

TABLE 12

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

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Basic research	Applied research	Development
All industries	21-23, 31-33, 42-81	400,100	24,829	62,132	313,139
Manufacturing industries	31-33	257,227	18,624	43,698	194,904
Food	311	4,697	466	1,518	2,713
Beverage and tobacco products	312	1,076	142	257	677
Textile, apparel, and leather products	313-16	920	35	79	806
Wood products	321	175	11	39	125
Printing and related support activities	323	229	17	52	160
Chemicals	325	74,977	10,193	17,021	47,763
Pharmaceuticals and medicines	3254	66,202	9,362	14,890	41,950
Other chemicals	other 325	8,775	831	2,132	5,813
Plastics and rubber products	326	3,754	375	771	2,608
Nonmetallic mineral products	327	1,334	161	280	893
Primary metals	331	749	36	80	633
Fabricated metal products	332	2,206	187	347	1,672
Machinery	333	13,197	639	1,521	11,037
Computer and electronic products	334	78,575	2,543	11,194	64,837
Semiconductor and other electronic components	3344	30,148	923	4,720	24,506
Navigational, measuring, electromedical, and control instruments	3345	14,509	726	2,108	11,675
Other computer and electronic products	other 334	33,918	894	4,367	28,656
Electrical equipment, appliances, and components	335	4,291	300	708	3,284
Transportation equipment	336	53,292	2,824	7,490	42,978
Aerospace products and parts	3364	26,383	1,616	3,782	20,986
Other transportation equipment	other 336	26,908	1,208	3,708	21,992
Furniture and related products	337	422	32	77	313
Miscellaneous manufacturing	322, 324, 339	17,332	663	2,263	14,407
Nonmanufacturing industries	21-23, 42-81	142,874	6,205	18,434	118,235
Information	51	80,252	2,243	7,626	70,383
Publishing	511	34,338	1,095	2,702	30,542
Telecommunications	517	3,682 - 3,806	268	1,511	1,902 - 2,027
Data processing, hosting, and related services	518	16,155	687	2,004	13,464
Other information	other 51	25,954 - 26,077	194	1,408	24,351 - 24,476
Professional, scientific, and technical services	54	36,922	2,491	8,584	25,848
Architectural, engineering, and related services	5413	2,708	260	968	1,479
Computer systems design and related services	5415	13,327	898	2,243	10,185
Scientific research and development services	5417	17,321	1,178	4,814	11,329
Biotechnology research and development	541711	4,449	515	253	3,680
Physical, engineering, and life sciences (except biotechnology) research and development	541712	11,913	594	3,943	7,377
Social sciences and humanities research and development	541720	959	70	618	271
Other professional, scientific, and technical services	other 54	3,566	154	559	2,854
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	25,700	1,471	2,225	22,004
All companies (number of domestic employees)	-	400,100	24,829	62,132	313,139
Small companies					
10-19 ^a	-	3,311	311	713	2,287
20-49	-	9,435	1,050	1,808	6,577
Medium companies					
50-99	-	10,141	738	2,288	7,116

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100-249	-	17,216	1,424	3,632	12,160
Large companies					
250-499	-	14,103	959	2,126	11,019
500-999	-	17,871	1,196	2,931	13,744
1,000-4,999	-	65,112	5,214	12,109	47,789
5,000-9,999	-	40,198	2,144	6,094	31,961
10,000-24,999	-	73,485	4,428	12,795	56,262
25,000 or more	-	149,227	7,366	17,637	124,224

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.