

TABLE 35

Domestic R&D paid for by others and performed by the company, by industry and company size: 2017

(Millions of U.S. dollars)

Industry	NAICS code	Company size (domestic employees)												
		All companies	10-19 ^a	20-49	50-99	100-249	250-499	500-599	1,000-4,999	5,000-9,999	10,000-24,999	25,000 or more		
All industries	21-23, 31-33, 42-81	61,065	909	1,842	2,071	3,703	2,331	1,576	12,771	7,497	10,070	18,295	i	
Manufacturing industries	31-33	41,072	197	644	625	1,394	1,076	1,190	9,411	2,045	9,080	15,409	i	
Food	311	244	0	0-53	*	86	5	3	87	0-69	3	2		
Beverage and tobacco products	312	107	0	*	0	0	107	0	0	*	0	0		
Textile, apparel, and leather products	313-16	1	0	0	*	1	0	0	0	0	0	0		
Wood products	321	5	0	0	0	0	1	i	5	*	0	0		
Paper	322	29	0	*	0	0-18	0	0	1	0	0	0-31		
Printing and related support activities	323	11	0	1	*	0	1	9	0	0	0	0		
Petroleum and coal products	324	15	0	0	0	0-16	0	0	0-16	0	2-18	0		
Chemicals	325	11,692	0-146	264	325	522	198	297	5,137	402-1,074	4,056	i	70-108	
Basic chemicals	3251	181	0-105	0-13	1	0-11	4	13	65-197	4	1	0		
Resin, synthetic rubber, fibers, and artificial synthetic fibers and filaments	3252	16	*	1	*	1	0	11	0	0	1	0		
Pesticide, fertilizer, and other agricultural chemicals	3253	284-383	0	0-13	0	1	0	0	287-418	0	0-131	i	0	
Pharmaceuticals and medicines	3254	10,973	0-146	251	324	511	191	272	4,651	341-1,070	3,897	i	69-108	
Soap, cleaning compound, and toilet preparation	3256	118-213	0	1	0	1	0	0	0	0	0-159	0		
Paint, coating, adhesive, and other chemicals	3255, 3259	23	*	0-13	*	0-11	3	i	0	1	0-57	0-57	*	
Plastics and rubber products	326	117	*	9	3	22	6	19	55	0	2	1		
Nonmetallic mineral products	327	30	i	0-7	0-10	i	5	5	3	0	10	i	0	
Primary metals	331	8	0	0-9	i	2	*	1	0	*	1	0-9	0	
Fabricated metal products	332	107	0-51	0-51	0-22	48	6	*	9	1	0	0		
Machinery	333	940	0-146	62	41	81	59	48	524	0-160	i	3	1	
Agricultural implement	33311	59	i	0	*	i	0-42	0-53	0	0	9	0-53	i	0
Semiconductor machinery	333242	465	0	*	*	0-81	*	0	293-487	0	0	0	0	

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Engine, turbine, and power transmission equipment	3336	159	0-146	4	0	1	0-60	0	0-166	0-160	0	*
Other machinery	other 333	257	0-146	58 i	0-42	0-81	0-60	48	0-175	0	3	0
Computer and electronic products	334	8,633	47-193	176	84	429	348	584	1,941	20-405	1,965	2,824
Communications equipment	3342	1,715 i	0	*	0-14	63	0-129	0-92	575 i	0	494-1,091 i	0
Semiconductor and other electronic components	3344	2,289	13	115	35	253	211	489	918	21	234	0
Navigational, measuring, electromedical, and control instruments	3345	4,420	34-181	60	37	110	9-138	4-96	329	0-385	543-1,141	2,824
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	150	35	7	4	48	10	5	35	0	6	0
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	4,083	0-146	40	0-34	0-63	0-129	0	111-295	0-385	537-1,135	2,824
Other measuring and controlling device	other 3345	187	0-146	13	0-34	0-63	0-129	0-92	0-182	0	0	0
Other computer and electronic products	other 334	209	*	1	0-14	3	0-96	0-92	119	0	0-96	0
Electrical equipment, appliances, and components	335	181	*	36	83	5	4	6	46	0	0	0
Transportation equipment	336	18,663 i	5	2	53	167	309	177	1,522	951	3,017	12,459 i
Automobiles, bodies, trailers, and parts	3361-63	2,745	*	1	0-53	0-65	308	100	1,427	171 i	538	84-327
Aerospace products and parts	3364	14,480 i	5	1	0-53	103	0	0-78 i	95	777	2,478	10,939 i
Aircraft, aircraft engine, and aircraft parts	336411-13	13,103 i	*	*	0-53	103	0	0-78 i	69	101	1,836	10,939 i
Guided missile, space vehicle, and related parts	336414-15, 336419	1,377	4	1	0-32	0	0	0-32	26 i	675	642	0
Military armored vehicle, tank, and tank components	336992	5	0	0	1	0-5	0-2	0	0	0	0	0
Other transportation	other 336	1,433	0	0	0	0-65	0-2	0-78	0	3	0	1,192-1,435
Furniture and related products	337	3	0	2	1	*	0	0	0	0	0	0
Miscellaneous manufacturing	339	285	0-83	39	10-33	15-34	29	43	64-85	0-53 i	20	18
Medical equipment and supplies	3391	240	0-53	39	11	16	20	36	65	0-53 i	20	18
Other miscellaneous manufacturing	3399	44	0-32	*	0-22	0-18	9	7	0-20	0	0	0

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Nonmanufacturing industries	21-23, 42-81	19,993	712	1,198	1,447	2,308	1,255	386	3,360	5,452	990	2,886	
Mining, extraction, and support activities	21	309	*	1	9	0	0	0	3	0	295	0	
Utilities	22	36	i	0	4	0	0	0	0	1	* i	32 i	
Wholesale trade	42	31		2 i	5	1 i	12	10	0	0	0	0	
Electronic shopping and electronic auctions	454111-12	0	0	0	0	0	0	0	0	0	0	0	
Transportation and warehousing	48-49	31		*	0	0	0	28	1	0	1	0	
Information	51	1,354		54 - 66	86	39	159	48	30	74 - 113	17	586	242
Publishing	511	1,062		55	29	21	12	15	27	75	0	586	242
Newspaper, periodical, book, and directory publishers	5111	0		0	0	0	0	0	0	0	0	0	0
Software publishers	5112	1,062		55	29	21	12	15	27	75	0	586	242
Telecommunications	517	40 - 163		0	43	0 - 19	0 - 123	1	0	0 - 39	0	0	0
Data processing, hosting, and related services	518	119		0 - 12	14	0 - 19	0 - 59	32	1	0	17	0	0
Other information	other 51	11 - 134		0	0	0	0 - 134	0	1	0 - 39	0	0	0
Finance and insurance	52	51		0	0	0	*	0	0	0	0	0	51
Real estate and rental and leasing	53	10		0	0	0	0	0	0	10	0	0	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0		0	0	0	0	0	0	0	0	0	0
Other real estate and rental and leasing	other 53	10		0	0	0	0	0	0	10	0	0	0
Professional, scientific, and technical services	54	17,951		642	1,087	1,359	2,127	1,164	285	3,231	5,390	106	2,559
Architectural, engineering, and related services	5413	1,147		88	73	171	233	109	43	1	0	42	387
Computer systems design and related services	5415	1,658		91	94	326	175	33	2	506	2	63	365
Scientific research and development services	5417	14,504		423	826	745	1,623	827	179	2,690	5,385	1	1,805
Biotechnology research and development	541711	3,653		86	152	145	53	137	0	1,275	0	0	1,805
Physical, engineering, and life sciences (except biotechnology) research and development	541712	9,978		334	663	597	1,543	690	179	1,144	4,827	1	0
Social sciences and humanities research and development	541720	873		4	10	3	28	0	0	270	558	0	0
Other professional, scientific, and technical services	other 54	641		39	94	117	96	195	62	34	3	0	2
Health care services	621-23	144		4	3	35	8	31	39	5	17	0	1
Other nonmanufacturing	23, 44-45 (excluding 454111-12),	76		0 - 12	13	4	2	3	3	0 - 39	27	0	0

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	55-56, 624, 71-72, 81																				

* = amount < \$500,000; 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 Research and Development Survey does not include companies with fewer than 10 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. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.