

Table 1**Funds spent for business R&D performed in the United States, by type of R&D, source of funds, and size of company: 2017–19**

(Millions of dollars)

Selected characteristic and company size	2017	2018	2019
Domestic R&D performance ^a	400,100	441,036	492,956
Type of R&D ^b			
Basic research	24,829	28,980	32,239
Applied research	62,132	65,222	74,031
Development	313,139	346,834	386,686
Paid for by the company ^c	339,036	377,806	428,968
Basic research	18,732	22,312	25,916
Applied research	49,149	53,229	59,697
Development	271,155	302,264	343,355
Paid for by others	61,065	63,230	63,989
Basic research	6,097	6,668	6,324
Applied research	12,984	11,993	14,333
Development	41,984	44,570	43,332
Source of funds			
Federal	24,277	i 24,685	21,941
Other ^d	36,788	38,545	42,048
Size of company (number of domestic employees)			
Small companies ^e			
10–19	3,311	4,390	5,501
20–49	9,435	11,252	12,418
Medium companies			
50–99	10,141	12,321	14,021
100–249	17,216	18,547	19,793
Large companies			
250–499	14,103	19,645	18,883
500–999	17,871	17,657	23,969
1,000–4,999	65,112	68,578	75,671
5,000–9,999	40,198	45,337	50,811
10,000–24,999	73,485	84,420	88,263
25,000 or more	149,227	158,889	183,626

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

^a Domestic R&D performance is the cost of R&D paid for and performed by the respondent company and paid for by others outside of the company and performed by the respondent company.

^b R&D comprises creative and systematic work undertaken in order to increase the stock of knowledge and to devise new applications of available knowledge. This includes (1) activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses (basic research), (2) activities aimed at solving a specific problem or meeting a specific commercial objective (applied research), and (3) systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new processes or to improving existing products—goods or services—or processes (development).

^c Includes foreign subsidiaries of U.S. companies.

^d Includes companies located inside and outside the United States; U.S. state government agencies and laboratories; U.S. universities, colleges, and academic researchers; and all other organizations located inside and outside the United States.

^e Includes only companies with 10 or more domestic employees.

Note(s):

Detail may not add to total because of rounding. Beginning in survey year 2018, companies that performed or funded less than \$50,000 of R&D were excluded from tabulation. These companies in aggregate represented a very small share of total R&D expenditures in prior years. Had the companies under this threshold been included in the 2018 estimates, they would have contributed approximately \$90 million to overall R&D expenditures. Excludes data for federally funded research and development centers.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey.