

Table 3**U.S. R&D expenditures, by type of R&D and performing sector: Selected years: 1970–2023**

(Billions of current and constant 2017 dollars and percent)

Type of R&D	1970	1980	1990	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 ^a	2023 ^b
Higher education	0.7	1.3	1.5	0.7	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.6
Nonprofit organizations	0.4	0.7	1.0	0.9	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.7	0.9	1.0	0.8	0.8

NA = not available

FFRDC = federally funded research and development center.

^a Some data for 2022 are preliminary and may later be revised.^b The data for 2023 include estimates and are likely to later be revised.**Note(s):**

Data throughout the span of time reported here are consistently based on Organisation for Economic Co-operation and Development *Frascati Manual* definitions for basic research, applied research, and experimental development. Prior to 2010, however, some changes had been introduced in the questionnaires of the sectoral expenditure surveys to improve the accuracy of respondents' classification of their R&D by type. Accordingly, small percentage changes in the historical data may not be meaningful.

Source(s):

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