

TABLE 17

**Federal obligations for research, by detailed field of science and engineering: FYs 2019–20**

(Dollars in thousands)

Field	2019	2020 (preliminary)
All fields	81,117,784.1	85,262,440.2
Computer sciences and mathematics	4,329,973.5	4,740,280.7
Computer sciences	2,896,797.3	NA
Mathematics	1,156,917.0	NA
Other computer sciences and mathematics	276,259.1	NA
Engineering	15,279,311.2	16,417,413.1
Aeronautical engineering	1,199,165.0	NA
Astronautical engineering	829,661.1	NA
Chemical engineering	454,093.1	NA
Civil engineering	566,290.3	NA
Electrical engineering	970,609.7	NA
Mechanical engineering	630,142.5	NA
Metallurgy and materials engineering	1,842,831.3	NA
Other engineering	8,786,518.2	NA
Environmental sciences	5,074,704.0	4,778,290.4
Atmospheric sciences	824,246.9	NA
Geological sciences	239,143.0	NA
Oceanography	819,217.6	NA
Other environmental sciences	3,192,096.6	NA
Life sciences	38,303,662.4	40,665,382.6
Agricultural sciences	1,445,518.9	NA
Biological sciences (excluding environmental biology)	18,910,386.0	NA
Environmental biology	924,187.5	NA
Medical sciences	13,774,777.7	NA
Other life sciences	3,248,792.4	NA
Physical sciences	9,816,132.9	9,607,645.8
Astronomy	1,583,417.8	NA
Chemistry	1,125,457.5	NA
Physics	3,445,977.6	NA
Other physical sciences	3,661,279.9	NA
Psychology	2,753,554.0	2,932,949.8
Biological aspects	17,523.2	NA
Social aspects	52,740.1	NA
Other psychological sciences	2,683,290.7	NA
Social sciences	1,155,672.8	1,018,255.7
Anthropology	34,948.4	NA
Economics	294,908.0	NA
Political science	14,186.3	NA
Sociology	224,016.7	NA
Other social sciences	587,613.4	NA
Other sciences nec	4,404,773.3	5,102,222.1

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. 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.