# **InfoBrief**

# Federal Science and Engineering Support to Higher Education Increased 10% in FY 2021

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In FY 2021, federal agency obligations to higher education institutions for science and engineering (S&E) activities increased 10.5% from FY 2020, from \$39.1 billion to \$43.2 billion (table 1). S&E support is comprised of five main categories: research and experimental development (R&D); R&D plant; facilities and equipment for instruction in S&E; fellowships, traineeships, and training grants (FTTGs); and other general support for S&E. In FY 2021, R&D was the largest component of S&E support totaling \$39.5 billion, an increase of 8.0% from the FY 2020 total of \$36.6 billion. Federal obligations for FTTGs totaled \$1.8 billion in FY 2021, increasing 7.9% from the FY 2020 total of \$1.6 billion.

Table 1

Federal obligations for science and engineering to universities and colleges, by type of activity: FYs 2020–21

(Dollars in millions)

Type of support	FY 2020	FY 2021	Year-to-year % change	FY 2021 % of total
All S&E support	39,122	43,223	10.5	100.0
R&D	36,569	39,504	8.0	91.4
R&D plant	400	419	4.6	1.0
Facilities and equipment for S&E instruction	20	11	-42.7	0.0
FTTGs	1,622	1,751	7.9	4.1
Other general S&E support <sup>a</sup>	511	1,538	201.0	3.6

 $S\&E = science \ and \ engineering; FTTGs = fellowships, traineeships, and \ training \ grants.$ 

#### Note(s):

Detail may not add to total because of rounding.

#### Source(s)

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2020; National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22, Federal Science and Engineering Support Module.

<sup>&</sup>lt;sup>a</sup> Category was General support for S&E through 2020; as of 2021, the category was changed to Other general support for S&E and includes the obligations previously reported under Other S&E activities.

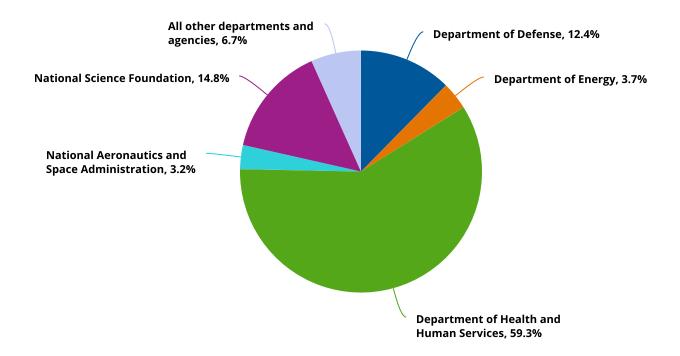
These and other estimates in this InfoBrief are from the FY 2021 Federal Science and Engineering Support module within the Survey of Federal Funds for Research and Development (Federal Funds Survey) (see "Data Sources, Limitations, and Availability" for more details), conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF).

# **Federal Agency Obligations for S&E Support**

In FY 2021, three federal agencies accounted for 86.4% of all federal S&E support to higher education institutions. Across all federal agencies, the Department of Health and Human Services (HHS) was the largest funder of S&E support to higher education institutions (59.3% of the total, or \$25.6 billion), followed by NSF (14.8%, or \$6.4 billion), and the Department of Defense (DOD) (\$12.4%, or \$5.4 billion). The Department of Energy (DOE) and the National Aeronautics and Space Administration (NASA) accounted for 3.7% and 3.2%, respectively, of all federal S&E support to higher education institutions in FY 2021 (figure 1).

Figure 1

Federal obligations for science and engineering support to universities and colleges, by agency: FY 2021



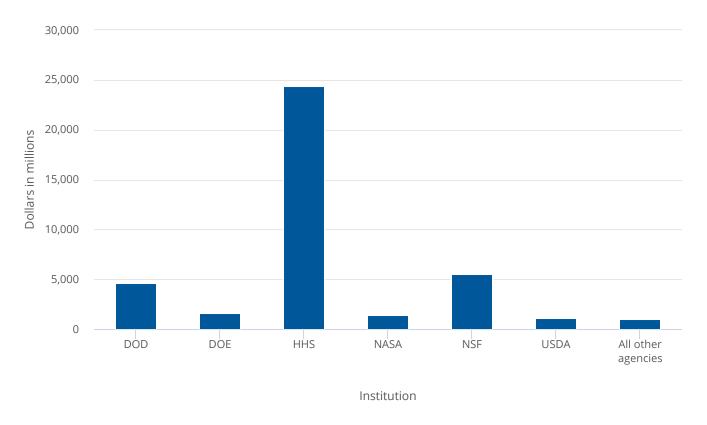
## Note(s):

Detail may not add to total because of rounding. The Department of Defense (DOD) states that more than 90% of its development obligations reported for universities and colleges are performed at university-administered laboratories that are separate from academic departments. Furthermore, DOD states that much of its development obligations are for major systems development, that such obligations differ from its obligations for advanced technology development, and that DOD total development obligations are therefore not comparable with development obligations at other federal agencies. Refer to the full set of data tables: table 14 for DOD obligations to individual institutions, by R&D breakdown (https://ncses.nsf.gov/surveys/federal-support-survey/2021#data).

## Source(s):

Federal obligations for R&D to higher education institutions totaled \$39.5 billion, but they are highly concentrated within a few agencies. For example, HHS accounted for \$24.4 billion, followed by NSF and DOD with \$5.5 billion and \$4.6 billion, respectively (figure 2). In FY 2021, DOE obligated \$1.6 billion for R&D to higher education, while NASA obligated \$1.4 billion. When it comes to other forms of S&E support, NSF accounted for 77.6% of all federal obligations for R&D plant to higher education (\$325 million of \$419 million), whereas DOD accounted for 47.0% of obligations for facilities and equipment for instruction in S&E (\$5.3 million of \$11.3 million). Federal obligations for FTTGs are also highly concentrated between two agencies, which combined account for 89.7% of all federal obligations within this category (\$1.6 billion of \$1.8 billion), namely, HHS at 61.3% (\$1.1 billion) and NSF at 28.4% (\$0.5 billion).

Figure 2
Federal obligations for science and engineering research and experimental development to universities and colleges, by agency: FY 2021



DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; USDA = Department of Agriculture.

#### Note(s):

DOD states that more than 90% of its development obligations reported for universities and colleges are performed at university-administered laboratories that are separate from academic departments. Furthermore, DOD states that much of its development obligations are for major systems development, that such obligations differ from its obligations for advanced technology development, and that DOD total development obligations are therefore not comparable with development obligations at other federal agencies. Refer to the full set of data tables: table 14 for DOD obligations to individual institutions, by R&D breakdown (https://ncses.nsf.gov/surveys/federal-support-survey/2021#data).

#### Source(s):

# Federal S&E Obligations to All Institutions of Higher Education

Just as federal funding for S&E support to higher education institutions was highly concentrated within a few agencies in FY 2021, so too was funding to recipient institutions. For example, in FY 2021, federal agencies obligated funding to nearly 1,100 institutions of higher education in the United States; however, the top 25 recipient institutions of federal obligations for S&E support accounted for 41.7%, or \$18.0 billion, of all federal funding to all institutions of higher education (table 2). Of the \$18.0 billion obligated to these 25 institutions to support S&E activities, 94.0% was for R&D, 3.0% was for FTTGs, and 2.5% was for other general support for S&E. The top 100 institutions combined received 81.0%, or \$34.8 billion, of all federal funding to higher education institutions for S&E support.<sup>4</sup>

Table 2
Federal obligations for science and engineering to universities and colleges, ranked by total amount received, by type of activity: FY 2021

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Institution	All federal obligations	R&D	R&D plant	Facilities and equipment for instruction in S&E	Fellowships, traineeships, and training grants	Other general support for S&E
All institutions	43,222,829	39,504,025	418,694	11,320	1,750,588	1,538,202
Johns Hopkins U.	1,870,070	1,817,726	0	0	30,911	21,433
New York U.	908,353	893,817	0	0	10,296	4,241
U. California, San						
Diego	858,385	792,907	33,796	0	20,847	10,835
Duke U.	837,060	810,504	4,700	0	16,916	4,940
U. Washington	834,089	787,213	1,925	0	28,760	16,191
U. Michigan	823,101	774,551	500	490	28,795	18,766
Columbia U. in the City of New York	822,294	761,354	15,201	0	28,464	17,275
U. California, San			_			
Francisco	782,571	714,877	0	0	39,930	27,763
U. Pittsburgh	746,051	679,319	4,518	0	28,703	33,511
U. Pennsylvania	734,635	681,663	1,859	0	34,444	16,669
U. California, Los Angeles	730,449	686,615	293	0	23,655	19,887
Stanford U.	727,830	696,510	0	0	15,393	15,928
U. Colorado Boulder	696,843	657,760	1,146	709	25,397	11,831
Washington U., Saint Louis	683,973	639,462	1,182	0	18,522	24,808
Yale U.	643,194	596,130	0	0	21,060	26,004
Cornell U., Ithaca	580,630	497,611	26,027	0	18,281	38,711
U. North Carolina, The, Chapel Hill	578,876	541,555	344	0	23,206	13,771
Northwestern U., Evanston	554,882	508,976	741	141	21,043	23,980
Pennsylvania State U.	549,070	508,209	1,232	0	16,820	22,808
Vanderbilt U.	542,355	507,806	1,000	0	21,650	11,898
U. Minnesota	525,480	473,552	1,459	0	18,379	32,090
Harvard U.	513,429	484,719	213	406	22,005	6,085
Emory U.	507,223	486,646	0	0	17,603	2,974
U. Southern California	502,370	484,727	305	0	7,216	10,122
Massachusetts Institute of Technology	464,264	443,392	984	0	5,337	14,551
All other higher education institutions	25,205,352	22,576,424	321,269	9,574	1,206,955	1,091,130

S&E = science and engineering.

#### Note(s)

Detail may not add to total because of rounding. Institution order is based on total actual dollars received before amounts are rounded.

## Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22, Federal Science and Engineering Support Module.

In FY 2021, Johns Hopkins University was the single largest recipient of federal obligations for S&E (\$1.9 billion). Of this amount, \$822 million was obligated by HHS and \$717 million was obligated by DOD. Total federal obligations to Johns Hopkins includes obligations to the Johns Hopkins University School of Medicine and the Johns Hopkins Applied Physics Laboratory (APL). The Johns Hopkins APL is one of 14 University Affiliated Research Centers. New York University, which includes the NYU Grossman School of Medicine, was the second-largest recipient of federal funding for S&E support (\$908 million). Of this amount, \$872 million was obligated from HHS. 6

# **S&E Obligations to Selected Types of Minority-Serving Institutions**

In FY 2021, North Carolina A&T State University maintained its position as the primary recipient of federal obligations for S&E activities (\$42 million) among all historically Black colleges and universities (HBCUs), a position it has held since FY 2016. Between FY 2011 and FY 2015, Morehouse School of Medicine was the largest HBCU recipient of federal S&E obligations (table 3).

Table 3

Federal obligations for science and engineering to the top 20 historically Black colleges and universities, ranked by total amount received, by type of activity: FY 2021

(Dollars in thousands)

Institution	All federal obligations	R&D	R&D plant	Facilities and equipment for instruction in S&E	Fellowships, traineeships, and training grants	Other general support for S&E
All HBCUs	552,157	356,419	8,762	0	101,944	85,033
North Carolina A&T State U.	42,438	25,785	5,553	0	4,720	6,380
Howard U.	34,287	29,811	379	0	3,081	1,017
Delaware State U.	29,335	22,594	0	0	3,068	3,673
Morgan State U.	25,163	20,659	400	0	3,873	231
Prairie View A&M U.	24,240	13,611	0	0	3,457	7,172
Florida A&M U.	23,652	16,593	0	0	2,880	4,180
Tuskegee U.	21,979	11,528	346	0	8,267	1,838
Alabama A&M U.	21,957	11,430	0	0	3,606	6,921
Tennessee State U.	21,868	12,893	0	0	3,604	5,371
Morehouse School of Medicine	20,179	20,010	0	0	23	146
Meharry Medical C.	19,916	11,094	671	0	8,150	(
Central State U.	18,216	8,424	0	0	2,880	6,913
Lincoln U.	15,309	7,399	0	0	2,102	5,809
Xavier U. Louisiana	15,185	11,447	0	0	3,739	(
North Carolina Central U.	14,686	14,002	0	0	379	304
Virginia State U.	14,446	8,062	0	0	2,018	4,366
U. Virgin Islands	14,092	10,541	0	0	1,431	2,119
Kentucky State U.	13,879	6,579	0	0	1,934	5,366
U. Maryland, Eastern Shore	13,290	7,623	0	0	2,604	3,064
Hampton U.	12,353	9,767	350	0	2,236	(
All other HBCUs	135,687	76,569	1,064	0	37,890	20,162

HBCUs = historically Black colleges and universities; S&E = science and engineering.

#### Note(s)

Detail may not add to total because of rounding. Institution order is based on total actual dollars received before amounts are rounded.

## Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22, Federal Science and Engineering Support Module.

The University of Illinois, Chicago was the leading recipient of federal S&E support among high-Hispanic-enrollment institutions (HHEs) in FY 2021 with \$299 million (table 4).<sup>8,9</sup>

Table 4

Federal obligations for science and engineering to the top 20 high-Hispanic-enrollment institutions receiving the largest amounts, ranked by total amount received, by type of activity: FY 2021

(Dollars in thousands)

Institution	All federal obligations	R&D	R&D plant	Facilities and equipment for instruction in S&E	Fellowships, traineeships, and training grants	Other general support for S&E
All HHE institutions	3,504,068	3,117,724	54,758	374	211,067	120,145
U. Illinois, Chicago	299,000	263,576	6,749	0	19,830	8,845
U. Texas, The, Austin	270,453	246,053	11,759	0	11,119	1,522
U. Arizona	261,376	236,890	3,593	246	11,566	9,081
U. California, Irvine	258,585	242,999	3,179	0	8,219	4,188
U. Texas M. D. Anderson Cancer Center, The	210,727	187,597	0	0	2,705	20,425
U. California, Santa Barbara	185,654	174,367	4,462	0	4,636	2,189
Arizona State U.	184,688	169,660	7,144	0	5,108	2,776
U. Texas Health Science Center, The, Houston	161,199	145,840	0	0	3,150	12,209
U. Texas Health Science Center, The, San Antonio	138,088	109,918	0	0	5,942	22,228
U. New Mexico	133,471	122,415	0	0	10,471	584
U. Central Florida	121,234	115,220	1,215	0	4,635	165
U. California, Riverside	108,245	101,555	0	0	2,862	3,828
U. Texas Medical Branch at Galveston, The	102,749	98,980	0	0	2,701	1,068
Texas A&M U., College Station	90,553	88,199	153	0	2,040	160
U. California, Santa Cruz	75,189	71,365	0	0	1,296	2,529
Florida International U.	67,851	60,456	216	0	6,346	833
Northern Arizona U.	57,505	55,442	0	0	1,799	264
U. Houston	46,448	45,939	0	0	509	0
U. Texas, The, El Paso	43,907	31,791	5,478	0	5,149	1,490
New Mexico State U., Las						
Cruces	40,712	30,639	476	0	5,205	4,392
All other HHE institutions	646,435	518,825	10,335	128	95,778	21,369

## Note(s):

Detail may not add to total because of rounding. Institution order is based on total actual dollars received before amounts are rounded; institutions receiving the same amount of actual dollars are listed alphabetically. Only those agencies that had obligations in the variables represented by this table appear in the table. This list of HHE institutions includes those institutions of higher education whose full-time equivalent (FTE) enrollment of undergraduate students is at least 25% Hispanic, according to fall 2021 enrollment data self-reported by the institutions in the Integrated Postsecondary Education Data System survey conducted by the National Center for Education Statistics (NCES). NCES determined FTE enrollment by calculating that approximately three part-time students are equivalent to one full-time student.

## Source(s):

Among tribal colleges and universities, Diné College was the leading recipient of federal S&E support in FY 2021 with \$5 million in federal obligations (table 5).<sup>10</sup>

Table 5
Federal obligations for science and engineering to tribal colleges and universities, ranked by total amount received, by activity: FY 2021

(Dollars in thousands)

Institution	All federal obligations	R&D	R&D plant	Facilities and equipment for instruction in S&E	Fellowships, traineeships, and training grants	Other general support for S&E
All tribal institutions	34,174	15,863	0	0	12,342	5,969
Diné C.	4,809	2,606	0	0	1,237	966
Sitting Bull C.	3,500	1,750	0	0	1,750	(
Navajo Technical U.	3,343	2,244	0	0	923	176
Northwest Indian C.	2,893	1,990	0	0	672	231
Salish Kootenai C.	2,811	1,419	0	0	1,102	290
Aaniiih Nakoda C.	2,333	1,218	0	0	1,116	(
United Tribes Technical						
C.	1,524	955	0	0	228	340
Keweenaw Bay Ojibwa Community C.	1,216	546	0	0	333	337
Fond du Lac Tribal and Community C.	1,169	659	0	0	244	266
Lac Courte Oreilles Oiibwe C.	1,161	273	0	0	663	225
C. Menominee Nation	1,089	366	0	0	498	224
Fort Peck Community C.	1,082	713	0	0	129	240
Blackfeet Community C.	902	48	0	0	201	653
Stone Child C.	824	68	0	0	332	423
Nueta Hidatsa Sahnish C.	684	117	0	0	300	267
Turtle Mountain Community C.	555	219	0	0	337	(
Little Priest Tribal C.	500	0	0	0	500	
Tohono O'odham Community C.	500	250	0	0	250	(
Leech Lake Tribal C.	472	142	0	0	90	240
Nebraska Indian Community C.	463	71	0	0	152	240
Chief Dull Knife C.	400	0	0	0	400	(
Little Big Horn C.	369	45	0	0	45	279
Oglala Lakota C.	369	19	0	0	109	240
Southwestern Indian Polytechnic Institute	369	43	0	0	151	174
Sinte Gleska U.	369	60	0	0	152	15
Sisseton Wahpeton C.	200	0	0	0	200	(
Bay Mills Community C.	133	0	0	0	133	(
C. Muscogee Nation	129	32	0	0	96	(
Institute of American Indian and Alaska Native Culture and Arts Development	10	10	0	0	0	(

#### Note(s)

Detail may not add to total because of rounding. Institution order is based on total actual dollars received before amounts are rounded; institutions receiving the same amount of actual dollars are listed alphabetically. Only those agencies that had obligations in the variables represented by this table appear in the table. This list of HHE institutions includes those institutions of higher education whose full-time equivalent (FTE) enrollment of undergraduate students is at least 25% Hispanic, according to fall 2021 enrollment data self-reported by the institutions in the Integrated Postsecondary Education Data System survey conducted by the National Center for Education Statistics (NCES). NCES determined FTE enrollment by calculating that approximately three part-time students are equivalent to one full-time student.

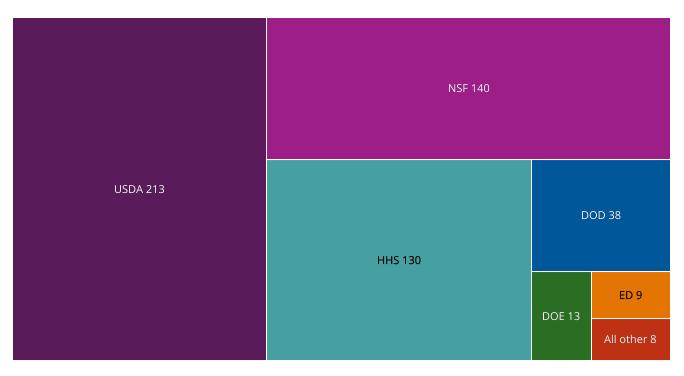
#### Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021–22, Federal Science and Engineering Support Module.

## **Historically Black Colleges and Universities**

Sixty-nine of the nation's 101 HBCUs<sup>11</sup> received federal obligations for S&E activities in FY 2021, totaling \$552 million. <sup>12</sup> In FY 2021, the Department of Agriculture (USDA) was the largest funder of S&E support to HBCUs with \$213 million. NSF and HHS each had total S&E support obligations of \$140 million and \$130 million, respectively (figure 3).

Figure 3
Federal obligations for science and engineering to historically Black colleges and universities, by agency: FY 2021



Dollars in millions

DOD = Department of Defense; DOE = Department of Energy; ED = Department of Education; HHS = Department of Health and Human Services; NSF = National Science Foundation; USDA = Department of Agriculture.

#### Note(s)

Detail may not add to total because of rounding. Institution order is based on total actual dollars received before amounts are rounded. Only those agencies that had obligations in the variables represented by this table appear in the table.

## Source(s):

The 20 HBCUs receiving the largest amounts of federal S&E support accounted for 75.4% (\$416 million) of all S&E support obligations to HBCUs (table 3). These top 20 HBCUs also received 78.5% (\$280 million) of all federal obligations for R&D to HBCUs, 62.8% (\$64 million) of obligations for FTTGs, 87.9% (\$8 million) of obligations for R&D plant, and 76.3% (\$65 million) of other general support for S&E. In total, the share of federal support for FTTGs was much larger in HBCUs (18.4%) than in all universities and colleges (4.1%). Similarly, federal support for R&D plant at HBCUs was 1.6% (\$9 million) of total S&E support, compared with 1.0% (\$419 million) at all higher education institutions. The relative emphasis on supporting research capacity reflects a longstanding approach by federal agencies to support research capacity in minority-serving institutions.

## **High-Hispanic-Enrollment Institutions**

HHEs received \$3.5 billion in federal obligations for S&E support in FY 2021 (table 4). Federal support to HHEs for R&D amounted to \$3.1 billion, or 89.0% of total federal S&E support to HHEs. By comparison, R&D accounted for 64.6% of federal S&E support to HBCUs and for 91.4% of federal S&E support to all higher education institutions. FTTG support to HHEs accounted for 6.0%, or \$211 million, of their S&E total. However, the share of federal support for FTTGs that went to "all other HHEs" was 14.8%, compared with the share of federal support for FTTGs that went to "all other higher education institutions" (4.8%).

Forty-nine percent of the FY 2021 federal S&E support to HHEs came from HHS, with \$1.7 billion in obligations. NSF was the second-leading federal agency to obligate funding to support S&E at HHEs, with \$843 million (24.0%). 13

## **Tribal Colleges and Universities**

Federal agency obligations to tribal colleges and universities <sup>14</sup> totaled \$34 million in FY 2021, or 0.1% of all federal S&E support to higher education institutions (table 5). Of the \$34 million in federal obligations for S&E to tribal colleges and universities in FY 2021, R&D amounted to \$16 million, or 46.4% of all S&E support, whereas FTTGs totaled \$12 million, or 36.1% of total S&E support. Similar to HBCUs, the distribution of types of S&E support illustrates how relatively larger shares of federal S&E obligations to tribal colleges and universities are for building research and training capacity within these institutions through FTTGs and other activities, compared with the shares of these obligations to all other institutions.

NSF continues to be the leading agency to support S&E activities within tribal colleges and universities with obligations of \$18 million, or 51.6% of all federal S&E support to these institutions. USDA followed with \$14 million, or 42.0%. 15

# **Data Sources, Limitations, and Availability**

Effective with the FY 2021 survey cycle, the Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions (Federal S&E Support Survey) was collected as a module within the Federal Funds Survey as part of a redesign of both surveys. For FY 2021, data were obtained from 33 federal agencies (14 federal departments and 19 independent agencies) that had obligations for R&D during FY 2021 or FY 2022. Because multiple subdivisions of some federal departments completed the survey, there were 74 agency-level responses: 6 federal departments, 49 agencies (within another 8 federal departments), and 19 independent agencies. However, lower offices could also be authorized to enter data: in the Federal Funds Survey nomenclature, agency-level offices could authorize program offices, program offices could authorize field offices, and field offices could authorize branch offices. When these suboffices are included, there were 730 total respondents: 74 agencies, 98 program offices, 173 field offices, and 385 branch offices. The module collects federal S&E support data by funding agency, individually named institution, type of activity, type of institution, and geographic location.

The six funding categories of federal S&E support are defined as follows:

• Research and experimental development (R&D) includes all direct, indirect, incidental, or related costs resulting from or necessary to perform R&D by private individuals and organizations under grant, contract, or cooperative agreement.

- R&D plant includes all projects whose principal purpose is to provide support for construction, acquisition, renovation, modification, repair, or rental of facilities, land, works, or fixed equipment for use in scientific or engineering R&D.
- Facilities and equipment for S&E instruction includes all programs whose principal purpose is to provide support for construction, acquisition, renovation, modification, repair, or rental of facilities, land, works, or equipment for use in instruction in S&E.
- Fellowships, traineeships, and training grants (FTTGs) includes all fellowship, traineeship, and training grant programs
  that are directed primarily toward the development and maintenance of the scientific workforce.
- General support for S&E includes funds used for scientific projects and support for activities within a specified discipline; explicit purpose is not specified.
- Other S&E activities includes all academic S&E obligations that cannot be assigned elsewhere and activities in support
  of technical conferences, teacher institutes, and programs aimed at increasing precollege and undergraduate
  students' scientific knowledge.

The Federal Science and Engineering Support module within the Federal Funds Survey is a census of federal agencies that fund R&D and S&E support. As such, there is no sampling error; however, survey data are still subject to some degree of unmeasurable nonsampling error which may include errors in classification or measurement of certain aspects of an agency's S&E support. For additional information see the Survey Quality Measures within the technical notes of the survey. The full set of data tables on the FY 2021 Federal S&E Support Survey are available at <a href="https://ncses.nsf.gov/surveys/federal-support-survey/2021#data">https://ncses.nsf.gov/surveys/federal-support-survey/2021#data</a>. Data for the survey are available in NCSES's interactive data tool. For more information, please contact the survey manager.

## **Notes**

- 1 Obligations represent the amount for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated or when future payment of money is required.
- 2 Higher education institutions are institutions that engage primarily in providing resident or accredited instruction for a not less than a 2-year program above the secondary school level that is acceptable for full credit toward a bachelor's degree or that provide not less than 1-year program of training above the secondary school level that prepares students for gainful employment in a recognized occupation. Included are colleges of liberal arts; schools of arts and sciences; professional schools, as in engineering and medicine, including hospitals, clinics, and research centers that are financially constituents of universities; and agricultural experiment stations.
- 3 See the full set of data tables: table 8.
- 4 Details available in the full set of data tables: table 17.
- 5 University Affiliated Research Centers (UARCs) were officially established in 1996 by the Under Secretary of Defense for Research and Engineering (USDR&E) and served to formalize strategic relationships with research centers affiliated with universities that in some cases data back to World War II. DOD-supported UARCs are all nonprofit research organizations affiliated with a university and have a set of core competencies that are tailored to the long-term needs of the DOD. DOD's long-term strategic relationship with UARCs requires them to provide and maintain advanced and sophisticated engineering, research, or development capabilities essential to the DOD's mission and operations. UARCs operate as independent, trusted advisors and honest brokers, agreeing to limit their operations in order to be free from real or perceived conflicts of interest. Each UARC is sponsored by a primary sponsor who is responsible for implementing UARC policies and procedures, monitoring performance, approving all work executed by the UARC, and conducting a comprehensive review every 5 years. Although any university can receive funds from DOD to perform work, that does not make them a UARC. Rather, all DOD UARCs are approved by USDR&E after a rigorous review and competitive selection process conducted by the proposed primary sponsor. Only USDR&E can establish, transfer, or terminate a UARC.
- 6 Details available in the full set of data tables: table 18.

- 7 Details available in the full set of data tables: table 21.
- 8 Details available in the full set of data tables: table 26.
- 9 HHEs are those institutions whose full-time equivalent (FTE) enrollment of undergraduate students is at least 25% Hispanic, according to fall 2020 enrollment data self-reported by the institutions in the Integrated Postsecondary Education Data System survey conducted by the National Center for Education Statistics (NCES). NCES determined FTE enrollment by calculating that approximately three part-time students are equivalent to one full-time student.
- 10 Details available in the full set of data tables: table 27.
- 11 The Higher Education Act of 1965, as amended, defines an HBCU as "any historically Black college or university that was established prior to 1964, whose principal mission was, and is, the education of Black Americans, and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary (of Education) to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation."
- 12 Details available in the full set of data tables: table 23.
- 13 Details available in the full set of data tables: table 26.
- 14 The list of tribal colleges and universities is from the White House Initiative on American Indian and Alaska Native Education (see <a href="https://sites.ed.gov/whiaiane/tribes-tcus/tribal-colleges-and-universities/">https://sites.ed.gov/whiaiane/tribes-tcus/tribal-colleges-and-universities/</a>). In accordance with Executive Order No. 13270, "Tribal Colleges and Universities," as extended by Executive Order No. 13316, the list includes all of the colleges cited in section 532 of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note), any other institution that qualifies for funding under the Tribally Controlled Community College Assistance Act of 1978 (25 U.S.C. 1801 et seq.), and Diné College, which is authorized in the Navajo Community College Assistance Act of 1978, Public Law 95-471, title II (25 U.S.C. 640a note). The statutory definition of American Indian tribally controlled colleges and universities, to which the Higher Education Act refers at §316(b)(3), 20 U.S.C. 1059c(b)(3), is in section 2(a)(4) of the Tribally Controlled College and University Assistance Act of 1978, 25 U.S.C. 1801(a)(4).
- 15 Details available in the full set of data tables: table 27.

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