Table 4
U.S. R&D expenditures, by performing sector, source of funds, and type of R&D: 2022
(Millions of dollars and percent)

| Performing sector and type of R&D | Source of funds (\$millions) | | | | | | |
|--|------------------------------|----------|-----------------------|-----------------------|------------------|-------------------------|--------------------------------------|
| | Total | Business | Federal government | Nonfederal government | Higher education | Nonprofit organizations | Percent distribution by performer |
| R&D | 891,834 | 673,127 | 164,471 | 6,010 | 26,560 | 21,665 | 100.0 |
| Business | 697,256 | 663,717 | 32,321 | 244 | ** | 974 | 78.2 |
| Federal government | 71,533 | 212 | 71,123 | 38 | ** | 161 | 8.0 |
| Federal intramural | 44,699 | 0 | 44,699 | 0 | 0 | 0 | 5.0 |
| FFRDCs | 26,834 | 212 | 26,424 | 38 | ** | 161 | 3.0 |
| Nonfederal government | 719 | 16 | 321 | 369 | 3 | 11 | 0. |
| Higher education | 94,275 | 5,590 | 49,059 | 4,945 | 26,121 | 8,560 | 10.6 |
| Nonprofit organizations | 28,052 | 3,593 | 11,648 | 415 | 437 | 11,959 | 3. |
| Percent distribution by funding source | 100.0 | 75.5 | 18.4 | 0.7 | 3.0 | 2.4 | |
| Basic research | 130,252 | 45,778 | 52,866 | 3,249 | 16,831 | 11,527 | 100. |
| Business | 43,355 | 40,768 | 2,480 | 21 | ** | 86 | 33.3 |
| Federal government | 13,247 | 39 | 13,171 | 7 | ** | 30 | 10.: |
| Federal intramural | 7,859 | 0 | 7,859 | 0 | 0 | 0 | 6.0 |
| FFRDCs | 5,388 | 39 | 5,312 | 7 | ** | 30 | 4. |
| Nonfederal government | 121 | 3 | 54 | 62 | 1 | 2 | 0. |
| Higher education | 59,619 | 3,139 | 31,605 | 2,948 | 16,609 | 5,320 | 45. |
| Nonprofit organizations | 13,910 | 1,829 | 5,556 | 211 | 222 | 6,090 | 10. |
| Percent distribution by funding source | 100.0 | 35.1 | 40.6 | 2.5 | 12.9 | 8.8 | |
| Applied research | 161,627 | 99,467 | 47,307 | 1,961 | 6,955 | 5,937 | 100. |
| Business | 102,688 | 96,727 | 5,614 | 71 | ** | 276 | 63. |
| Federal government | 23,501 | 98 | 23,312 | 17 | ** | 74 | 14. |
| Federal intramural | 12,745 | 0 | 12,745 | 0 | 0 | 0 | 7. |
| FFRDCs | 10,757 | 98 | 10,568 | 17 | ** | 74 | 6. |
| Nonfederal government | 557 | 12 | 248 | 285 | 2 | 8 | 0.3 |
| Higher education | 25,605 | 1,632 | 13,410 | 1,473 | 6,832 | 2,259 | 15. |
| Nonprofit organizations | 9,277 | 997 | 4,724 | 115 | 121 | 3,320 | 5. |
| Percent distribution by funding source | 100.0 | 61.5 | 29.3 | 1.2 | 4.3 | 3.7 | |
| Experimental development | 599,959 | 527,883 | 64,298 | 799 | 2,774 | 4,205 | 100. |
| Business | 551,217 | 526,222 | 24,227 | 152 | ** | 616 | 91. |
| Federal government | 34,784 | 75 | 34,639 | 13 | ** | 57 | 5. |
| Federal intramural | 24,095 | 0 | 24,095 | 0 | 0 | 0 | 4. |
| FFRDCs | 10,690 | 75 | 10,544 | 13 | ** | 57 | 1. |
| Nonfederal government | 42 | 1 | 19 | 21 | * | 1 | 0. |
| Higher education | 9,051 | 820 | 4,045 | 525 | 2,681 | 982 | 1. |
| Nonprofit organizations | 4,865 | 766 | 1,368 | 88 | 93 | 2,550 | 0.0 |
| Percent distribution by funding source | 100.0 | 88.0 | 10.7 | 0.1 | 0.5 | 0.7 | |

^{* =} amount < \$0.5 million; ** = small to negligible amount, included as part of the funding provided by nonprofit organizations.

FFRDC = federally funded research and development center.

Note(s):

Some data for 2022 are preliminary and may be revised later.

Source(s)

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