

TABLE 17

Higher education R&D expenditures for equipment, by R&D field, source of funds, and institutional control: FY 2020

(Dollars in thousands)

Field	All expenditures			Federal			Nonfederal		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
All R&D fields	2,588,624	1,924,396	664,228	1,201,365	845,175	356,190	1,387,259	1,079,221	308,038
Science	1,787,045	1,291,954	495,091	860,070	594,457	265,613	926,975	697,497	229,478
Computer and information sciences	164,385	130,036	34,349	113,808	97,665	16,143	50,577	32,371	18,206
Geosciences, atmospheric sciences, and ocean sciences	136,963	122,177	14,786	91,416	83,984	7,432	45,547	38,193	7,354
Atmospheric science and meteorology	20,841	18,570	2,271	16,572	15,039	1,533	4,269	3,531	738
Geological and earth sciences	52,636	43,841	8,795	29,953	25,350	4,603	22,683	18,491	4,192
Ocean sciences and marine sciences	57,836	55,485	2,351	42,700	41,945	755	15,136	13,540	1,596
Geosciences, atmospheric sciences, and ocean sciences nec	5,650	4,281	1,369	2,191	1,650	541	3,459	2,631	828
Life sciences	990,630	717,282	273,348	373,658	236,157	137,501	616,972	481,125	135,847
Agricultural sciences	98,162	96,328	1,834	24,075	23,160	915	74,087	73,168	919
Biological and biomedical sciences	455,430	289,571	165,859	193,815	107,171	86,644	261,615	182,400	79,215
Health sciences	382,382	288,594	93,788	135,695	91,415	44,280	246,687	197,179	49,508
Natural resources and conservation	11,673	10,686	987	4,225	4,140	85	7,448	6,546	902
Life sciences nec	42,983	32,103	10,880	15,848	10,271	5,577	27,135	21,832	5,303
Mathematics and statistics	7,907	3,559	4,348	4,158	2,641	1,517	3,749	918	2,831
Physical sciences	409,342	257,972	151,370	256,469	158,831	97,638	152,873	99,141	53,732
Astronomy and astrophysics	35,304	22,769	12,535	18,802	11,614	7,188	16,502	11,155	5,347
Chemistry	136,354	99,008	37,346	75,360	53,674	21,686	60,994	45,334	15,660
Materials science	19,654	12,232	7,422	11,453	7,807	3,646	8,201	4,425	3,776
Physics	184,112	111,722	72,390	125,708	76,271	49,437	58,404	35,451	22,953
Physical sciences nec	33,918	12,241	21,677	25,146	9,465	15,681	8,772	2,776	5,996
Psychology	22,078	15,368	6,710	8,666	6,139	2,527	13,412	9,229	4,183
Social sciences	14,414	11,448	2,966	2,767	2,531	236	11,647	8,917	2,730
Anthropology	2,843	2,010	833	145	116	29	2,698	1,894	804
Economics	2,422	1,659	763	167	135	32	2,255	1,524	731
Political science and government	886	682	204	140	70	70	746	612	134
Sociology, demography, and population studies	2,108	1,488	620	906	844	62	1,202	644	558
Social sciences nec	6,155	5,609	546	1,409	1,366	43	4,746	4,243	503
Sciences nec	41,326	34,112	7,214	9,128	6,509	2,619	32,198	27,603	4,595
Engineering	741,873	578,237	163,636	335,816	245,892	89,924	406,057	332,345	73,712
Aerospace, aeronautical, and astronautical engineering	62,078	49,333	12,745	37,169	30,461	6,708	24,909	18,872	6,037
Bioengineering and biomedical engineering	56,178	35,949	20,229	26,692	13,542	13,150	29,486	22,407	7,079
Chemical engineering	53,400	41,779	11,621	23,898	17,108	6,790	29,502	24,671	4,831
Civil engineering	39,656	33,962	5,694	17,784	15,861	1,923	21,872	18,101	3,771
Electrical, electronic, and communications engineering	138,659	97,305	41,354	88,821	69,725	19,096	49,838	27,580	22,258
Industrial and manufacturing engineering	22,505	14,754	7,751	15,311	11,769	3,542	7,194	2,985	4,209
Mechanical engineering	95,127	70,335	24,792	52,675	39,207	13,468	42,452	31,128	11,324
Metallurgical and materials engineering	58,883	38,066	20,817	35,461	17,660	17,801	23,422	20,406	3,016
Engineering nec	215,387	196,754	18,633	38,005	30,559	7,446	177,382	166,195	11,187
Non-S&E	59,706	54,205	5,501	5,479	4,826	653	54,227	49,379	4,848
Business management and business administration	4,885	3,713	1,172	165	149	16	4,720	3,564	1,156
Communication and communications technologies	1,208	1,075	133	106	106	0	1,102	969	133
Education	8,660	7,712	948	937	884	53	7,723	6,828	895

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Humanities	4,108	3,020	1,088	310	152	158	3,798	2,868	930
Law	667	526	141	106	1	105	561	525	36
Social work	1,177	1,111	66	103	42	61	1,074	1,069	5
Visual and performing arts	1,768	1,501	267	320	304	16	1,448	1,197	251
Non-S&E nec	37,233	35,547	1,686	3,432	3,188	244	33,801	32,359	1,442

nec = not elsewhere classified; S&E = science and engineering.

Source(s):

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2020.