TABLE A-18

Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2021

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
All R&D fields	2,662,006	7,190	0.3	1,272,156	3,888	0.3
All science and engineering	2,607,229	119,624	4.6	1,264,539	59,571	4.7
Computer and information sciences	112,305	14,211	12.7	61,300	5,621	9.2
Geosciences, atmospheric sciences, and ocean sciences	125,635	4,358	3.5	82,581	1,527	1.8
Atmospheric science and meteorology	21,241	750	3.5	16,808	257	1.5
Geological and earth sciences	46,776	1,985	4.2	24,303	713	2.9
Ocean sciences and marine sciences	51,267	1,593	3.1	37,823	539	1.4
Geosciences, atmospheric sciences, and ocean sciences nec	6,351	30	0.5	3,647	18	0.5
Life sciences	1,029,337	20,300	2.0	409,732	13,596	3.3
Agricultural sciences	96,332	181	0.2	28,703	131	0.5
Biological and biomedical sciences	448,424	10,555	2.4	212,198	7,232	3.4
Health sciences	439,402	9,481	2.2	150,692	6,187	4.1
Natural resources and conservation	14,937	44	0.3	6,694	22	0.3
Life sciences nec	30,242	39	0.1	11,445	24	0.2
Mathematics and statistics	9,780	4,993	51.1	5,812	2,479	42.7
Physical sciences	447,085	17,366	3.9	273,687	9,001	3.3
Astronomy and astrophysics	39,188	3,236	8.3	20,664	1,870	9.0
Chemistry	147,904	2,097	1.4	81,731	1,733	2.1
Materials science	28,355	219	0.8	17,379	219	1.3
Physics	210,252	9,701	4.6	140,734	4,719	3.4
Physical sciences nec	21,386	2,113	9.9	13,179	460	3.5
Psychology	17,293	71	0.4	9,684	23	0.2
Social sciences	11,893	502	4.2	3,711	337	9.1
Anthropology	1,029	5	0.5	42	1	2.4
Economics	3,311	29	0.9	853	3	0.4
Political science and government	427	33	7.7	23	4	17.4
Sociology, demography, and population studies	984	197	20.0	449	138	30.7
Social sciences nec	6,142	238	3.9	2,344	191	8.1
Sciences nec	62,697	2,035	3.2	9,317	1,119	12.0
Engineering	791,204	55,788	7.1	408,715	25,868	6.3
Aerospace, aeronautical, and astronautical engineering	68,280	7,034	10.3	41,490	3,139	7.6
Bioengineering and biomedical engineering	58,226	2,385	4.1	26,204	1,448	5.5
Chemical engineering	58,603	738	1.3	29,151	382	1.3
Civil engineering	39,391	525	1.3	16,260	340	2.1
Electrical, electronic, and communications engineering	181,023	25,769	14.2	127,631	11,637	9.1
Industrial and manufacturing engineering	23,314	4,695	20.1	13,954	2,092	15.0
Mechanical engineering	98,623	9,955	10.1	64,312	4,734	7.4
Metallurgical and materials engineering	65,891	1,030	1.6	46,073	461	1.0
Engineering nec	197,853	3,657	1.8	43,640	1,635	3.7
All non-science and engineering	54,777	749	1.4	7,617	129	1.7

TABLE A-18

Imputed amounts for total and federally financed higher education R&D equipment expenditures, by R&D field: FY 2021

(Dollars in thousands)

R&D field	Total			Federally financed		
	All R&D expenditures	Imputed amount	Imputed amount as % of total	All R&D expenditures	Imputed amount	Imputed amount as % of total
Business management and business administration	6,236	36	0.6	702	10	1.4
Communication and communications technologies	3,415	5	0.1	145	0	0.0
Education	5,099	360	7.1	918	61	6.6
Humanities	3,092	136	4.4	157	10	6.4
Law	215	16	7.4	92	1	1.1
Social work	351	7	2.0	85	3	3.5
Visual and performing arts	1,813	22	1.2	167	2	1.2
Non-science and engineering nec	34,556	167	0.5	5,351	42	0.8

nec = not elsewhere classified.

Note(s):
Imputation rate at total level is lower than imputation rates at detail levels because some institutions could provide totals but not details. This table includes only institutions reporting $1 million or more in total R&D expenditures in FY 2020. Institutions reporting less than $1 million in total R&D expenditures in FY 2020 completed a shorter version of the survey form in FY 2021 that did not include this question.

Source(s):
National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2021.