

TABLE 4-4

U.S. R&D expenditures by type of work: Selected years, 1970–2015

(Billions of current and constant 2009 dollars; percent distribution)

Type of work	1970	1980	1990	2000	2010	2011	2012	2013	2014	2015 ^a
Current \$billions										
All R&D	26.3	63.2	152.0	267.9	406.6	426.2	433.6	454.0	475.4	495.1
Basic research	3.6	8.7	23.0	42.0	75.9	73.0	73.3	78.5	82.1	83.5
Applied research	5.8	13.7	34.9	56.5	79.3	82.1	87.1	88.3	91.9	97.2
Experimental development	16.9	40.7	94.1	169.4	251.4	271.0	273.3	287.1	301.5	314.5
Constant 2009 \$billions										
All R&D	115.3	142.5	227.6	327.2	401.7	412.5	412.1	424.6	436.8	450.1
Basic research	15.8	19.7	34.5	51.3	75.0	70.7	69.7	73.4	75.4	75.9
Applied research	25.2	30.9	52.3	69.0	78.3	79.5	82.8	82.6	84.4	88.3
Experimental development	74.3	91.8	140.9	206.9	248.4	262.3	259.7	268.6	277.0	285.9
Percent distribution										
All R&D	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic research	13.7	13.8	15.2	15.7	18.7	17.1	16.9	17.3	17.3	16.9
Applied research	21.9	21.7	23.0	21.1	19.5	19.3	20.1	19.5	19.3	19.6
Experimental development	64.4	64.5	61.9	63.2	61.8	63.6	63.0	63.3	63.4	63.5

^a Some data for 2015 are preliminary and may later be revised.

Note(s)

Detail may not add to total because of rounding. Data throughout the time series reported here are consistently based on the Organisation for Economic Co-operation and Development's Frascati Manual definitions for basic research, applied research, and experimental development. For 2010 and subsequent years, however, some changes have been introduced in the questionnaires of the sectoral expenditure surveys to improve the accuracy of respondents' classification of their R&D. Therefore, small percentage changes may not be meaningful when comparing data before 2010 with more recent data.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, National Patterns of R&D Resources (annual series).

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