

TABLE 33

**Federal obligations for applied research, by detailed field of R&D: FYs 2021–22**

(Dollars in thousands)

Field	2021	2022 (preliminary)
All fields	43,750,114	44,673,778
Computer and information sciences	3,085,502	3,493,397
Geosciences, atmospheric sciences, and ocean sciences	1,796,822	2,483,997
Atmospheric science and meteorology	327,323	NA
Geological and earth sciences	287,382	NA
Ocean sciences and marine sciences	606,458	NA
Other geosciences, atmospheric sciences, and ocean sciences	575,659	NA
Life sciences	19,169,498	19,323,075
Agricultural sciences	485,954	NA
Biological and biomedical sciences	8,465,964	NA
Health sciences	8,175,797	NA
Natural resources and conservation	195,054	NA
Other life sciences	1,846,730	NA
Mathematics and statistics	212,312	196,748
Physical sciences	1,612,352	2,374,856
Astronomy and astrophysics	518	NA
Chemistry	348,827	NA
Materials science	215,194	NA
Physics	608,578	NA
Other physical sciences	439,235	NA
Psychology	1,835,546	1,846,335
Biological aspects	457	NA
Social aspects	33,704	NA
Other psychological sciences	1,801,385	NA
Social sciences	832,410	907,402
Anthropology	19,931	NA
Economics	175,443	NA
Political science and government	9,305	NA
Sociology, demography, and population studies	67,754	NA
Other social sciences	559,977	NA
Engineering	10,223,332	10,629,283
Aerospace, aeronautical, and astronautical engineering	1,508,118	NA
Bioengineering and biomedical engineering	13,076	NA
Chemical engineering	611,820	NA
Civil engineering	578,925	NA
Electrical, electronics, and communications engineering	687,331	NA
Industrial and manufacturing engineering	250,266	NA
Mechanical engineering	175,092	NA
Metallurgical and materials engineering	572,643	NA
Other engineering	5,826,062	NA
Other fields	4,982,338	3,418,685
Business management and business administration	86,123	NA
Communication and communications technologies	12,257	NA
Education research	627,270	NA
Humanities	*	NA
Law	370	NA
Social work	0	NA
Visual and performing arts	0	NA
All other fields	4,256,284	NA

\* = amount greater than \$0 but less than \$50,000.

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

**Note(s):**

Because of rounding, detail may not add to total. FYs 2021 and 2022 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). As of volume 71 (FYs 2021–22), the fields of R&D (formerly, "fields of science and engineering") were revised for consistency with other National Center for Science and Engineering Statistics surveys; some fields were added, merged, or split, and some fields were renamed. Therefore, the data are not directly comparable with totals reported in previous years. See technical table A-3 for additional notes associated with the taxonomy changes to the fields listed in this table.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22.