

TABLE 36

## Domestic R&amp;D paid for by others and performed by the company, by type of R&amp;D, industry, and company size: 2018

(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	63,230	6,668	11,993	44,570
Manufacturing industries	31-33	39,393	4,353 i	5,901	29,139
Food	311	242	26	83	134
Beverage and tobacco products	312	109	13	22	73
Textile, apparel, and leather products	313-16	4	0	*	4
Wood products	321	4	* i	1	3
Printing and related support activities	323	4	*	*	3
Chemicals	325	10,553	2,208	1,256	7,089
Pharmaceuticals and medicines	3254	9,792	2,081	899	6,813
Other chemicals	other 325	761	128	358	276
Plastics and rubber products	326	83	1	5	78
Nonmetallic mineral products	327	24	2	2	21
Primary metals	331	22 i	1 i	3 i	19 i
Fabricated metal products	332	105	6 i	20 i	79 i
Machinery	333	1,034	52	103	879
Computer and electronic products	334	9,775	283	992	8,499
Semiconductor and other electronic components	3344	2,410	82	100	2,228
Navigational, measuring, electromedical, and control instruments	3345	5,863	115 i	782	4,966
Other computer and electronic products	other 334	1,502 i	86 i	110	1,305 i
Electrical equipment, appliances, and components	335	266	32	44	189
Transportation equipment	336	16,735	1,683 i	3,327	11,725
Aerospace products and parts	3364	13,131 i	1,575 i	2,053 i	9,503 i
Other transportation	other 336	3,604	107	1,274	2,223
Furniture and related products	337	5	*	1	5
Miscellaneous manufacturing	322, 324, 339	428	46	43	339
Nonmanufacturing industries	21-23, 42-81	23,838	2,315	6,092	15,431
Information	51	862	182	137	543
Publishing	511	489	38	59	393
Telecommunications	517	65	20	0	45
Data processing, hosting, and related services	518	191	9 - 89	0 - 79	102
Other information	other 51	117	36 - 116	0 - 79	2
Professional, scientific, and technical services	54	22,486	2,076	5,890	14,520
Architectural, engineering, and related services	5413	1,684	98 i	698	887
Computer systems design and related services	5415	2,291	386	815	1,090
Scientific research and development services	5417	17,761	1,526	4,229	12,006 i
Research and development in biotechnology	541711	5,037	682	159	4,197 i
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	12,080	442	3,899	7,739
Research and development in the social sciences and humanities	541720	644	402	171 i	71 i
Other professional, scientific, and technical services	other 54	750	66	148	537
Other nonmanufacturing	21-23, 42-49, 52, 53, 55-81	490	57	64	368
All companies (number of domestic employees)	-	63,230	6,668	11,993	44,570
Small companies					
10-19 <sup>a</sup>	-	1,050	64 i	298	688
20-49	-	1,695	142	381	1,172
Medium companies					
50-99	-	1,875	350	300	1,226
100-249	-	3,921	422	1,160 i	2,340
Large companies					

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(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Basic research	Applied research	Development
250–499	–	3,041	248	415	2,377
500–999	–	2,096	180	441	1,475
1,000–4,999	–	10,068	2,319	2,391	5,359
5,000–9,999	–	9,063	59	1,672	7,331
10,000–24,999	–	9,997	457 i	1,481	8,060 i
25,000 or more	–	20,423	2,426 i	3,455 i	14,542

\* = 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.

<sup>a</sup> 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. 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, 2018.