

TABLE 8

**Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2018–21**

(Dollars in thousands)

FFRDC	Total				Federally financed			
	2018	2019	2020	2021	2018	2019	2020	2021
All FFRDCs	21,171,529	22,737,500	23,514,241	24,921,476	20,770,388	22,338,855	23,133,501	24,509,691
University-administered FFRDCs	6,715,338	6,946,262	7,003,132	6,850,276	6,560,094	6,796,696	6,867,741	6,700,555
Ames Laboratory	36,858	33,612	32,844	34,214	35,696	33,211	32,302	34,016
Argonne National Laboratory	777,246	810,693	859,658	856,568	747,349	787,513	840,237	832,400
Fermi National Accelerator Laboratory	328,419	334,258	300,002	319,051	327,630	333,460	299,811	317,812
Green Bank Observatory <sup>a</sup>	NA	NA	NA	8,629	NA	NA	NA	8,629
Jet Propulsion Laboratory	2,733,908	2,709,063	2,638,412	2,388,355	2,733,908	2,709,063	2,638,412	2,388,355
Lawrence Berkeley National Laboratory	832,457	872,237	916,082	966,972	769,839	807,967	862,965	910,428
Lincoln Laboratory	1,013,320	1,103,870	1,115,927	1,136,133	1,001,849	1,084,953	1,093,081	1,110,465
National Center for Atmospheric Research	158,260	199,476	188,484	181,010	139,532	187,615	175,316	161,163
National Radio Astronomy Observatory	100,691	101,901	100,078	94,202	98,642	99,881	98,458	93,313
National Solar Observatory	14,733	15,931	16,892	17,684	14,027	15,892	16,472	17,680
NSF's National Optical-Infrared Astronomy Research Laboratory (NSF's NOIRLab)	33,874	38,262	72,686	75,251	24,172	28,760	69,685	73,393
Princeton Plasma Physics Laboratory	82,435	91,271	107,662	115,505	82,057	91,119	103,856	113,591
SLAC National Accelerator Laboratory	341,615	368,938	382,264	396,780	326,587	352,527	366,936	382,252
Software Engineering Institute	142,891	140,954	141,291	120,443	142,877	140,940	141,291	120,443
Thomas Jefferson National Accelerator Facility	118,631	125,796	130,850	139,479	115,929	123,795	128,919	136,615
Nonprofit-administered FFRDCs	6,617,274	7,033,162	7,419,509	8,370,508	6,490,564	6,891,730	7,279,066	8,215,876
Aerospace Federally Funded Research and Development Center	1,020,827	1,065,989	1,114,741	1,128,241	1,018,425	1,062,804	1,109,291	1,121,569
Arroyo Center	39,738	37,956	35,248	38,304	39,738	37,956	35,248	38,304
Brookhaven National Laboratory	552,640	590,470	595,466	637,658	525,170	561,030	569,925	620,000
Center for Advanced Aviation System Development	177,530	174,123	180,634	230,484	156,437	152,539	163,497	207,828
Center for Communications and Computing	68,237	68,371	67,072	65,255	68,237	68,371	67,072	65,255
Center for Enterprise Modernization	162,690	174,712	190,408	263,661	161,448	173,127	190,408	263,661
Center for Naval Analyses	95,198	96,697	95,874	96,391	95,198	96,697	95,874	96,391
Center for Nuclear Waste Regulatory Analyses	5,054	6,987	6,762	5,630	4,647	6,340	6,359	5,233
CMS Alliance to Modernize Healthcare	175,030	213,369	228,162	348,269	175,030	213,369	228,162	348,269
Homeland Security Operational Analysis Center	46,321	54,751	44,736	34,888	46,321	54,751	44,736	34,888
Homeland Security Systems Engineering and Development Institute	104,689	115,813	136,874	183,588	104,689	115,813	135,713	182,413
Judiciary Engineering and Modernization Center	6,697	7,331	6,765	5,493	6,697	7,331	6,708	5,493
National Biodefense Analysis and Countermeasures Center	37,598	39,003	42,330	44,968	37,598	39,003	42,330	44,968

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(Dollars in thousands)

FFRDC	Total				Federally financed			
	2018	2019	2020	2021	2018	2019	2020	2021
National Cybersecurity Center of Excellence	19,556	22,205	23,557	33,671	19,556	22,205	23,557	33,671
National Defense Research Institute	57,743	67,647	64,134	66,170	57,743	67,647	64,134	66,170
National Renewable Energy Laboratory	388,500	455,016	511,585	559,151	349,410	405,923	456,336	497,047
National Security Engineering Center	1,078,610	1,124,861	1,143,701	1,468,298	1,077,697	1,123,616	1,142,013	1,463,965
Oak Ridge National Laboratory	1,399,445	1,470,372	1,632,684	1,760,578	1,378,398	1,454,122	1,616,580	1,746,756
Pacific Northwest National Laboratory	956,193	1,012,136	1,071,249	1,168,268	943,147	993,733	1,053,982	1,142,925
Project Air Force	48,858	48,325	46,936	47,966	48,858	48,325	46,936	47,966
Science and Technology Policy Institute	8,086	9,080	9,256	9,784	8,086	9,080	9,256	9,784
Systems and Analyses Center	168,034	177,948	171,335	173,792	168,034	177,948	170,949	173,320
Industry-administered FFRDCs	7,838,917	8,758,076	9,091,600	9,700,692	7,719,730	8,650,429	8,986,694	9,593,260
Frederick National Laboratory for Cancer Research	748,500	751,452	745,726	861,605	748,500	751,452	745,726	861,605
Idaho National Laboratory	395,112	478,324	494,094	516,691	376,053	463,588	481,146	503,977
Lawrence Livermore National Laboratory	1,386,687	1,517,429	1,558,071	1,613,673	1,353,502	1,480,978	1,526,467	1,580,263
Los Alamos National Laboratory	2,145,232	2,461,275	2,722,375	2,974,164	2,120,857	2,440,514	2,701,388	2,950,380
Sandia National Laboratories	3,009,105	3,373,217	3,395,241	3,542,756	2,967,822	3,340,658	3,358,481	3,507,607
Savannah River National Laboratory	154,281	176,379	176,093	191,803	152,996	173,239	173,486	189,428

NA = not available; data were not provided by institution.

FFRDC = federally funded research and development center; NSF = National Science Foundation.

<sup>a</sup> Prior to the FY 2021 collection, the National Center for Science and Engineering Statistics discovered that the Green Bank Observatory had split from the National Radio Astronomy Observatory on 1 October 2016, both retained FFRDC status. For FYs 2017–20, R&D expenditures reported for National Radio Astronomy Observatory, include the expenditures for the Green Bank Observatory. The Green Bank Observatory began reporting separately on the FY 2021 survey.

**Source(s):**

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