

TECHNICAL TABLE A-2

Companies in the target population and selected for the sample, by industry and company size: 2018

(Number of companies)

Industry and company size	NAICS code	Companies in target population ^a	Companies selected for the sample		
			All companies	Noncertainties	Certainties
All industries	21-23, 31-33, 42-81	1,115,834	45,690	22,945	22,745
Manufacturing industries	31-33	97,714	17,478	8,187	9,291
Food	311	9,265	1,043	676	367
Beverages and tobacco products	312	2,887	394	267	127
Textiles, apparel, and leather products	313-16	4,075	576	389	187
Wood products	321	4,977	414	216	198
Paper	322	1,529	372	217	155
Printing and related support activities	323	6,115	1,040	666	374
Petroleum and coal products ^b	324	371	150	20	130
Chemicals	325	4,968	1,994	455	1,539
Basic chemicals	3251	696	298	97	201
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	559	189	47	142
Pesticides, fertilizers, and other agricultural chemicals	3253	288	124	27	97
Pharmaceuticals and medicines	3254	1,449	774	60	714
Soaps, cleaning compounds, and toilet preparations	3256	769	240	67	173
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,207	369	157	212
Plastics and rubber products	326	4,900	987	529	458
Nonmetallic mineral products	327	4,019	429	204	225
Primary metals	331	1,799	432	196	236
Fabricated metal products	332	20,107	1,989	1,097	892
Machinery	333	9,533	1,836	723	1,113
Agricultural implements	33311	522	153	44	109
Semiconductor machinery	333242	79	65	0	65
Engines, turbines, and power transmission equipment	3336	386	137	36	101
Other machinery	other 333	8,546	1,481	643	838
Computer and electronic products	334	4,928	1,772	545	1,227
Communications equipment	3342	582	252	40	212
Semiconductors and other electronic components	3344	1,829	505	191	314
Navigational, measuring, electromedical, and control instruments	3345	1,846	757	266	491
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	307	176	39	137
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	240	122	20	102
Other measuring and controlling devices	other 3345	1,299	459	207	252
Other computer and electronic products	other 334	671	258	48	210
Electrical equipment, appliances, and components	335	2,275	632	313	319
Transportation equipment	336	4,705	1,037	392	645
Motor vehicles, bodies, trailers, and parts	3361-63	2,942	574	231	343
Aerospace products and parts	3364	824	245	66	179
Aircraft, aircraft engines, and aircraft parts	336411-13	782	212	66	146
Guided missiles, space vehicles, and related parts	336414, 336415, 336419	42	33	0	33
Military armored vehicles, tanks, and tank components	336992	25	14	0	14

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Other transportation equipment	other 336	914	204	95	109
Furniture and related products	337	4,531	985	590	395
Miscellaneous manufacturing	339	6,668	1,344	691	653
Medical equipment and supplies	3391	2,396	639	260	379
Other miscellaneous	3399	4,272	705	431	274
Unclassified	-	62	52	1	51
Nonmanufacturing industries	21-23, 42-81	1,018,120	28,212	14,758	13,454
Mining, extraction, and support activities ^b	21	5,047	667	382	285
Utilities	22	794	197	46	151
Wholesale trade	42	70,086	5,905	4,138	1,767
Electronic shopping and electronic auctions	454111-12	3,516	383	270	113
Transportation and warehousing	48-49	33,760	509	185	324
Information	51	15,490	3,316	1,538	1,778
Publishing	511	5,132	1,262	561	701
Newspaper, periodical, book, and directory publishers	5111	2,795	530	323	207
Software publishers	5112	2,337	732	238	494
Telecommunications	517	2,368	481	268	213
Data processing, hosting, and related services	518	3,040	1,003	357	646
Other information	other 51	4,950	570	352	218
Finance and insurance	52	26,776	920	214	706
Real estate and rental and leasing	53	25,228	446	134	312
Lessors of nonfinancial intangible assets (except copyrighted works)	533	468	93	3	90
Other real estate and rental and leasing	other 53	24,760	353	131	222
Professional, scientific, and technical services	54	102,371	10,247	4,452	5,795
Architectural, engineering, and related services	5413	17,392	2,899	1,817	1,082
Computer systems design and related services	5415	16,549	3,262	1,978	1,284
Scientific research and development services	5417	2,446	2,446	0	2,446
Biotechnology research and development	541711	632	632	0	632
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,637	1,637	0	1,637
Social sciences and humanities research and development	541720	177	177	0	177
Other professional, scientific, and technical services ^c	other 54	65,984	1,640	657	983
Health care services	621-23	111,131	1,406	524	882
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	623,672	4,088	2,866	1,222
Unclassified	-	249	128	9	119
Company size (number of domestic employees)					
All companies	-	1,115,834	45,690	22,945	22,745
< 10 ^d	-	6,688	333	127	206
10-19	-	549,218	10,378	8,209	2,169
20-49	-	359,015	10,819	7,323	3,496
50-99	-	109,437	6,795	3,516	3,279
100-249	-	58,090	7,292	2,523	4,769
250-499	-	16,955	3,684	713	2,971
500-999	-	8,205	2,522	286	2,236

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			All companies	Noncertainties	Certainties
1,000–4,999	–	6,390	2,660	185	2,475
5,000–9,999	–	874	512	22	490
10,000–24,999	–	592	418	23	395
25,000 or more	–	370	277	18	259

NAICS = 2012 North American Industry Classification System.

^a Estimates of the number of companies in the target population are based on the original sampling frame that was created to select the 2018 Business Research and Development Survey (BRDS) sample. These estimates do not include 111 R&D performers from the previous year's sample, which were not on the original sampling frame but were found during the survey's annual contact update procedures. These companies were added to the 2018 sample with certainty but are not reflected in the number of certainties selected for the sample.

^b Because of the widespread practice of the larger petroleum extraction and refining companies vertically integrating their activities, petroleum refineries (NAICS 32411) and oil and gas extraction (NAICS 211) were combined during sampling.

^c Contains companies classified in scientific research and development services (NAICS 5417) that, as of sampling, were not fully classified to the level of detail in biotechnology research and development (NAICS 541711), physical, engineering, and life sciences research and development (NAICS 541712), or social sciences and humanities research and development (NAICS 541720).

^d This category includes companies that are represented on the sampling frame as having missing data, but these companies are in scope to BRDS because they have at least \$500,000 in annual payroll.

Note(s):

Certainties are companies whose probability of selection is one based on prior year R&D expenditures equal to or greater than \$3 million as well as others included in the sample for analytical purposes (analytical certainties). Noncertainties are companies whose probability of selection is less than one. Companies that were missing or had an incomplete NAICS code at the time of sampling were assigned to an "unclassified" industry category temporarily. If an unclassified company reported R&D expenditures, its primary industrial activity was investigated, and a NAICS code was assigned during statistical processing.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.