

TABLE 76

**Federal obligations for applied research performed at universities and colleges for selected agencies, by detailed field of science and engineering: FYs 2019–20**

(Dollars in thousands)

| Field   | 2019         | 2020 (preliminary) |
|---|--------------|--------------------|
| All fields  | 13,077,676.4 | 14,014,190.8       |
| Computer sciences and mathematics                     | 385,120.2    | 425,269.5          |
| Computer sciences                                     | 341,579.0    | NA                 |
| Mathematics   | 28,648.7     | NA                 |
| Other computer sciences and mathematics               | 14,892.5     | NA                 |
| Engineering   | 1,348,776.6  | 1,533,014.1        |
| Aeronautical engineering                              | 86,422.3     | NA                 |
| Astronautical engineering                             | 12,068.8     | NA                 |
| Chemical engineering                                  | 28,374.6     | NA                 |
| Civil engineering                                     | 1,959.7      | NA                 |
| Electrical engineering                                | 80,860.5     | NA                 |
| Mechanical engineering                                | 39,352.4     | NA                 |
| Metallurgy and materials engineering                  | 70,010.8     | NA                 |
| Other engineering                                     | 1,029,727.6  | NA                 |
| Environmental sciences                                | 209,933.0    | 212,312.7          |
| Atmospheric sciences                                  | 5,144.7      | NA                 |
| Geological sciences                                   | 283.6        | NA                 |
| Oceanography  | 36,515.0     | NA                 |
| Other environmental sciences                          | 167,989.7    | NA                 |
| Life sciences   | 9,545,271.6  | 10,123,344.7       |
| Agricultural sciences                                 | 254,024.9    | NA                 |
| Biological sciences (excluding environmental biology) | 4,936,824.6  | NA                 |
| Environmental biology                                 | 102,092.1    | NA                 |
| Medical sciences                                      | 3,225,633.1  | NA                 |
| Other life sciences                                   | 1,026,697.0  | NA                 |
| Physical sciences                                     | 118,031.4    | 195,839.7          |
| Astronomy   | 1,063.1      | NA                 |
| Chemistry   | 66,439.3     | NA                 |
| Physics   | 30,645.8     | NA                 |
| Other physical sciences                               | 19,883.3     | NA                 |
| Psychology  | 759,370.2    | 802,608.1          |
| Biological aspects                                    | 0.0          | NA                 |
| Social aspects  | 3,565.7      | NA                 |
| Other psychological sciences                          | 755,804.5    | NA                 |
| Social sciences                                       | 115,801.9    | 127,668.1          |
| Anthropology  | 36.1         | NA                 |
| Economics   | 45,838.8     | NA                 |
| Political science                                     | 0.0          | NA                 |
| Sociology   | 15,050.5     | NA                 |
| Other social sciences                                 | 54,876.4     | NA                 |
| Other sciences nec                                    | 595,371.3    | 594,133.9          |

NA = not available; data were not collected at that level for that fiscal year.

nec = not elsewhere classified.

**Note(s):**

Because of rounding, detail may not add to total. Seven agencies are required to report data for this section of the survey: the Departments of Agriculture, Defense, Energy, Health and Human Services, and Homeland Security; the National Aeronautics and Space Administration; and the National Science Foundation. Applied research obligations of these seven agencies represented more than 95% of total federal applied research obligations to universities and colleges in FYs 2019–20. FY 2020 preliminary data do not include obligations from supplemental COVID-19 related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act).

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2019–20.