5	* e
Paint, coating, adhesive, and other chemicals	3255, 3259	16	* e	D	50 i	1 e	D	4
Plastics and rubber products	326	139	2	17 i	273	4 e	* e	21
Nonmetallic mineral products	327	5	1 e	3 e	6 e	1 e	1 i	2 e
Primary metals	331	3	* e	38	32	* e	1 i	3
Fabricated metal products	332	32	29	20 i	76 i	7 i	1 e	5 e
Machinery	333	368	11	72	486	87	30	146
Agricultural implement	33311	* e	1 i	* e	1 i	* e	0	1
Semiconductor machinery	333295	0	0	* e	43	* e	0	* e
Engine, turbine, and power transmission equipment	3336	D	1	43	118	D	14	115
Other machinery	other 333	D	9	29	325	D	16	30
Computer and electronic products	334	134	12	216	5,109	292	97	193 i
Communications equipment	3342	13	*	17	579	20	86	105 i
Semiconductor and other electronic components	3344	89	2 i	5	2,741	72	5	15
Navigational, measuring, electromedical, and control instruments	3345	25	8	189	387	107	6	59 i
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	4	0	177	86	40 i	* e	7 i

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	*	* e	1	115	37	* e	34 i
Other measuring and controlling device	other 3345	22	8	11 i	186 i	30	6	18 i
Other computer and electronic products	other 334	7	*	4 e	1,401 i	94	* e	14 e
Electrical equipment, appliances, and components	335	76	2 i	71	98	6	4 i	15 i
Transportation equipment	336	41	2 e	97	471	216	11	215
Automobiles, bodies, trailers, and parts	3361-63	27	2 e	84	92	168	* e	18
Aerospace products and parts	3364	4	* e	8	363	48 i	10	92
Aircraft, aircraft engine, and aircraft parts	336411-13	4	* e	8	358	D	10	D
Guided missile, space vehicle, and related parts	336414-15, 336419	0	0	*	5	D	0	D
Military armored vehicle, tank, and tank component	336992	0	0	0	0	0	0	0
Other transportation	other 336	10	* e	5 i	16	* e	* e	105
Furniture and related products	337	* e	* e	2 i	12 i	3	4	16
Miscellaneous	339	D	D	D	291	153	18	D
Medical equipment and supplies	3391	21 i	1	45	222	132	14	25 i
Other miscellaneous manufacturing	3399	D	D	D	69 i	21 i	3	D
Nonmanufacturing industries	21-23, 42-81	201	20 e	249	4,679	662	214 i	1,040 i
Mining, extraction, and support activities	21	* e	* e	1 e	1,748	16	* e	5 e
Utilities	22	* e	*	* e	3	* e	* e	D
Wholesale trade	42	6 e	2 e	22 i	65 e	48 i	5 i	14 e
Electronic shopping and electronic auctions	454111-12	2	* e	1 e	7 e	7 i	* e	2 e
Transportation and warehousing	48-49	1 e	D	24	16	3	D	6
Information	51	86	10	24 e	1,819	367	164 i	365
Publishing	511	25 i	7	13 e	1,472	220	162 i	187 i
Newspaper, periodical, book, and directory publishers	5111	* e	* e	1 e	3 e	* e	* e	1 e
Software publishers	5112	25 i	7	13 i	1,469	219	162 i	186 i
Telecommunications	517	2 e	1 e	* e	31 i	1 e	1 e	78
Data processing, hosting, and related services	518	44	2 e	6 e	264	35 i	1 e	77
Other information	other 51	16	1 e	4 e	53	112	1 e	24 i
Finance and insurance	52	12 i	* e	2 e	42	57	* e	6
Real estate and rental and leasing	53	* i	D	* e	4 i	* e	1	* e
Lessors of nonfinancial intangible assets (except copyrighted works)	533	* i	* e	* e	1 i	* e	1	* e
Other real estate and rental and leasing	other 53	* e	D	* e	3 i	* e	* e	* e
Professional, scientific, and technical services	54	74	6 e	153	898	152	42 i	632 e
Architectural, engineering, and related services	5413	18	* e	5 e	110	3 i	1	41
Computer systems design and related services	5415	33 i	3 i	31 e	428 i	90	35 i	373 e
Scientific research and development services	5417	12	2 e	42	255	34 i	3 e	160
Biotechnology research and development	541711	7	* e	29	110	9 e	* e	26
Physical, engineering, and life sciences (except biotechnology) research and development	541712	5 e	2 e	12	143	25 i	3 e	133
Social sciences and humanities research and development	541720	0	* e	* e	1 i	* e	* e	* i
Other professional, scientific, and technical services	other 54	10 e	1 e	76	105 e	24	3 i	58 e

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
Health care services	621-23	* e	* e	5	5 i	* e	D	2 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	20	D	17	70	12 i	D	D
All companies (number of domestic employees)	-	1,206	94	1,118	12,859	1,546	425 i	2,356
Small companies <sup>b</sup>								
5-499	-	187 e	38 e	275 e	2,091	425	92 i	780 e
5-99	-	104 e	24 e	182 e	1,098 e	160 e	48 i	579 e
5-49	-	70 e	17 e	112 e	687 e	97 e	30 e	414 e
5-9	-	14 e	3 e	21 e	110 e	23 e	3 e	79 e
10-24	-	30 e	8 e	42 e	310 e	44 e	9 e	176 e
25-49	-	26 e	6 e	49 e	267 e	29 e	17 i	159 e
50-99	-	34 e	7 e	69 i	412 i	63 i	19 i	165 e
100-249	-	40	11	64 i	577	111 i	25 i	146
250-499	-	43 i	2 e	30	415	153	20	55
Medium and large companies								
500-999	-	85	4	28	473	75	25 i	175
1,000-4,999	-	189	43	191	1,740	470	19	360
5,000-9,999	-	200	* e	230	1,022	147	20	195
10,000-24,999	-	67	5	110	2,938	98 i	14	140
25,000 or more	-	479	4	283	4,594	331	255 i	705

  

Industry and company size	NAICS code	Washington	West Virginia	Wisconsin	Wyoming	Undistributed <sup>c</sup>
All industries	21-23, 31-33, 42-81	13,678	257	3,654	23 e	7,423
Manufacturing industries	31-33	4,241	232	2,864	8	3,848
Food	311	27	47	127	*	71
Beverage and tobacco products	312	25	* e	* e	* e	D
Textile, apparel, and leather products	313-16	7	* e	24	* e	49
Wood products	321	27	16	11 i	D	D
Paper	322	1 e	D	350	* e	D
Printing and related support activities	323	1 e	* e	15 i	D	D
Petroleum and coal products	324	* e	D	2	* e	D
Chemicals	325	438	91	181	3	156
Basic chemicals	3251	12	1 e	10 i	1	62
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	1	1	36	*	D
Pesticide, fertilizer, and other agricultural chemical	3253	7	* e	20	D	15 i
Pharmaceuticals and medicines	3254	405	89	96	1	47
Soap, cleaning compound, and toilet preparation	3256	11	* e	2 e	0	D
Paint, coating, adhesive, and other chemicals	3255, 3259	3	* e	17	D	D
Plastics and rubber products	326	17	21	121	* e	161
Nonmetallic mineral products	327	5 i	2	9	* e	795
Primary metals	331	16	5	16 i	* e	48

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Washington	West Virginia	Wisconsin	Wyoming	Undistributed <sup>f</sup>
Fabricated metal products	332	44	2 e	70	* e	76
Machinery	333	115	5 e	759	1 e	147
Agricultural implement	33311	* e	2	51	* e	4
Semiconductor machinery	333295	0	0	0	0	6
Engine, turbine, and power transmission equipment	3336	16	* e	433	0	1
Other machinery	other 333	99	3 e	275	1 e	137
Computer and electronic products	334	937	18	156	2	1,303
Communications equipment	3342	142	1	20	*	47
Semiconductor and other electronic components	3344	248	1 e	23	*	997
Navigational, measuring, electromedical, and control instruments	3345	418	4	90	* e	239
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	262	3	18	* e	125
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	33	*	7	0	74
Other measuring and controlling device	other 3345	123	1 e	64	* e	40
Other computer and electronic products	other 334	130	12	24	1 e	21
Electrical equipment, appliances, and components	335	26	19	417	* e	D
Transportation equipment	336	2,399	6	339	* e	296
Automobiles, bodies, trailers, and parts	3361-63	70	1 e	190	* e	D
Aerospace products and parts	3364	2,324	5	12	* e	D
Aircraft, aircraft engine, and aircraft parts	336411-13	D	5	9	* e	D
Guided missile, space vehicle, and related parts	336414-15, 336419	D	* i	3 i	0	D
Military armored vehicle, tank, and tank component	336992	0	0	* i	0	*
Other transportation	other 336	5 e	* e	136	0	29
Furniture and related products	337	4 i	D	17	D	D
Miscellaneous	339	151	D	249	* e	513
Medical equipment and supplies	3391	37 i	1 e	97 i	* e	508
Other miscellaneous manufacturing	3399	114	D	152	* e	5
Nonmanufacturing industries	21-23, 42-81	9,437	24 e	790	15 e	3,575
Mining, extraction, and support activities	21	1 e	6 e	1 e	6 e	23
Utilities	22	* e	*	6	*	D
Wholesale trade	42	39 i	2 e	22 i	1 e	280 i
Electronic shopping and electronic auctions	454111-12	9	* e	2 e	* e	39
Transportation and warehousing	48-49	2 e	* e	1 e	* e	D
Information	51	8,625	3 e	480	3 e	2,176
Publishing	511	8,133	1	435	1 e	476
Newspaper, periodical, book, and directory publishers	5111	1 e	* e	1 e	* e	31 i
Software publishers	5112	8,133	1	434	1 e	444
Telecommunications	517	2 e	* e	15	* e	1,577
Data processing, hosting, and related services	518	62	* e	22	1 e	71
Other information	other 51	428	1 e	9	* e	53
Finance and insurance	52	3	* e	129	* e	163
Real estate and rental and leasing	53	* e	D	1	D	D

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Washington	West Virginia	Wisconsin	Wyoming	Undistributed <sup>e</sup>
Lessors of nonfinancial intangible assets (except copyrighted works)	533	* e	D	1	* e	D
Other real estate and rental and leasing	other 53	* e	D	* e	D	D
Professional, scientific, and technical services	54	706	12 e	136	4 e	809
Architectural, engineering, and related services	5413	117	1 e	15	1 e	77
Computer systems design and related services	5415	438	7	66	1 e	147
Scientific research and development services	5417	86	1 e	38	2	34
Biotechnology research and development	541711	51	1	29	1	22
Physical, engineering, and life sciences (except biotechnology) research and development	541712	35	1 e	9	1 e	12
Social sciences and humanities research and development	541720	* e	0	* e	0	0
Other professional, scientific, and technical services	other 54	64	2 e	17 e	1 e	551
Health care services	621-23	4	* e	* e	D	D
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	47	D	11 i	D	72
All companies (number of domestic employees)	-	13,678	257	3,654	23 e	7,423
Small companies <sup>b</sup>						
5-499	-	1,311	57 e	663 i	18 e	1,397
5-99	-	560 i	47 e	321 e	15 e	304
5-49	-	331 e	26 e	185 e	13 e	87
5-9	-	58 e	3 e	28 e	1 e	19
10-24	-	137 e	13 e	76 e	9 e	20
25-49	-	136 e	10 e	81 e	2 e	48
50-99	-	229	21	136	2 e	217
100-249	-	483	7	191	1 e	447
250-499	-	268	3	151	1	646
Medium and large companies						
500-999	-	274	1 e	160	* i	631
1,000-4,999	-	844	12	608	3	2,086

TABLE 21. Companies with domestic R&D paid for and performed by the company, by industry and company size, by state: 2012  
(Millions of U.S. dollars)

Industry and company size	NAICS code	Washington	West Virginia	Wisconsin	Wyoming	Undistributed <sup>e</sup>
5,000–9,999	–	232	83	1,022	*	146
10,000–24,999	–	695	32	646	* i	1,246
25,000 or more	–	10,323	71	556	1	1,917

\* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; e = estimated, more than 50% of the estimate is modeled—see technical notes; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

<sup>a</sup> Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse.

<sup>b</sup> 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.

<sup>c</sup> Includes data reported on Form BRDI-1 that were not allocated to a specific state, as well as data reported on Form BRDI-1S by multiestablishment companies. For single-establishment companies, data reported on Form BRDI-1S were allocated to the state in the address used to mail the survey form.

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. For a given estimate in this table, if the conditions are satisfied for both the i and e data codes, the e data code is assigned because the imputation rate may be found in the corresponding table of imputation rates. 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.