

TABLE 38

**Federal obligations for experimental development, by detailed field of R&D: FYs 2022–23**

(Dollars in thousands)

Field	2022	2023 (preliminary)
All fields	96,614,768	86,967,076
Computer and information sciences	2,441,587	3,071,243
Geosciences, atmospheric sciences, and ocean sciences	724,394	814,607
Atmospheric science and meteorology	161,652	NA
Geological and earth sciences	98,794	NA
Ocean sciences and marine sciences	97,043	NA
Other geosciences, atmospheric sciences, and ocean sciences	366,905	NA
Life sciences	30,408,047	5,768,626
Agricultural sciences	69,277	NA
Biological and biomedical sciences	27,943,626	NA
Health sciences	2,126,858	NA
Natural resources and conservation	60,942	NA
Other life sciences	207,343	NA
Mathematics and statistics	225,671	289,090
Physical sciences	3,415,031	4,324,792
Astronomy and astrophysics	649,952	NA
Chemistry	500,846	NA
Materials science	29,435	NA
Physics	645,248	NA
Other physical sciences	1,589,550	NA
Psychology	383,043	493,460
Biological aspects	0	NA
Social aspects	1,951	NA
Other psychological sciences	381,092	NA
Social sciences	149,433	209,299
Anthropology	5,546	NA
Economics	15,792	NA
Political science and government	237	NA
Sociology, demography, and population studies	18,548	NA
Other social sciences	109,310	NA
Engineering	44,427,376	54,070,111
Aerospace, aeronautical, and astronautical engineering	18,949,433	NA
Bioengineering and biomedical engineering	419,323	NA
Chemical engineering	590,148	NA
Civil engineering	484,504	NA
Electrical, electronics, and communications engineering	2,374,835	NA
Industrial and manufacturing engineering	2,952,700	NA
Mechanical engineering	848,194	NA
Metallurgical and materials engineering	825,654	NA
Other engineering	16,982,585	NA
Other fields	14,440,187	17,925,849
Business management and business administration	636,755	NA
Communication and communications technologies	472,638	NA
Education research	109,816	NA
Humanities	0	NA
Law	151	NA
Social work	0	NA
Visual and performing arts	0	NA
All other fields	13,220,827	NA

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. FY 2022 obligations include additional funding provided by supplemental COVID-19 pandemic-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 2022–23.