

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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	-	1,991,824	2,042,331	2,048,328	2,067,292	460,463	676,742	698,401	231,686
U. California, San Diego	1	94,236	107,931	88,060	120,294	16,036	13,224	91,034	0
U. Colorado Boulder	2	135,477	126,077	132,846	119,659	38,768	10,811	1,526	68,554
Woods Hole Oceanographic Institution	3	111,160	96,228	110,718	112,979	0	0	112,979	0
U. Washington, Seattle	4	100,006	96,441	96,422	100,000	46,809	10,550	41,328	1,313
Texas A&M U., College Station and Health Science Center	5	84,670	85,959	88,535	86,781	3,270	7,173	71,543	4,795
Colorado State U., Fort Collins	6	34,160	103,710	100,566	70,266	37,934	29,060	0	3,272
Columbia U. in the City of New York	7	72,326	70,875	65,302	61,544	7,067	20,777	33,700	0
Arizona State U.	8	30,385	36,248	52,476	59,778	0	59,778	0	0
U. Hawaii, Manoa	9	60,650	60,762	55,156	58,526	2,463	11,446	39,627	4,990
U. Oklahoma, Norman and Health Science Center	10	26,632	26,948	43,991	54,007	51,727	2,280	0	0
U. Alaska, Fairbanks	11	47,328	51,687	50,997	50,566	6,801	21,354	21,397	1,014
U. Maryland ^a	12	na	na	na	46,763	34,987	10,357	1,013	406
Johns Hopkins U. ^b	13	30,987	32,162	29,412	37,235	5,813	11,875	8,208	11,339
U. New Hampshire	14	45,381	40,472	38,709	36,870	17,711	5,166	13,993	0
U. Wisconsin-Madison	15	40,990	38,139	36,826	36,615	26,687	6,721	0	3,207
U. Miami	16	42,242	39,797	36,182	36,297	25,386	0	9,719	1,192
Oregon State U.	17	40,711	38,438	41,429	34,363	1,736	6,214	16,524	9,889
U. Rhode Island	18	25,531	29,316	28,307	32,874	47	4,989	22,407	5,431
Pennsylvania State U., University Park and Hershey Medical Center	19	27,911	27,849	31,354	28,218	11,435	13,296	3,487	0
Harvard U.	20	24,391	23,670	26,892	27,835	2,036	4,174	0	21,625
California Institute of Technology	21	23,918	22,811	22,753	25,436	3,932	18,852	0	2,652
U. California, Los Angeles	22	19,859	22,572	26,061	24,970	6,003	17,913	0	1,054
Massachusetts Institute of Technology	23	37,527	32,656	27,772	22,382	6,930	8,264	5,660	1,528
U. Southern Mississippi	24	9,761	8,841	9,366	21,324	0	3,739	6,199	11,386
U. Texas, Austin	25	22,562	28,732	23,228	19,745	0	14,737	3,515	1,493
Desert Research Institute	26	18,735	18,607	17,665	16,557	3,217	13,340	0	0
Princeton U.	27	17,790	16,845	17,747	15,933	7,182	3,013	4,866	872
U. Utah	28	7,483	5,696	7,255	15,150	4,137	11,013	0	0
U. California, Santa Barbara	29	13,722	12,659	13,504	14,799	0	6,263	8,536	0
William & Mary	30	13,937	14,248	14,448	14,272	0	455	13,817	0

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U. Arizona	31	15,085	13,967	13,117	13,372	2,799	9,399	913	261
North Carolina State U.	32	15,323	14,270	12,401	12,946	5,839	0	836	6,271
U. Alabama, Huntsville	33	9,752	9,957	10,004	12,920	12,583	249	88	0
U. California, Santa Cruz	34	10,700	11,115	11,487	12,725	0	2,408	6,628	3,689
SUNY, Stony Brook U.	35	12,594	13,576	11,179	11,996	0	4,132	7,839	25
Rutgers, State U. New Jersey, New Brunswick	36	23,175	11,804	14,353	11,993	1,688	214	9,702	389
U. North Carolina, Chapel Hill	37	10,565	12,952	11,903	11,158	0	4,391	3,427	3,340
U. South Florida, Tampa	38	9,541	11,313	10,896	10,880	0	2,054	8,826	0
U. Maryland, Baltimore County	39	13,538	15,821	14,629	10,807	1,313	8,343	665	486
U. Southern California	40	14,939	12,250	10,908	10,664	0	9,128	1,536	0
U. Hawaii, system office	41	ne	ne	11,020	10,531	10,531	0	0	0
U. Delaware	42	11,976	13,435	12,351	10,066	0	2,183	4,998	2,885
George Mason U.	43	10,495	10,192	10,804	9,912	4,038	5,269	395	210
U. California, Irvine	44	6,220	8,557	8,857	9,510	0	9,510	0	0
U. Florida	45	9,264	8,741	10,165	9,497	0	7,315	1,688	494
U. Maine	46	10,457	10,917	10,472	9,385	0	2,065	7,303	17
Michigan Technological U.	47	7,860	7,868	8,473	8,715	1,397	20	2,484	4,814
U. Chicago	48	6,561	7,125	8,644	8,639	0	8,639	0	0
San Jose State U.	49	8,687	8,697	10,336	8,618	1,509	179	6,930	0
U. Pittsburgh, Pittsburgh	50	9,080	9,002	8,521	8,568	0	1,578	0	6,990
U. Maryland Center for Environmental Science	51	9,791	9,805	7,064	8,301	0	189	7,051	1,061
Florida State U.	52	8,169	9,068	8,332	8,123	1,638	842	4,524	1,119
U. Michigan, Ann Arbor	53	7,192	7,018	7,281	8,070	0	8,070	0	0
U. Minnesota, Twin Cities	54	7,227	7,797	7,622	8,058	0	8,058	0	0
Florida International U.	55	2,828	3,502	8,001	7,987	1,560	1,066	5,361	0
Louisiana State U., Baton Rouge	56	7,948	6,967	7,956	7,883	0	1,536	5,574	773
Georgia Institute of Technology	57	7,076	8,038	8,340	7,822	0	7,533	289	0
Mississippi State U.	58	1,031	5,184	5,817	7,793	182	6,347	1,175	89
Stanford U.	59	8,194	7,247	8,710	7,690	0	5,849	1,414	427
Duke U.	60	7,572	7,792	6,987	7,079	0	2,743	4,336	0
U. Georgia	61	7,461	8,053	6,109	6,855	0	243	6,612	0

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Northern Arizona U.	62	6,896	3,673	7,751	6,805	9	4,249	0	2,547
SUNY, U. Albany	63	12,673	20,856	8,969	6,728	6,077	651	0	0
U. Connecticut	64	5,879	5,272	5,866	6,674	0	874	5,800	0
U. New Mexico	64	5,068	7,393	6,957	6,674	280	6,394	0	0
U. California, Davis	66	8,177	7,610	6,596	6,459	1,125	1,662	472	3,200
U. Nevada, Reno	67	7,709	6,677	6,940	6,263	288	5,359	465	151
West Virginia U.	68	7,986	4,172	3,992	6,255	0	4,562	0	1,693
New Mexico Institute of Mining and Technology	69	2,622	5,012	5,010	6,235	0	6,235	0	0
Ohio State U.	70	7,126	5,966	6,182	6,216	0	6,216	0	0
U. Illinois, Urbana-Champaign	71	6,266	5,591	6,121	5,967	3,609	2,358	0	0
Boston U.	72	5,258	4,460	5,287	5,898	0	5,898	0	0
U. California, Berkeley	73	6,757	6,627	6,670	5,638	0	5,638	0	0
U. Wyoming	74	11,513	10,112	5,959	5,473	4,009	1,441	0	23
Naval Postgraduate School	75	6,386	6,176	5,993	5,268	2,803	138	2,131	196
Washington U., Saint Louis	76	5,174	6,269	4,750	5,192	0	5,192	0	0
Colorado School of Mines	77	2,997	4,075	4,025	4,981	123	4,423	0	435
Florida A&M U.	78	2,874	2,766	3,458	4,945	0	0	4,213	732
Cornell U.	79	3,767	4,297	5,072	4,796	701	4,050	45	0
Washington State U.	80	4,351	5,318	4,276	4,767	347	1,528	0	2,892
U. Alaska, Anchorage	81	2,287	2,666	4,355	4,476	49	3,310	589	528
U. Maryland, Eastern Shore	82	3,190	5,266	2,775	4,369	296	0	4,073	0
Texas A&M U.-Corpus Christi	83	4,515	5,153	5,216	4,273	685	509	1,309	1,770
U. California, Riverside	84	4,295	5,160	4,555	4,237	0	2,430	0	1,807
Montana State U., Bozeman	85	4,499	4,188	4,787	4,215	0	2,080	0	2,135
Southern Methodist U.	86	4,665	3,627	3,324	4,100	0	4,100	0	0
U. Oregon	87	2,671	2,460	3,286	4,038	0	3,527	511	0
U. Massachusetts, Amherst	88	2,643	2,568	2,936	4,021	0	4,021	0	0
U. Puerto Rico, Mayaguez	89	3,710	4,339	4,246	3,975	0	505	3,470	0
Morgan State U.	90	4,578	4,984	4,372	3,955	0	3,955	0	0
U. Virginia, Charlottesville	91	3,060	3,264	2,870	3,896	0	0	0	3,896
U. Kansas	92	9,947	7,205	4,879	3,873	298	2,743	199	633

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Hampton U.	93	3,537	4,080	4,022	3,779	3,159	0	435	185
Nova Southeastern U.	94	3,559	3,394	3,210	3,515	0	0	3,515	0
U. Toledo	95	2,124	3,154	2,773	3,474	0	3,474	0	0
Old Dominion U.	96	3,831	3,720	3,590	3,290	0	0	3,290	0
Boston C.	97	4,268	4,494	4,067	3,209	2,895	314	0	0
Stevens Institute of Technology	98	5,719	5,006	3,756	3,202	852	3	94	2,253
Northeastern U.	99	1,773	2,260	2,665	3,174	0	398	2,776	0
U. Tennessee, Knoxville	100	3,087	2,489	2,611	3,160	0	2,730	0	430
Texas State U.	101	773	844	2,932	3,137	0	2,463	0	674
U. North Dakota	102	6,208	3,947	1,958	3,056	2,272	784	0	0
Yale U.	103	4,005	3,727	3,142	3,053	0	3,053	0	0
Purdue U., West Lafayette	104	3,082	3,128	3,140	3,042	3,042	0	0	0
U. Arkansas, Fayetteville	105	1,640	2,352	2,464	3,009	0	3,009	0	0
Michigan State U.	106	1,434	1,663	2,386	2,983	0	2,983	0	0
U. Montana, Missoula	107	1,577	1,610	2,393	2,967	0	1,724	1,243	0
Rutgers, State U. New Jersey, Newark	108	1,085	1,876	2,295	2,921	0	2,921	0	0
Texas Tech U.	109	3,414	2,537	2,326	2,843	358	2,293	0	192
New Mexico State U.	110	1,787	2,465	3,752	2,797	14	1,107	0	1,676
U. Guam	111	2,407	2,442	2,382	2,620	20	270	2,103	227
U. Massachusetts, Boston	112	3,609	3,692	3,753	2,573	0	1,194	1,379	0
Boise State U.	113	4,944	3,600	4,272	2,556	203	2,050	7	296
U. Nevada, Las Vegas	114	1,293	2,788	2,578	2,543	35	2,459	0	49
Brown U.	115	2,804	2,192	2,166	2,488	219	1,108	110	1,051
U. Idaho	116	2,887	2,604	2,588	2,451	221	2,230	0	0
U. Massachusetts, Dartmouth	117	2,826	3,068	2,393	2,297	0	0	2,297	0
SUNY, U. Buffalo	118	2,130	2,682	2,925	2,286	0	2,286	0	0
Virginia Polytechnic Institute and State U.	119	2,663	2,302	2,218	2,251	0	2,248	3	0
U. Houston	120	993	1,808	2,588	2,213	392	1,520	238	63
U. Colorado Denver and Anschutz Medical Campus	121	192	208	2,807	2,178	2,070	19	0	89
U. Nebraska, Lincoln	122	1,809	2,469	2,305	2,140	0	2,140	0	0
U. Rochester	123	1,900	2,257	2,082	2,112	0	2,112	0	0

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CUNY, City C.	124	1,303	1,249	1,902	2,103	0	2,103	0	0
U. Minnesota, Duluth	125	2,702	886	979	1,993	0	1,993	0	0
U. Puerto Rico, Rio Piedras	126	2,674	2,091	1,664	1,932	0	494	0	1,438
Rice U.	127	2,756	2,916	1,995	1,929	0	1,929	0	0
U. Wisconsin-Milwaukee	128	2,992	2,424	2,142	1,903	0	0	1,903	0
Portland State U.	129	1,183	1,566	1,764	1,895	107	1,690	63	35
Jackson State U.	130	1,755	2,122	1,562	1,794	0	0	0	1,794
Iowa State U.	131	1,035	1,365	1,568	1,776	0	1,776	0	0
U. Central Florida	132	5,256	3,378	1,590	1,654	1,654	0	0	0
Central Washington U.	133	1,045	1,699	1,317	1,650	0	1,650	0	0
Indiana U., Bloomington	134	1,590	1,603	1,692	1,630	1,150	480	0	0
Syracuse U.	135	1,051	2,002	1,611	1,616	0	1,616	0	0
U. Memphis	136	1,326	1,194	1,938	1,605	0	1,605	0	0
U. Texas, El Paso	137	1,676	1,475	1,662	1,550	0	1,550	0	0
U. South Alabama	138	995	945	1,188	1,499	0	33	1,466	0
South Dakota State U.	139	4,655	4,445	2,988	1,485	0	1,485	0	0
Tulane U.	140	1,711	1,521	1,574	1,478	0	1,478	0	0
U. Washington, Tacoma	141	705	635	985	1,443	0	0	1,443	0
San Francisco State U.	142	2,035	1,741	875	1,442	0	105	1,337	0
San Diego State U.	143	2,734	2,386	1,986	1,433	0	589	383	461
U. North Carolina, Wilmington	144	844	1,315	1,019	1,398	0	782	608	8
California State U., Northridge	145	1,816	1,766	1,697	1,393	0	337	928	128
U. California, Merced	146	1,331	1,130	1,404	1,391	0	1,391	0	0
Carleton C.	147	168	175	230	1,330	0	1,330	0	0
Kansas State U.	148	1,405	1,751	1,653	1,259	0	1,259	0	0
U. Pennsylvania	149	1,497	1,387	776	1,255	0	1,255	0	0
Dartmouth C. and Dartmouth Hitchcock Medical Center	150	1,341	1,626	1,376	1,234	0	1,234	0	0
U. Massachusetts, Lowell	151	197	385	971	1,218	752	466	0	0
U. Missouri, Columbia	152	921	1,307	853	1,212	0	1,212	0	0
Western Washington U.	153	1,003	953	936	1,153	0	687	466	0
Rensselaer Polytechnic Institute	154	1,170	992	1,165	1,111	0	1,111	0	0

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California Polytechnic State U., San Luis Obispo	155	647	774	1,257	1,089	0	0	1,089	0
U. Louisiana, Lafayette	155	1,137	1,704	872	1,089	0	487	93	509
U. New England	157	838	1,233	749	1,080	0	0	1,080	0
U.S. Naval Academy	158	687	531	1,110	1,074	0	0	1,074	0
C. Charleston	159	884	1,149	1,095	1,064	77	366	621	0
U. Texas Rio Grande Valley	160	36	861	926	1,060	0	21	1,012	27
Northwest Indian C.	161	ne	ne	466	1,043	290	294	459	0
Auburn U., Auburn	162	2,447	2,037	1,424	1,026	61	339	0	626
Lehigh U.	163	737	888	841	1,004	0	1,004	0	0
Northwestern U.	164	1,156	1,020	1,021	1,003	0	1,003	0	0
U. South Carolina, Columbia	165	2,867	1,754	1,079	983	0	0	983	0
U. New Orleans	166	1,952	1,941	1,708	969	0	969	0	0
Pennsylvania State U., Behrend	167	1,047	1,288	657	899	8	8	883	0
Air Force Institute of Technology	168	1,585	1,905	1,534	876	876	0	0	0
Coastal Carolina U.	169	733	808	710	862	266	12	329	255
U. Kentucky	169	856	957	644	862	0	862	0	0
East Carolina U.	171	1,224	514	406	851	0	294	557	0
Vanderbilt U. and Vanderbilt U. Medical Center	172	3,124	1,949	1,858	838	0	838	0	0
Montclair State U.	173	472	460	510	825	0	672	153	0
SUNY, Buffalo State	174	629	474	626	819	0	169	0	650
St. Edward's U.	175	250	1,220	162	807	400	407	0	0
California State U., Sacramento	176	562	630	737	802	0	802	0	0
Emory U.	177	939	1,056	1,145	801	0	0	0	801
U. Hawaii, Hilo	178	445	498	731	796	267	329	200	0
Carnegie Mellon U.	179	515	842	835	791	6	0	0	785
Montana Technological U.	180	851	687	892	788	0	788	0	0
California State U., Monterey Bay	181	687	538	637	785	4	47	628	106
Skidmore C.	182	87	94	475	743	0	725	0	18
Saint Louis U.	183	775	599	571	733	0	733	0	0
U. of the Virgin Islands	184	0	374	542	713	0	0	713	0
Idaho State U.	185	1,989	2,461	1,891	710	0	710	0	0

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U. Alabama, Birmingham	186	1,007	806	812	702	702	0	0	0
Georgia State U.	187	330	340	479	681	0	681	0	0
Missouri U. of Science and Technology	188	0	0	375	660	0	654	0	6
Utah State U.	189	1,586	1,038	1,514	642	642	0	0	0
Bowling Green State U.	190	186	343	269	640	0	210	430	0
U. Iowa	191	641	968	669	636	0	618	0	18
Savannah State U.	192	987	479	591	633	0	177	435	21
U. Texas, San Antonio	193	133	569	788	617	0	617	0	0
Florida Gulf Coast U.	194	36	58	408	615	0	3	612	0
U. Mississippi	195	475	441	696	614	0	174	440	0
Florida Institute of Technology	196	0	244	761	612	44	0	568	0
Baylor U.	197	460	535	583	607	0	487	120	0
U. Vermont	198	232	134	399	606	10	383	0	213
Case Western Reserve U.	199	715	835	765	567	0	567	0	0
Southern Illinois U., Edwardsville	200	417	488	568	562	0	452	0	110
Southern Illinois U., Carbondale	201	211	333	382	557	30	199	0	328
Oklahoma State U., Stillwater	202	1,019	669	940	554	0	554	0	0
U. Texas, Arlington	203	551	525	445	547	0	547	0	0
Towson U.	204	151	486	526	542	0	542	0	0
Temple U.	205	530	454	727	536	0	536	0	0
Miami U.	206	349	391	761	521	0	521	0	0
Indiana U.-Purdue U., Indianapolis	207	778	903	731	518	0	518	0	0
Virginia Commonwealth U.	208	733	771	823	516	0	0	0	516
U. Alabama, Tuscaloosa	209	714	384	519	499	0	499	0	0
Stockton U.	210	170	ne	107	493	0	313	180	0
SUNY, C. Plattsburgh	211	224	161	240	488	0	16	472	0
SUNY, C. of Environmental Science and Forestry	212	605	483	641	483	225	91	130	37
Indiana U. Pennsylvania	213	41	155	113	481	0	140	0	341
Occidental C.	214	68	41	321	480	0	108	372	0
Franklin and Marshall C.	215	71	35	144	442	0	255	187	0
Western Michigan U. and Homer Stryker M.D. School of Medicine	216	633	678	581	433	11	422	0	0

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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. North Texas, Denton	217	154	514	587	428	0	428	0	0
U. North Carolina, Charlotte	218	211	127	198	422	0	422	0	0
Kent State U.	219	202	345	550	412	104	308	0	0
SUNY, Binghamton U.	220	349	378	178	411	0	285	0	126
Clark U.	221	450	620	598	410	0	252	158	0
Villanova U.	222	73	164	502	405	0	405	0	0
U. Dayton	223	148	49	199	400	238	162	0	0
Florida Atlantic U.	224	177	277	335	387	175	0	0	212
U. Illinois, Chicago	225	207	355	426	381	0	381	0	0
Humboldt State U.	226	2,532	2,398	1,255	376	19	183	93	81
New School	227	34	1	325	373	0	0	0	373
Colgate U.	228	268	395	430	363	0	283	0	80
Bowdoin C.	229	654	258	531	356	0	29	327	0
Ohio U.	230	543	648	294	351	0	319	0	32
U. Cincinnati	231	622	516	529	339	0	339	0	0
Grand Valley State U.	232	349	524	617	328	0	7	0	321
West Texas A&M U.	233	0	96	75	326	326	0	0	0
Western Carolina U.	234	427	553	419	320	0	19	301	0
James Madison U.	235	224	563	510	317	0	317	0	0
Fort Hays State U.	236	ne	ne	ne	316	0	272	0	44
Wesleyan U.	237	205	205	397	314	0	314	0	0
CUNY, Queens C.	238	247	417	328	311	0	311	0	0
Macalester C.	239	350	287	141	310	0	258	0	52
U. Washington, Bothell	239	419	330	116	310	310	0	0	0
Northern Illinois U.	241	335	269	416	309	0	309	0	0
Rowan U.	242	0	70	139	308	0	308	0	0
Embry-Riddle Aeronautical U.	243	196	179	418	307	307	0	0	0
U. Louisiana, Monroe	243	63	124	31	307	307	0	0	0
Roger Williams U.	245	404	508	454	300	0	0	299	1
Western Kentucky U.	246	533	396	401	290	0	290	0	0
Hawaii Pacific U.	247	208	245	268	288	0	0	288	0

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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
Eastern Michigan U.	248	368	389	453	285	43	242	0	0
North Dakota State U.	249	87	96	198	277	0	277	0	0
Rockefeller U.	250	225	443	359	272	0	0	0	272
Appalachian State U.	251	587	834	571	266	162	71	33	0
Illinois State U.	252	209	159	33	263	0	263	0	0
Brigham Young U., Provo	253	386	366	213	260	0	260	0	0
Claflin U.	254	97	101	138	259	0	259	0	0
Creighton U.	254	0 i	0 i	192 i	259 i	259 i	0 i	0 i	0 i
Middlebury C.	256	138	488	241	256	0	256	0	0
U. Alaska, Southeast	257	182	487	420	254	0	20	234	0
Howard U.	258	3,366	1,101	618	248	0	0	248	0
SUNY, C. Brockport	259	39	107	0	239	0	239	0	0
Illinois Institute of Technology	260	145	240	377	236	98	138	0	0
North Carolina Central U.	261	375	350	250	233	0	233	0	0
U. Missouri, Kansas City	262	449	285	238	223	43	180	0	0
Tarleton State U.	263	821	838	272	221	0	221	0	0
American U.	264	75	58	198	215	0	0	0	215
George Washington U.	265	370	641	596	213	0	210	0	3
William Paterson U.	266	68	77	54	211	0	211	0	0
CUNY, New York City C. of Technology	267	ne	ne	367	209	0	136	0	73
Georgia Southern U.	268	144	168	93	207	46	101	60	0
Bethune-Cookman U.	269	ne	ne	158	204	0	0	150	54
Middle Tennessee State U.	269	171	128	134	204	0	0	0	204
California State Polytechnic U., Pomona	271	144	380	231	202	0	202	0	0
Lewis and Clark C.	272	214	225	178	201	112	89	0	0
Texas A&M U.-Kingsville	272	733	94	245	201	0	0	0	201
Chapman U.	274	341	209	225	193	0	0	0	193
California State U., Fullerton	275	72	156	391	189	0	189	0	0
Texas Christian U.	276	39	104	167	178	0	124	0	54
Claremont McKenna C.	277	51	88	93	173	0	89	84	0
U. Akron	278	252	127	147	171	0	171	0	0

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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. San Francisco	279	37	180	276	170	70	100	0	0
U. Texas, Dallas	280	240	104	145	167	0	167	0	0
Providence C.	281	4	8	103	166	0	0	166	0
Central State U.	282	110	45	122	163	4	159	0	0
Gettysburg C.	283	ne	65	121	162	0	0	162	0
Wright State U.	284	322	297	231	161	0	161	0	0
CUNY, Hunter C.	285	246	242	265	160	0	160	0	0
Haverford C.	285	0	0	106	160	0	30	130	0
Heidelberg U.	287	0	408	162	159	0	0	159	0
U. Minnesota, Morris	287	213	147	ne	159	0	159	0	0
Benedict C.	289	359	439	532	157	0	0	157	0
Virginia State U.	289	97	28	50	157	157	0	0	0
Delaware State U.	291	597	626	412	155	155	0	0	0
U. Denver	292	37	46	101	154	0	154	0	0
Wayne State U.	292	335	217	203	154	0	154	0	0
Wellesley C.	292	0	0	2	154	2	152	0	0
U. San Diego	295	1,123	1,037	519	150	0	0	149	1
CUNY, system office	296	0	54	100	148	0	0	0	148
California State U., Bakersfield	297	1,223	215	208	147	0	147	0	0
Salisbury U.	298	23	86	78	145	0	46	0	99
Oberlin C.	299	207	488	212	144	0	144	0	0
SUNY, Geneseo	300	252	273	153	140	0	140	0	0
Indiana State U.	301	103	60	21	137	0	137	0	0
Northeastern Illinois U.	302	ne	200	150	131	0	131	0	0
U. North Carolina, Asheville	303	540	419	352	126	106	20	0	0
Union C., Schenectady	304	818	285	550	125	0	125	0	0
CUNY, Brooklyn C.	305	588	415	118	123	0	123	0	0
Colby C.	306	20	51	91	122	0	122	0	0
Tufts U.	307	77	135	592	120	0	67	29	24
Texas Southern U.	308	0	176	0	119	0	0	0	119
North Carolina Agricultural and Technical State U.	309	289	214	124	118	0	0	0	118

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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. Military Academy	310	114	215	245	111	0	111	0	0
California State U., Chico	311	416	76	83	110	0	110	0	0
California State U., San Bernardino	311	38	58	38	110	0	110	0	0
U. Louisville	313	125	133	187	106	38	68	0	0
Williams C.	314	130	162	146	104	0	104	0	0
Marshall U.	315	0	0	0	100	0	0	0	100
Pomona C.	315	527	366	96	100	0	100	0	0
Monmouth U.	317	173	ne	ne	91	0	0	91	0
Johnson C. Smith U.	318	0	0	0	90	0	90	0	0
Wheaton C., Wheaton	318	ne	0	0	90	0	90	0	0
Alaska Pacific U.	320	322	198	117	88	1	46	41	0
Central Michigan U.	321	90	95	79	86	26	17	43	0
CUNY, York C.	322	ne	ne	ne	85	0	85	0	0
U. of the District of Columbia	323	72	106	51	84	0	84	0	0
Bates C.	324	88	108	73	83	0	83	0	0
Hobart and William Smith Colleges	324	ne	179	ne	83	83	0	0	0
Des Moines U.	326	129	110	140	77	0	77	0	0
U. Wisconsin-Oshkosh	327	ne	74 i	77 i	76 i	0 i	76 i	0 i	0 i
California State U., Long Beach	328	282	123	134	73	0	73	0	0
U. Northern Colorado	329	31	9	5	72	1	71	0	0
U. Colorado Colorado Springs	330	156	109	46	68	0	1	67	0
Northern Michigan U.	331	135	31	62	65	0	65	0	0
U. Wisconsin-Stevens Point	331	61 i	63 i	65 i	65 i	0 i	65 i	0 i	0 i
Colorado C.	333	35	131	38	58	0	58	0	0
New York U.	334	15	388	164	55	0	55	0	0
Andrews U.	335	ne	ne	ne	54	0	54	0	0
Central Connecticut State U.	336	31	80	ne	52	0	52	0	0
New Jersey City U.	337	ne	3	30	50	0	50	0	0
U. Wisconsin-Green Bay	338	61 i	44 i	33 i	49 i	0 i	49 i	0 i	0 i
U. North Georgia	339	ne	65	20	48	0	48	0	0
Tennessee Technological U.	340	0	0	20	43	0	43	0	0

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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
SUNY, Oswego	341	ne	31	39	42	5	37	0	0
Oregon Institute of Technology	342	0	0 i	0	41 i	0 i	41 i	0 i	0 i
Keene State C.	343	ne	101	ne	39	0	14	25	0
U. Tulsa	343	211	198	121	39	0	0	0	39
Smith C.	345	10	12	26	38	0	38	0	0
Seattle U.	346	0	0	4	37	0	0	37	0
Texas A&M International U.	346	26	89	165	37	0	37	0	0
U. West Florida	348	0	0	0	34	0	34	0	0
Gallaudet U.	349	2	5	17	33	0	28	5	0
Missouri State U.	349	23	99	133	33	0	33	0	0
Eastern Washington U.	351	35	42	30	30	0	30	0	0
U. Puerto Rico, Medical Sciences Campus	352	0	0	0	29	0	29	0	0
Trinity U.	353	122	65	27	28	0	28	0	0
U. Wisconsin-Platteville	353	ne	0 i	ne	28 i	3 i	20 i	0 i	5 i
Long Island U.	355	0	0	0	26	0	26	0	0
Loyola Marymount U.	356	0	8	0	25	0	25	0	0
Stephen F. Austin State U.	356	0	11	18	25	0	25	0	0
U. Richmond	356	97	49	28	25	0	25	0	0
U. Wisconsin-Superior	356	ne	ne	32	25	0	25	0	0
Bucknell U.	360	50 i	48 i	46	22	0	22	0	0
DePaul U.	360	12	0	5	22	0	22	0	0
Mercyhurst U.	362	55	147 i	ne	21 i	0 i	21 i	0 i	0 i
Murray State U.	363	30	21	30	17	0	17	0	0
U. South Dakota	363	65	225	14	17	0	17	0	0
Furman U.	365	137	132	99	16	16	0	0	0
U. of Mary Washington	365	ne	ne	18	16	0	16	0	0
Manhattan C.	367	ne	ne	ne	14	14	0	0	0
Loyola U., Chicago	368	0	13	16	13	0	13	0	0
C. Wooster	369	ne	75	31	12	0	12	0	0
Duquesne U.	369	0	0	0	12	0	12	0	0
Hofstra U.	371	37	15	8	11	2	0	0	9

TABLE 40

Federally financed higher education R&D expenditures in the geosciences, atmospheric sciences, and ocean sciences, ranked by all FY 2019 geosciences, atmospheric sciences, and ocean sciences: FYs 2016–19 and by subfield for FY 2019

(Dollars in thousands)

Institution	Rank	2016	2017	2018	2019				
					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
Rider U.	371	0	46	7	11	0	0	0	11
California State U., Fresno	373	101	83	48	10	0	10	0	0
Fort Lewis C.	373	ne	ne	ne	10	0	0	0	10
Southern Connecticut State U.	375	0	151	0	9	0	0	9	0
Wichita State U.	375	6	28	15	9	0	9	0	0
Morehead State U.	377	12	13	17	7	0	7	0	0
Santa Clara U.	377	0	0	0	7	7	0	0	0
Pennsylvania State U., Harrisburg	379	0	0	0	5	0	5	0	0
U. Wisconsin-Eau Claire	379	88	62	1	5	0	5	0	0
Winthrop U.	379	0	3	5	5	0	5	0	0
U. Wisconsin-La Crosse	382	6	0	0	4	0	4	0	0
CUNY, Advanced Science Research Center	383	ne	406	997	3	0	0	0	3
Hamilton C.	383	74	33	0	3	0	0	0	3
Western Illinois U.	383	ne	96	93	3	0	3	0	0
Whitman C.	383	ne	ne	ne	3	0	3	0	0
All other surveyed institutions	-	58,251	47,699	45,090	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.

^a 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.

^b Johns Hopkins University includes the Applied Physics Laboratory, with \$21,887 thousand in federally financed R&D expenditures in geosciences, atmospheric sciences, and ocean sciences in FY 2019.

Note(s):

Institutions reporting zero expenditures in ranked total for FY 2019 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.