TABLE 4-4

U.S. R&D expenditures, by type of work: Selected years, 2000–17

(Billions of current and constant 2012 dollars; percent distribution)

Type of work	2000	2010	2012	2013	2014	2015	2016	2017[a]
Current $billions								
All R&D	267.9	406.6	433.6	454.0	475.4	493.7	515.6	547.9
Basic research	42.0	76.0	73.4	78.6	82.1	83.5	88.6	91.5
Applied research	56.5	79.2	87.0	88.2	91.8	97.2	104.8	108.8
Development	169.4	251.4	273.3	287.1	301.5	312.9	322.2	347.6
Constant 2012 $billions								
All R&D	343.2	423.0	433.6	446.1	458.7	471.4	487.4	508.3
Basic research	53.8	79.1	73.4	77.2	79.3	79.8	83.8	84.8
Applied research	72.4	82.4	87.0	86.7	88.6	92.9	99.1	100.9
Development	217.0	261.6	273.3	282.2	290.9	298.8	304.5	322.5
Percent distribution								
All R&D	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basic research	15.7	18.7	16.9	17.3	17.3	16.9	17.2	16.7
Applied research	21.1	19.5	20.1	19.4	19.3	19.7	20.3	19.9
Development	63.2	61.8	63.0	63.3	63.4	63.4	62.5	63.4

[a] Some data for 2017 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. Prior to 2010, however, some changes were 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 Center for Science and Engineering Statistics, National Science Foundation, National Patterns of R&D Resources (annual series).

Science and Engineering Indicators