

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
All institutions	-	3,159,553	3,185,958	3,281,457	3,295,883	624,579	1,242,339	1,035,519	393,446
U. California, San Diego	1	159,294	180,626	201,331	185,870	7,727	38,898	139,245	0
Woods Hole Oceanographic Institution	2	143,179	145,169	143,240	160,059	36,704 i	66,248 i	42,901 i	14,206 i
U. Washington, Seattle	3	122,167	123,301	135,307	128,033	53,801	9,406	57,404	7,422
U. Colorado Boulder	4	136,586	121,624	119,824	118,876	30,868	12,891	2,609	72,508
Texas A&M U., College Station and Health Science Center	5	115,394	113,459	107,894	106,932	5,452	16,284	78,485	6,711
U. Alaska, Fairbanks	6	65,850	69,346	72,609	95,711	8,494	52,713	33,542	962
U. Oklahoma, Norman and Health Science Center	7	63,159	71,836	84,812	91,101	81,571	9,530	0	0
Johns Hopkins U. <sup>a</sup>	8	34,663 i	42,585 i	65,556 i	79,257 i	11,368 i	34,126 i	24,357 i	9,406 i
Columbia U. in the City of New York	9	80,240	75,900	78,288	77,515	10,482	32,077	34,956	0
U. Hawaii, Manoa	10	78,170	82,955	71,468	73,176	3,574	14,442	53,490	1,670
Arizona State U.	11	82,299	83,703	73,544	68,116	0	68,116	0	0
U. Wisconsin-Madison	12	50,280	58,701	65,000	65,814	39,038	17,180	0	9,596
U. Maryland <sup>b</sup>	13	na	52,823	58,099	61,660	14,573	41,169	2,464	3,454
Colorado State U., Fort Collins	14	116,804	85,500	67,642	60,073	42,825	15,441	0	1,807
U. New Hampshire	15	52,678	48,149	51,661	55,523	28,224	6,307	20,992	0
U. Texas, Austin	16	55,302	51,155	61,145	54,009	16	42,578	9,063	2,352
U. Rhode Island	17	47,018	50,513	42,634	52,469	0	11,501	32,011	8,957
U. Miami	18	50,321	48,427	50,684	50,826	35,988	0	13,932	906
U. Utah	19	12,580 i	27,848 i	20,011 i	47,024 i	0 i	41,384 i	0 i	5,640 i
California Institute of Technology	20	32,030	37,101	43,338	43,295 i	1,986 i	34,651 i	204 i	6,454 i
Oregon State U.	21	48,616	40,030	39,215	43,111	1,741	6,465	19,404	15,501
U. California, Los Angeles	22	38,361	38,106	41,594	41,818	8,669	27,493	0	5,656
U. Maryland Center for Environmental Science	23	42,675	43,867	43,554	40,621	84	3,398	36,862	277
Harvard U.	24	42,697	43,664	43,505	38,756	6,193	8,834	820	22,909
U. California, Santa Barbara	25	33,665	35,554	40,396	37,222	0	14,629	22,411	182
William & Mary	26	33,109	32,425	33,084	34,838	0	303	34,535	0
U. Arizona	27	28,947	31,075	31,148	32,088	7,273	21,648	2,261	906
Pennsylvania State U., University Park and Hershey Medical Center	28	50,302	46,390	41,590	31,930	16,523	13,007	2,400	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. California, Santa Cruz	29	24,348	26,570	29,389	31,217	0	7,476	17,662	6,079
Massachusetts Institute of Technology	30	41,824	34,015	32,718	30,961	7,956	11,360	9,521	2,124
U. California, Davis	31	27,316	29,166	30,153	30,603	3,995	1,653	4,848	20,107
Princeton U.	32	28,636	24,755	23,819	29,203	12,846	7,670	386	8,301
Louisiana State U., Baton Rouge	33	31,488	31,853	32,283	28,763	0	3,597	19,120	6,046
SUNY, Stony Brook U.	34	25,646	26,282	25,334	26,694	154	6,542	19,885	113
U. Southern Mississippi	35	18,864	29,968	29,843	26,110	0	5,211	5,342	15,557
North Carolina State U.	36	19,819	21,691	27,010	25,579	6,504	0	6,271	12,804
U. Maine	37	22,741	25,039	24,874	24,778	0	6,687	18,068	23
Rutgers, State U. New Jersey, New Brunswick	38	19,173	18,036	25,634	24,326	2,528	141	21,232	425
Desert Research Institute	39	24,601	23,991	22,889	22,791	5,410	17,381	0	0
Stanford U.	40	18,036	17,624	20,216	21,216	0	11,821	2,827	6,568
U. South Florida <sup>c</sup>	41	26,509	25,127	24,670	19,373	0	6,911	12,460	2
U. Nevada, Reno	42	14,369	14,563	15,077	19,030	243	17,178	794	815
U. Delaware	43	20,689	18,346	17,697	18,173	0	3,575	8,990	5,608
U. Alabama, Huntsville	44	12,552	16,001	17,304	17,960	17,546	399	15	0
U. Georgia	45	22,530	23,281	20,493	17,846	0	3,577	14,269	0
U. North Carolina, Chapel Hill	46	19,136	16,922	19,242	16,879	0	5,690	6,294	4,895
Florida International U.	47	14,800	14,955	16,023	16,584	4,651	2,129	9,804	0
Michigan Technological U.	48	13,885	14,388	13,896	16,272	1,476	40	6,404	8,352
Florida State U.	49	20,650	18,343	20,816	16,252	4,423	2,979	7,935	915
U. Florida	50	16,846	17,186	17,740	16,189	0	9,582	6,607	0
SUNY, U. Albany	51	17,696	15,833	15,523	15,605	13,754	1,851	0	0
Mississippi State U.	52	8,947	10,928	17,335	15,520	1,332	10,865	3,169	154
U. Maryland, Baltimore County	53	20,275	13,585	15,158	15,087	1,599	10,678	2,208	602
U. Michigan, Ann Arbor	54	14,278	15,705	14,928	15,080	0	15,080	0	0
San Jose State U.	55	14,627	12,777	13,747	14,857	2,883	269	11,483	222
U. Southern California	56	16,323	16,850	19,983	14,323	0	10,291	4,032	0
Georgia Institute of Technology	57	12,380	12,260	12,904	13,998	344	13,347	307	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. Minnesota, Twin Cities	58	14,248	14,391	14,715	13,634	0	13,634	0	0
U. California, Irvine	59	10,922	11,580	12,705	13,034	176	12,858	0	0
George Mason U.	60	11,977	11,598	10,679	12,577	5,254	6,485	513	325
Texas A&M U.-Corpus Christi	61	14,719	13,494	11,900	12,296	591	994	5,294	5,417
U. Massachusetts, Dartmouth	62	11,084	11,550	10,917	12,196	0	0	12,196	0
U. Kansas	63	11,329	10,594	10,485	11,923	842	11,081	0	0
U. Hawaii, system office	64	11,022	10,531	11,853	11,591	11,576	0	15	0
U. Wyoming	65	9,473	6,755	12,944	11,251	6,464	2,971	0	1,816
Nova Southeastern U.	66	7,857	8,878	11,436	10,973	0	0	10,973	0
U. Connecticut	67	10,356	10,974	9,186	10,483	0	746	9,737	0
U. California, Riverside	68	9,880	10,774	10,855	10,303	0	2,839	0	7,464
U. Pittsburgh, Pittsburgh	69	12,405	13,185	10,875	9,952	0	2,242	0	7,710
U. South Carolina, Columbia	70	1,781	988	8,374	9,609	0	900	8,709	0
U. Houston	71	8,002	10,516	9,437	9,292	4,960	3,501	331	500
Texas Tech U.	72	6,583	8,213	8,913	9,282	520	5,609	0	3,153
Washington State U.	73	8,441	10,109	9,440	8,946	3	1,103	46	7,794
U. Chicago	74	9,652	9,370	9,090	8,854	0	8,854	0	0
Montana Technological U.	75	7,162	7,235	7,825	8,222	0	8,222	0	0
Ohio State U.	76	9,286	9,030	9,158	7,979	0	7,979	0	0
Indiana U., Bloomington	77	5,528	7,220	8,053	7,960	2,945	1,546	0	3,469
Brown U.	78	4,306	4,310	5,954	7,954	0	2,151	189	5,614
Boston U.	79	7,105	8,701	8,573	7,876	0	7,876	0	0
U. California, Berkeley	80	11,473	9,429	9,845	7,857	2	7,855	0	0
Purdue U., West Lafayette	81	6,013	7,119	10,166	7,578	6,482	0	0	1,096
Boston C.	82	5,533	5,130	5,836	7,414	6,176	1,238	0	0
U. Wisconsin-Milwaukee	83	7,681	6,442	7,288	7,385	1,162	298	5,925	0
Texas State U.	84	5,402	7,349	7,357	7,338	2	1,692	0	5,644
Duke U.	85	11,171	11,077	9,675	7,310	0	1,186	6,124	0
New Mexico Institute of Mining and Technology	86	5,610	6,791	6,729	7,309	0	7,309	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Yale U.	87	7,613	6,995	5,916	7,021	0	7,021	0	0
Northern Arizona U.	88	9,714	7,984	7,408	6,790	96	5,122	41	1,531
U. New Mexico	89	7,775	7,329	6,924	6,727	393	6,334	0	0
Naval Postgraduate School	90	7,227	6,339	6,566	6,591	2,089	644	3,346	512
Cornell U.	91	6,568	6,531	8,145	6,589	1,136	5,218	235	0
U. of the Virgin Islands	92	542	830	3,639	6,508	0	184	4,405	1,919
U. Louisiana, Lafayette	93	3,290	3,957	5,426	6,277	0	5,186	1,091	0
U. North Dakota	94	4,056	6,713	6,781	6,234	5,562	672	0	0
U. Montana, Missoula	95	5,035	6,376	5,878	6,212	0	2,677	3,535	0
Washington U., Saint Louis	96	5,045	5,676	5,509	6,083	0	6,083	0	0
U. Nevada, Las Vegas	97	4,253	4,526	6,342	6,082	394	5,400	0	288
U. Oregon	98	3,785	4,871	6,704	6,060	0	5,486	574	0
U. Alaska, Anchorage	99	5,101	5,186	7,339	5,735	310	4,732	650	43
Colorado School of Mines	100	8,380	8,238	8,916	5,713	0	5,052	0	661
Michigan State U.	101	3,779	5,244	5,435	5,695	0	5,480	0	215
U. Arkansas, Fayetteville	102	4,287	4,449	3,499	5,686	0	5,686	0	0
Iowa State U.	103	3,659	3,917	4,538	5,650	0	5,650	0	0
Florida A&M U.	104	3,701	5,282	5,844	5,633	0	0	5,137	496
U. Illinois, Urbana-Champaign	105	7,272	6,868	6,281	5,521	3,785	1,736	0	0
Montana State U., Bozeman	106	5,125	5,618	5,603	5,468	0	4,099	0	1,369
Southern Methodist U.	107	5,941	6,954	6,100	5,367	0	5,367	0	0
U. Virginia, Charlottesville	108	4,785	5,352	6,040	5,356	3	0	0	5,353
U. Toledo	109	4,189	5,659	5,748	5,309	0	4,934	0	375
New Mexico State U.	110	4,939	3,908	5,381	5,067	203	2,165	0	2,699
U. Tennessee, Knoxville <sup>d</sup>	111	5,752	5,557	5,322	5,062	0	3,355	0	1,707
U. Guam	112	2,548	2,753	2,696	5,047	0	262	4,673	112
SUNY, U. Buffalo	113	4,479	3,533	3,739	4,912	0	4,912	0	0
U. Idaho	114	5,244	5,923	4,933	4,803	115	4,612	0	76
Rice U.	115	3,958	4,341	5,152	4,786	0	4,786	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Dartmouth C. and Dartmouth Hitchcock Medical Center	116	4,771	4,359	5,241	4,607	0	4,607	0	0
East Carolina U.	117	4,433	3,684	4,586	4,564	0	410	4,154	0
U. South Alabama	118	4,186	4,222	5,011	4,466	0	244	4,222	0
U. North Carolina, Wilmington	119	4,511	5,193	5,206	4,311	0	28	4,204	79
U. Alabama, Tuscaloosa	120	895	1,000	3,062	4,302	0	2,847	1,455	0
Tulane U.	121	3,753	4,317	4,825	4,217	0	4,217	0	0
U. Maryland, Eastern Shore	122	2,775	4,369	3,454	4,182	0	0	4,182	0
U. Memphis	123	4,629	4,117	5,493	4,089	0	4,089	0	0
Northeastern U.	124	4,296	4,603	4,039	4,044	0	1,195	2,849	0
Auburn U., Auburn	125	2,171	2,690	3,460	4,008	0	2,241	0	1,767
San Francisco State U.	126	3,233	4,297	3,759	3,975	229	394	3,077	275
West Virginia U.	127	7,266	10,049	9,625	3,965	0	3,320	0	645
U. Central Florida	128	5,039	4,486	4,008	3,951	3,935	0	16	0
U. California, Merced	129	3,165	2,916	2,943	3,849	126	1,621	0	2,102
Old Dominion U.	130	5,151	4,907	4,166	3,775	0	0	3,775	0
U. Texas, El Paso	131	2,566	3,168	3,426	3,757	0	3,747	0	10
Tarleton State U.	132	4,903	3,504	3,188	3,745	0	1,084	0	2,661
U. Massachusetts, Amherst	133	5,215	6,569	4,265	3,582	0	3,582	0	0
Virginia Polytechnic Institute and State U.	134	3,867	4,185	3,068	3,534	185	3,349	0	0
U. Texas, San Antonio	135	1,087	1,178	2,354	3,429	0	2,203	0	1,226
U. Puerto Rico, Rio Piedras	136	2,192	2,537	3,754	3,409	0	3,409	0	0
Western Washington U.	137	3,802	3,822	3,897	3,379	0	1,277	2,102	0
U. Kentucky	138	2,385	2,331	2,966	3,356	0	3,356	0	0
Morgan State U.	139	4,372	3,955	3,384	3,298	0	3,298	0	0
Florida Institute of Technology	140	2,559	2,096	2,310	3,254	905	208	2,006	135
U. Vermont	141	446	772	2,716	3,237	1,947	1,284	6	0
Boise State U.	142	5,633	3,536	3,660	3,129	68	2,938	87	36
Oklahoma State U., Stillwater	143	4,546	2,613	2,870	3,119	0	3,119	0	0
Syracuse U.	144	3,766	3,913	3,060	3,005	0	3,005	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. Massachusetts, Boston	145	6,451	5,249	3,848	2,960	13	1,166	1,781	0
Hampton U.	146	4,022	3,779	3,454	2,881	2,212	0	661	8
U. Washington, Tacoma	147	1,452	1,827	2,089	2,838	0	0	2,838	0
Grand Valley State U.	148	3,124	2,818	2,887	2,803	0	6	0	2,797
Baylor U.	149	2,573	2,685	2,185	2,731	1,349	1,139	243	0
U. Massachusetts, Lowell	150	1,938	1,977	2,177	2,614	1,140	1,474	0	0
Southern Illinois U., Edwardsville	151	1,987	1,383	1,979	2,542	0	1,758	0	784
U. Rochester	152	2,702	2,765	3,104	2,536	0	2,536	0	0
Florida Gulf Coast U.	153	1,032	877	1,654	2,475	252	6	2,168	49
Saint Louis U.	154	1,161	1,281	1,174	2,264	0	2,264	0	0
Emory U.	155	1,675	1,237	1,075	2,217	0	0	0	2,217
Ohio U.	156	1,400	1,618	1,697	2,183	53	2,130	0	0
San Diego State U.	157	2,978	2,582	2,234	2,158	0	968	773	417
Utah State U.	158	1,836	1,150	511	2,146	1,133	1,013	0	0
Temple U.	159	1,721	1,559	2,044	2,108	0	2,108	0	0
U. Nebraska, Lincoln	160	4,014	3,639	2,943	2,028	0	2,028	0	0
U. Puerto Rico, Mayaguez	161	5,475	5,676	5,487	2,014	0	542	1,472	0
Florida Atlantic U.	162	1,017	1,149	1,186	2,013	369	0	0	1,644
U. Iowa	163	2,113	2,088	2,441	1,971	0	579	0	1,392
California State U., Monterey Bay	164	922	1,327	1,281	1,953	0	369	1,446	138
U. Pennsylvania	165	1,266	2,455	1,760	1,929	0	1,929	0	0
U. North Texas, Denton	166	747	1,444	2,064	1,879	0	1,879	0	0
Bowling Green State U.	167	723	1,112	1,903	1,875	0	412	1,463	0
Rutgers, State U. New Jersey, Newark	168	3,312	3,313	1,485	1,873	0	1,873	0	0
Rensselaer Polytechnic Institute	169	2,601	1,931	2,837	1,868	0	1,868	0	0
Vanderbilt U. and Vanderbilt U. Medical Center	170	3,355	1,586	1,919	1,861	0	1,861	0	0
Portland State U.	171	2,094	2,090	2,212	1,818	278	1,287	249	4
Montclair State U.	172	1,128	1,685	1,262	1,815	0	1,501	300	14
Heidelberg U.	173	911	1,222	1,125	1,725	0	0	1,725	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Western Michigan U. and Homer Stryker M.D. School of Medicine	174	1,278	1,546	1,402	1,660	0	1,660	0	0
U. Texas Rio Grande Valley	175	1,280	2,049	1,769	1,649	0	17	1,507	125
Southern Illinois U., Carbondale	176	1,271	1,354	848	1,643	8	561	0	1,074
SUNY, Binghamton U.	177	2,108	2,026	1,916	1,636	0	1,636	0	0
Idaho State U.	178	2,913	1,447	1,792	1,627	0	994	0	633
Sonoma State U.	179	ne	ne	571	1,617	0	472	201	944
CUNY, City C.	180	2,113	2,459	1,699	1,600	0	1,600	0	0
Georgia State U.	181	1,070	1,268	1,104	1,500	0	1,500	0	0
California State U., East Bay	182	ne	ne	1,029	1,493	0	1,493	0	0
Monmouth U.	183	ne	1,082	1,621	1,492	0	0	1,492	0
Coastal Carolina U.	184	1,301	1,573	1,690	1,415	462	40	913	0
Northwestern U.	185	1,627	1,547	1,351	1,342	0	1,342	0	0
U. Mississippi	186	1,797	1,726	1,151	1,306	342	324	640	0
Pennsylvania State U., Behrend	187	1,034	1,154	250	1,249	126	32	1,091	0
U. Missouri, Columbia	187	1,005	1,335	988	1,249	0	1,232	17	0
U. New Orleans	189	2,356	1,778	1,585	1,244	0	1,244	0	0
Central Washington U.	190	1,779	2,110	1,525	1,204	0	1,204	0	0
Occidental C.	191	573	817	1,086	1,201	0	141	1,060	0
Embry-Riddle Aeronautical U.	192	1,475	818	1,336	1,200	1,200	0	0	0
Clark U.	193	1,052	1,787	1,890	1,197	0	1,052	145	0
U. Hawaii, Hilo	194	785	842	894	1,195	0	719	476	0
C. Charleston	195	1,365	1,212	1,048	1,156	200	458	498	0
Humboldt State U.	196	2,660	1,490	1,464	1,141	314	122	697	8
Kansas State U.	197	2,574	2,337	1,479	1,130	0	1,130	0	0
California Polytechnic State U., San Luis Obispo	198	1,410	1,362	1,105	1,106	0	0	1,106	0
Lehigh U.	199	1,166	1,191	1,510	1,087	0	1,048	0	39
Northwest Indian C.	200	466	1,043	1,033	1,084	301	305	477	1
Miami U.	201	1,241	1,031	1,354	1,071	0	1,071	0	0
U. North Carolina, Charlotte	202	366	1,111	1,009	1,054	0	1,054	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Kent State U.	203	1,022	942	958	1,038	25	959	0	54
American U.	204	511	482	642	1,035	0	0	0	1,035
CUNY, Advanced Science Research Center	205	1,442	3	104	1,030	0	209	821	0
Western Kentucky U.	206	1,175	979	842	1,013	122	866	0	25
CUNY, Hunter C.	207	1,297	1,147	1,339	1,010	0	1,010	0	0
Alaska Pacific U.	208	1,210	1,406	1,196	1,005	0	54	871	80
SUNY, C. of Environmental Science and Forestry	209	1,131	554	1,211	995	151	633	116	95
Salisbury U.	210	1,274	1,334	891	988	0	929	0	59
U. Illinois, Chicago	211	653	701	1,021	943	0	943	0	0
Indiana U.-Purdue U., Indianapolis	212	1,266	926	1,272	938	0	938	0	0
U. Cincinnati	213	1,439	1,143	1,171	913	0	913	0	0
Carleton C.	214	292	1,607	863	900	0	900	0	0
Georgia Southern U.	215	259	774	719	890	32	689	98	71
Stockton U.	216	2,171	2,484	2,789	885	15	0	776	94
SUNY, Buffalo State	217	915	1,050	895	869	0	209	0	660
U. New England	218	1,092	1,405	936	867	0	0	867	0
U. Texas, Arlington	218	1,275	1,289	877	867	0	867	0	0
Brigham Young U., Provo	220	302	567	461	853	0	853	0	0
Savannah State U.	221	591	633	728	815	0	146	527	142
SUNY, C. Plattsburgh	222	476	850	824	813	0	7	806	0
Northern Illinois U.	223	568	395	553	803	0	662	0	141
South Dakota State U.	224	3,991	1,933	904	801	197	604	0	0
Roger Williams U.	225	913	700	730	777	0	0	736	41
California State U., Sacramento	226	934	909	839	752	0	752	0	0
California State U., Northridge	227	1,859	1,832	2,158	731	0	340	148	243
West Texas A&M U.	228	191	434	219	688	676	0	0	12
North Dakota State U.	229	296	714	553	680	0	680	0	0
Colgate U.	230	765	511	453	677	0	460	0	217
Rockefeller U.	231	1,052	974	986	660	0	0	0	660



TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U.S. Naval Academy	232	1,110	1,079	775	649	0	0	649	0
James Madison U.	233	678	1,003	753	628	0	461	0	167
Austin Peay State U.	234	56	14	596	611	0	608	0	3
U. Texas, Dallas	235	938	907	856	598	0	598	0	0
Illinois State U.	236	474	809	788	591	0	591	0	0
Amherst C.	237	74	169	439	567	0	567	0	0
Central Michigan U.	238	644	661	677	557	145	275	134	3
CUNY, York C.	239	ne	85	527	543	256	287	0	0
Case Western Reserve U.	240	789	591	523	536	0	536	0	0
Loyola Marymount U.	241	805	761	489	527	0	63	0	464
Duquesne U.	242	77	84	584	510	0	510	0	0
CUNY, Brooklyn C.	243	625	631	645	504	0	504	0	0
William Paterson U.	244	156	299	579	487	0	333	0	154
Towson U.	245	650	653	709	481	0	481	0	0
St. Edward's U.	246	440	1,077	528	478	409	10	0	59
U. Akron	247	187	192	285	467	0	467	0	0
U. Dayton	248	225	428	359	465	311	154	0	0
U. Minnesota, Duluth	249	1,245	3,466	2,480	451	0	451	0	0
Wesleyan U.	250	512	444	821	450	0	322	0	128
Villanova U.	251	824	809	826	443	0	381	62	0
New York U.	252	361	434	401	436	0	242	194	0
U. Alabama, Birmingham	252	1,199	870	701	436	436	0	0	0
California State U., Chico	254	160	140	395	426	0	426	0	0
Middlebury C.	255	260	270	240	425	0	316	0	109
U. Washington, Bothell	256	116	462	371	405	362	36	7	0
Marshall U.	257	39	164	258	404	0	0	0	404
CUNY, Queens C.	258	414	427	817	402	0	402	0	0
Rowan U.	259	481	451	409	397	0	397	0	0
California State U., Fresno	260	113	125	147	379	0	379	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. Colorado Denver <sup>e</sup>	260	na	na	na	379	379	0	0	0
Delaware State U.	262	956	633	385 i	377	0	4	373	0
Tufts U.	262	1,151	482	472	377	0	219	109	49
U. Wisconsin-Stevens Point	264	201 i	214 i	226	368	0	368	0	0
Carnegie Mellon U.	265	1,599	994	448	364	281	0	83	0
Appalachian State U.	266	945	583	499	357	136	221	0	0
Bowdoin C.	267	562	507	635	328	0	16	312	0
Oregon Institute of Technology	267	0 i	358 i	312 i	328 i	0 i	0 i	0 i	328 i
Skidmore C.	269	495	762	632	320	0	320	0	0
Wichita State U.	269	36	25	44	320	0	320	0	0
SUNY, C. Brockport	271	85	396	353	319	0	319	0	0
Tennessee State U.	272	0	0	297	314 i	0 i	314 i	0 i	0 i
Western Carolina U.	272	489	494	297	314	0	30	284	0
Chapman U.	274	274	231	212	304	28	0	0	276
Southern Connecticut State U.	275	109	168	253	300	50	74	176	0
Albany State U.	276	288	18	19	299	16	261	0	22
North Carolina Central U.	277	287	303	321	294	0	294	0	0
Hawaii Pacific U.	278	318	324	220	289	0	38	251	0
Howard U.	278	618	248	225	289	0	0	289	0
Wayne State U.	280	339	412	296	288	0	288	0	0
Lewis and Clark C.	281	195	294	212	280	27	251	0	2
Virginia Commonwealth U.	282	1,196	871	354	278	0	0	0	278
DePaul U.	283	27	37	91	276	0	276	0	0
U. Puerto Rico, Medical Sciences Campus	284	0	29	136	265	0	265	0	0
Long Island U.	285	0	40	345	261	0	261	0	0
U. North Carolina, Asheville	286	412	128	84	260	86	150	0	24
Union C., Schenectady	287	625	189	154	252	0	252	0	0
Louisiana Tech U.	288	76	77	84	236	0	0	0	236
California State U., Fullerton	289	693	420	329	229	0	87	142	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Smith C.	290	69	117	36	228	0	228	0	0
U. Alaska, Southeast	290	424	309	222	228	0	59	169	0
California State U., Long Beach	292	209	125	514	226	0	226	0	0
U. San Diego	292	583	185	163	226	0	0	226	0
Illinois Institute of Technology	294	416	246	398	224	109	115	0	0
U. of St. Thomas (MN)	295	56	15	18	222	0	222	0	0
Macalester C.	296	210	427	390	221	97	45	0	79
U. Richmond	297	49	49	62	218	0	218	0	0
SUNY, Geneseo	298	301	298	239	212	0	212	0	0
U. Colorado Anschutz Medical Campus <sup>e</sup>	298	na	na	na	212	212	0	0	0
Des Moines U.	300	162	82	197	206	0	206	0	0
U. San Francisco	301	295	194	106	204	81	43	0	80
U. Tulsa	302	223	112	213	202	0	202	0	0
Williams C.	303	180	205	195	200	0	191	0	9
New Mexico Highlands U.	304	70	ne	189	198	0	198	0	0
Pomona C.	305	131	236	274	193	0	136	0	57
U. Missouri, Kansas City	306	495	402	308	190	0	117	5	68
Colby C.	307	122	152	193	187	0	187	0	0
U. Louisville	308	192	197	180	185	114	63	8	0
U. Minnesota, Morris	309	ne	216	227	180	0	180	0	0
Missouri State U.	310	133	34	95	177	2	175	0	0
U. of the District of Columbia	310	102	84	41	177	0	177	0	0
Air Force Institute of Technology	312	1,792	967	742	175	175	0	0	0
George Washington U.	312	716	288	436	175	0	17	0	158
Clarkson U.	314	0	4	59	172	0	142	30	0
New School	315	330	800	537	169	0	0	0	169
Barnard C.	316	24	9	60	164	0	160	4	0
Wright State U.	317	570	312	210	163	0	163	0	0
Bryn Mawr C.	318	268	185	260	151	0	151	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
California State Polytechnic U., Pomona	318	319	295	68	151	0	0	9	142
U. Northern Iowa	318	165	161	142	151	0	0	0	151
U. Northern Colorado	321	74	140	296	147	0	147	0	0
Haverford C.	322	154 i	229 i	229 i	145 i	0 i	89 i	48 i	8 i
Providence C.	323	103	166	160	144	0	0	144	0
U. Hawaii, Maui C.	323	ne	ne	ne	144	0	0	144	0
Eastern Connecticut State U.	325	110	22	101	143	0	143	0	0
U. Colorado Colorado Springs	326	55	79	173	141	81	60	0	0
Murray State U.	327	181	120	134	139	0	139	0	0
California State U., Bakersfield	328	299	262	176	134	0	134	0	0
U. North Georgia	329	121	129	133	132	0	132	0	0
St. Cloud State U.	330	12	13	217	128	0	128	0	0
Middle Tennessee State U.	331	134	500	48	126	0	126	0	0
U. Wisconsin-Oshkosh	331	125 i	126 i	126 i	126	0	126	0	0
Sam Houston State U.	333	31	86	72	124	0	124	0	0
Stephen F. Austin State U.	334	342	292	177	121	0	117	4	0
Texas Christian U.	334	168	178	248	121	0	121	0	0
Franklin and Marshall C.	336	355	710	232	119	0	92	0	27
Fort Hays State U.	337	ne	331	298	117	0	116	0	1
Colorado C.	338	58	109	96	114	0	114	0	0
Ithaca C.	338	ne	ne	6	114	79	15	20	0
Eastern Michigan U.	340	505	399	172	108	0	76	10	22
Central State U.	341	122	163	126	102	0	102	0	0
Northern Michigan U.	342	207	155	91	101	0	101	0	0
Trinity U.	343	46	113	56	96	0	96	0	0
U. New Haven	344	185	152	143	93	73	0	20	0
Dillard U.	345	0	0	0	87	0	37	0	50
Wellesley C.	346	30	154	161	86	17	69	0	0
Albion C.	347	80	53	84	82 i	0 i	82 i	0 i	0 i

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Fort Valley State U.	347	0	0	0	82	0	82	0	0
U. Wisconsin-Green Bay	347	66 i	92 i	90 i	82 i	0 i	82 i	0 i	0 i
Wheaton C., Wheaton	350	49	136	130	81	0	81	0	0
Central Connecticut State U.	351	ne	61	91	79	0	79	0	0
Texas Southern U.	351	0	140	197	79	0	0	0	79
Furman U.	353	121	16	47	78	0	78	0	0
Northland C.	353	ne	ne	ne	78 i	0 i	67 i	0 i	11 i
Indiana State U.	355	42	199	120	74	0	74	0	0
St. Olaf C.	356	13	102	38	71	13	0	58	0
SUNY, Oswego	356	63	52	73	71	18	53	0	0
U. Wisconsin-Eau Claire	358	1	8	8	69	0	69	0	0
Northeastern Illinois U.	359	150	131	50	68	0	68	0	0
U. Louisiana, Monroe	360	33	307	46	64	61	0	0	3
Eastern Washington U.	361	45	66	58	61	0	61	0	0
Kean U.	361	ne	ne	301	61	0	61	0	0
Lincoln U., Jefferson City	363	0	0	0	60	23	37	0	0
C. Wooster	364	103	120	59	59 i	0 i	59 i	0 i	0 i
Hope C.	364	0	0	20	59	0	59	0	0
West Chester U. Pennsylvania	366	77	60	65	55	0	55	0	0
Seattle U.	367	4	37	42	54	0	0	54	0
U. of Mary Washington	367	25	17	97	54	0	54	0	0
Hofstra U.	369	9	20	4	53	1	50	2	0
Willamette U.	369	43	14	4	53	0	50	3	0
U. Denver	371	108	186	168	52	0	52	0	0
U. Houston-Downtown	371	8	27	94	52	0	0	17	35
California State U., San Bernardino	373	40	118	87	51	0	51	0	0
Fort Lewis C.	374	ne	22	56	46	0	28	0	18
CUNY, Baruch C.	375	135	79	198	44	0	7	0	37
U. of the Pacific	376	0	0	0	43	0	43	0	0

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
Mercyhurst U.	377	ne	41 i	42 i	42 i	0 i	33 i	0 i	9 i
Sacred Heart U.	378	ne	ne	ne	40	8	0	32	0
Texas A&M International U.	379	232	96	84	39	0	39	0	0
Bates C.	380	100	119	119	37	0	37	0	0
Dakota State U.	380	0	0	18	37	0	37	0	0
Saginaw Valley State U.	382	30	11	36	36 i	0 i	4 i	0 i	32 i
U. Nebraska, Omaha	383	113	7	18	34	0	34	0	0
U.S. Air Force Academy	383	0	0	0	34	0	34	0	0
Indiana U. Pennsylvania	385	233	497	161	33	0	29	0	4
Andrews U.	386	ne	64	45	32	0	32	0	0
Calvin U.	387	2	37	35 i	31 i	0 i	31 i	0 i	0 i
Troy U.	387	ne	ne	49	31	0	0	31	0
Suffolk U.	389	ne	ne	28	28	0	0	28	0
Oberlin C.	390	224	157	93	27	0	27	0	0
Clafflin U.	391	138	259	37	26	26	0	0	0
East Tennessee State U.	391	29 i	6 i	0 i	26 i	0 i	26 i	0 i	0 i
Lamar U.	393	45	0	0	24	0	24	0	0
Tennessee Technological U.	393	56	74	60	24	0	24	0	0
California State U., Los Angeles	395	0	0 i	0	23	0	23	0	0
Hobart and William Smith Colleges	395	ne	118	148	23	22	1	0	0
Pennsylvania State U., Harrisburg	397	0	11	5	22	11	11	0	0
Sul Ross State U.	397	2	0	22	22 i	0 i	22 i	0 i	0 i
U. Central Arkansas	397	4	0	20	22	0	22	0	0
U. North Florida	400	132	144	10	21	0	0	0	21
CUNY, Lehman C.	401	37	0	37	20	0	20	0	0
U. Southern Maine	402	3	41	42	18	0	0	18	0
U. West Florida	402	189	138	875	18	0	18	0	0
U. Wisconsin-La Crosse	402	25	31	35	18	0	18	0	0
Claremont McKenna C.	405	93	173	29	17	0	0	0	17

TABLE 40

**Higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2021 geosciences, atmospheric sciences, and ocean sciences: FYs 2018–21 and by subfield for FY 2021**

(Dollars in thousands)

Institution	Rank	2018	2019	2020	2021				
					All geosciences, atmospheric sciences, and ocean sciences	Atmospheric science and meteorology	Geological and earth sciences	Ocean sciences and marine sciences	Geosciences, atmospheric sciences, and ocean sciences nec
U. Puerto Rico, Humacao	405	0	0	0	17	0	0	0	17
Vassar C.	405	0 <sup>i</sup>	11	0	17	0	17	0	0
California State U., San Marcos	408	379	0	47	13	0	0	8	5
California State U., Stanislaus	408	0	0	1	13	0	13	0	0
Minnesota State U., Mankato	408	62	32	1	13	0	13	0	0
U. Wisconsin-Superior	411	34	25	30	11	0	11	0	0
Bucknell U.	412	102	94	12 <sup>i</sup>	10	0	8	0	2
Eastern Kentucky U.	412	21	7	4	10	0	0	0	10
California State U., Dominguez Hills	414	13	7	13	8	0	0	0	8
Virginia State U.	414	54	157	0	8	8	0	0	0
Morehead State U.	416	22	7	16	7	0	7	0	0
Lafayette C.	417	13	0	8	5	0	5	0	0
Northeast Ohio Medical U.	417	3	6	0	5	0	5	0	0
Midwestern U.	419	0	0	0	4	0	0	0	4
Gallaudet U.	420	56	71	10	2	0	0	2	0
Jackson State U.	420	1,562	1,794	189	2	2	0	0	0
Kentucky State U.	420	186	0	0	2	0	2	0	0
U.S. Military Academy	420	245	111	98	2	0	2	0	0
Alfred U.	424	0	0	1	1	0	0	0	1
Hamilton C.	424	29	72	15	1	0	1	0	0
Indiana U., South Bend	424	0	ne	ne	1	0	0	0	1
All other surveyed institutions	-	65,036	12,222	6,995	0	0	0	0	0

i = imputed. na = not applicable; institution did not exist or did not exist as a separate entity. ne = not eligible; institution did not meet the criteria for inclusion.

nec = not elsewhere classified.

<sup>a</sup> Johns Hopkins University includes the Applied Physics Laboratory (APL), with \$64,954 thousand imputed for total R&D expenditures in geosciences, atmospheric sciences, and ocean sciences in FY 2021. Total expenditures by field for Johns Hopkins University are flagged as imputed because APL was unable to distribute a portion of institutionally funded R&D by field.

<sup>b</sup> The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

<sup>c</sup> The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

<sup>d</sup> The University of Tennessee, Knoxville includes expenditures from the University of Tennessee Institute of Agriculture. Due to a reorganization within the University of Tennessee system, the Institute of Agriculture now falls under the leadership of the University of Tennessee, Knoxville chancellor. Prior to FY 2020, the University of Tennessee, Knoxville, Institute of Agriculture reported to the survey separately.

<sup>e</sup> The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

**Note(s):**

Institutions reporting zero expenditures in ranked total for FY 2021 are not listed in this table. Tied institutions are ranked alphabetically. Ranked institutions are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large, multi-campus universities; some are part of state university systems. For a complete list of campuses that belong to a larger university or system and their aggregate R&D expenditures, see table 6.

**Source(s):**

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