

Table 1**Summary of federal obligations for research and experimental development, by type of R&D and type of performer, for selected agencies: FYs 2019–21**

(Millions of current dollars and percent change)

| Type of R&D and type of performer | 2019 | 2020 | 2021 (preliminary) | % change 2019–20 | % change 2020–21 (preliminary) |
|------------------------------------|---------|---------|--------------------|------------------|--------------------------------|
| Total R&D obligations | 142,424 | 167,403 | 179,465 | 17.5 | 7.2 |
| By agency | | | | | |
| DOD | 58,780 | 66,695 | 69,297 | 13.5 | 3.9 |
| DOE | 14,376 | 13,453 | 15,070 | -6.4 | 12.0 |
| HHS | 39,191 | 60,006 | 68,834 | 53.1 | 14.7 |
| NASA | 13,570 | 10,538 | 8,799 | -22.3 | -16.5 |
| NSF | 5,996 | 6,351 | 6,406 | 5.9 | 0.1 |
| All other agencies | 10,511 | 10,360 | 11,059 | -1.4 | 6.7 |
| By performer | | | | | |
| Intramural ^a | 39,313 | 51,472 | 64,209 | 30.9 | 24.7 |
| Extramural ^b | 103,111 | 115,931 | 115,256 | 12.4 | -0.6 |
| Research obligations | 81,118 | 85,305 | 85,156 | 5.2 | -0.2 |
| By agency | | | | | |
| DOD | 8,268 | 8,915 | 9,250 | 7.8 | 3.8 |
| DOE | 11,370 | 10,525 | 11,470 | -7.4 | 9.0 |
| HHS | 38,354 | 44,234 | 43,380 | 15.3 | -1.9 |
| NASA | 8,111 | 6,394 | 5,298 | -21.2 | -17.1 |
| NSF | 5,996 | 6,351 | 6,406 | 5.9 | 0.9 |
| All other agencies | 9,018 | 8,885 | 9,353 | -1.5 | 5.3 |
| By performer | | | | | |
| Intramural ^a | 18,298 | 19,572 | 20,769 | 7.0 | 6.1 |
| Extramural ^b | 62,820 | 65,733 | 64,387 | 4.6 | -2.0 |
| Experimental development | 61,306 | 82,098 | 94,310 | 33.9 | 14.9 |
| By agency | | | | | |
| DOD | 50,511 | 57,780 | 60,048 | 14.4 | 3.9 |
| DOE | 3,007 | 2,928 | 3,600 | -2.6 | 23.0 |
| HHS | 837 | 15,772 | 25,454 | 1,784.4 | 61.4 |
| NASA | 5,459 | 4,144 | 3,502 | -24.1 | -15.5 |
| NSF | na | na | na | na | na |
| All other agencies | 1,493 | 1,475 | 1,705 | -1.2 | 15.6 |
| By performer | | | | | |
| Intramural ^a | 21,015 | 31,899 | 43,440 | 51.8 | 36.2 |
| DOD | 17,710 | 20,212 | 20,604 | 14.1 | 1.9 |
| HHS | 35 | 9,966 | 21,098 | 28,374.3 | 111.7 |
| BARDA | 0 | 9,930 | 21,092 | na | 112.4 |
| NIH | na | na | na | na | na |
| All other departments and agencies | 3,270 | 1,722 | 1,737 | -47.3 | 0.9 |
| Extramural ^b | 40,292 | 50,199 | 50,869 | 24.6 | 1.3 |
| DOD | 32,801 | 37,568 | 39,443 | 14.5 | 5.0 |
| HHS | 802 | 5,806 | 4,356 | 623.9 | -25.0 |
| BARDA | 736 | 5,736 | 4,286 | 679.4 | -25.3 |
| NIH | na | na | na | na | na |
| All other departments and agencies | 6,689 | 6,824 | 7,070 | 2.0 | 3.6 |

na = not applicable.

BARDA = Biomedical Advanced Research and Development Authority; DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; ; NIH = National Institutes of Health; NSF = National Science Foundation.

^a Intramural activities cover costs associated with the administration of intramural R&D programs and extramural R&D procurements by federal personnel as well as actual intramural performance.

^b Extramural performers include business, federally funded research and development centers, universities and colleges, nonprofits, state and local governments, and foreign.

Note(s):

Because of rounding, details may not add to total. Percentages are computed using actual dollars reported. FYs 2020 and 2021 data include obligations from supplemental COVID-19–related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). Federal intramural amounts for the Biomedical Advanced Research and Development Authority are transfers to the other agencies in support of Operation Warp Speed. FY 2021 data are preliminary.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development.