

Table RD-13

Funds spent for business R&D performed in the United States, by type of R&D: 2010–19

(Millions of dollars and percent share)

Type of R&D	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Millions of dollars										
All U.S. R&D	406,600	426,215	433,716	454,271	475,969	494,499	521,700	554,012	604,837	666,875
Basic research	76,388	73,552	73,843	79,137	82,769	84,273	85,689	88,696	96,043	102,874
Applied research	79,017	81,891	86,822	88,158	91,771	97,249	110,484	114,069	119,837	132,021
Experimental development	251,195	270,772	273,051	286,976	301,428	312,977	325,528	351,248	388,957	431,981
All business R&D ^a	278,977	294,093	302,250	322,528	340,728	355,821	374,685	400,100	441,036	492,956
Basic research	16,371	13,020	13,293	19,508	21,936	21,792	24,644	24,829	28,980	32,239
Applied research	44,906	47,186	50,755	51,014	53,415	56,472	61,020	62,132	65,222	74,031
Experimental development	217,699	233,886	238,202	252,007	265,377	277,558	289,021	313,139	346,834	386,686
Distribution of total U.S. R&D and business R&D, by type of R&D (%)										
All U.S. R&D	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic research	18.8	17.3	17.0	17.4	17.4	17.0	16.4	16.0	15.9	15.4
Applied research	19.4	19.2	20.0	19.4	19.3	19.7	21.2	20.6	19.8	19.8
Experimental development	61.8	63.5	63.0	63.2	63.3	63.3	62.4	63.4	64.3	64.8
All business R&D ^a	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic research	5.9	4.4	4.4	6.0	6.4	6.1	6.6	6.2	6.6	6.5
Applied research	16.1	16.0	16.8	15.8	15.7	15.9	16.3	15.5	14.8	15.0
Experimental development	78.0	79.5	78.8	78.1	77.9	78.0	77.1	78.3	78.6	78.4
Business share of total U.S. R&D and each type of R&D (%)										
All business R&D ^a	68.6	69.0	69.7	71.0	71.6	72.0	71.8	72.2	72.9	73.9
Basic research	21.4	17.7	18.0	24.7	26.5	25.9	28.8	28.0	30.2	31.3
Applied research	56.8	57.6	58.5	57.9	58.2	58.1	55.2	54.5	54.4	56.1
Experimental development	86.7	86.4	87.2	87.8	88.0	88.7	88.8	89.2	89.2	89.5

^a Includes companies located in the United States that performed or funded R&D. Data in this table represent an aggregate of all industries in the North American Industry Classification System codes 21–33 and 42–81.

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. Data for 2010–16 come from the National Center for Science and Engineering Statistics' (NCSES's) annual Business Research and Development and Innovation Survey, which covered all publicly or privately held companies with 5 or more employees. Data for 2017 and 2018 come from NCSES's annual Business Research and Development Survey, which covers all publicly or privately held companies with 10 or more employees. Data for 2019 come from NCSES's annual Business Enterprise Research and Development Survey, which also covers all publicly or privately held companies with 10 or more employees. The total U.S. R&D data come from National Patterns of R&D Resources (2019–20 edition).

Source(s):

National Center for Science and Engineering Statistics, Business Research and Development and Innovation Survey (BRDIS), Business Research and Development Survey (BRDS), Business Enterprise Research and Development Survey (BERD), and National Patterns of R&D Resources (2019–20 edition).

Science and Engineering Indicators