

TABLE 8

## Total and federally financed R&amp;D expenditures at federally funded research and development centers, by FFRDC: FYs 2016–19

(Dollars in thousands)

FFRDC	Total				Federally financed			
	2016	2017	2018	2019	2016	2017	2018	2019
All FFRDCs	19,219,702	20,038,307	21,171,529	22,737,500	18,855,593	19,667,804	20,770,388	22,338,855
University-administered FFRDCs	5,669,908	6,155,252	6,715,338	6,946,262	5,529,238	6,013,003	6,560,094	6,796,696
Ames Laboratory	46,886	53,527	36,858	33,612	46,190	52,830	35,696	33,211
Argonne National Laboratory	733,377	723,824	777,246	810,693	704,100	690,234	747,349	787,513
Fermi National Accelerator Laboratory	323,507	320,516	328,419	334,258	322,196	319,559	327,630	333,460
Jet Propulsion Laboratory	1,852,369	2,324,826	2,733,908	2,709,063	1,852,369	2,324,826	2,733,908	2,709,063
Lawrence Berkeley National Laboratory	797,831	813,267	832,457	872,237	741,250	755,899	769,839	807,967
Lincoln Laboratory	949,138	969,090	1,013,320	1,103,870	942,049	963,584	1,001,849	1,084,953
National Center for Atmospheric Research	177,422	171,551	158,260	199,476	155,584	151,138	139,532	187,615
National Radio Astronomy Observatory	90,411	91,720	100,691	101,901	87,649	89,791	98,642	99,881
National Solar Observatory	12,783	11,841	14,733	15,931	11,821	11,833	14,027	15,892
NSF's National Optical-Infrared Astronomy Research Laboratory (NSF's NOIRLab)	24,917	25,906	33,874	38,262	21,890	22,479	24,172	28,760
Princeton Plasma Physics Laboratory	82,246	81,444	82,435	91,271	81,187	81,123	82,057	91,119
SLAC National Accelerator Laboratory	313,031	327,453	341,615	368,938	300,207	311,686	326,587	352,527
Software Engineering Institute	145,981	132,967	142,891	140,954	145,725	132,870	142,877	140,940
Thomas Jefferson National Accelerator Facility	120,009	107,320	118,631	125,796	117,021	105,151	115,929	123,795
Nonprofit-administered FFRDCs	6,128,058	6,413,612	6,617,274	7,033,162	6,019,726	6,297,166	6,490,564	6,891,730
Aerospace Federally Funded Research and Development Center	909,868	942,704	1,020,827	1,065,989	905,468	939,793	1,018,425	1,062,804
Arroyo Center	44,616	42,723	39,738	37,956	44,616	42,723	39,738	37,956
Brookhaven National Laboratory	579,087	556,875	552,640	590,470	563,400	539,075	525,170	561,030
Center for Advanced Aviation System Development	156,644	168,169	177,530	174,123	137,578	148,610	156,437	152,539
Center for Communications and Computing	61,625	66,692	68,237	68,371	61,625	66,692	68,237	68,371
Center for Enterprise Modernization	146,436	154,933	162,690	174,712	146,432	154,829	161,448	173,127
Center for Naval Analyses	84,232	90,401	95,198	96,697	84,232	90,401	95,198	96,697
Center for Nuclear Waste Regulatory Analyses	8,600	6,312	5,054	6,987	7,583	5,207	4,647	6,340
CMS Alliance to Modernize Healthcare	141,860	169,013	175,030	213,369	141,860	169,013	175,030	213,369
Homeland Security Operational Analysis Center	na	8,622	46,321	54,751	na	8,622	46,321	54,751
Homeland Security Studies and Analysis Institute	22,038	na	na	na	22,038	na	na	na
Homeland Security Systems Engineering and Development Institute	101,628	104,414	104,689	115,813	101,628	104,414	104,689	115,813
Judiciary Engineering and Modernization Center	9,289	8,030	6,697	7,331	9,289	8,030	6,697	7,331
National Biodefense Analysis and Countermeasures Center	32,902	34,991	37,598	39,003	32,902	34,991	37,598	39,003
National Cybersecurity Center of Excellence	13,076	13,436	19,556	22,205	13,076	13,436	19,556	22,205
National Defense Research Institute	62,848	69,013	57,743	67,647	62,848	69,013	57,743	67,647
National Renewable Energy Laboratory	362,087	357,916	388,500	455,016	337,017	328,197	349,410	405,923
National Security Engineering Center	966,542	1,012,155	1,078,610	1,124,861	966,404	1,009,971	1,077,697	1,123,616

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**Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2016–19**

(Dollars in thousands)

FFRDC	Total				Federally financed			
	2016	2017	2018	2019	2016	2017	2018	2019
Oak Ridge National Laboratory	1,283,729	1,403,204	1,399,445	1,470,372	1,251,237	1,373,042	1,378,398	1,454,122
Pacific Northwest National Laboratory	914,747	983,962	956,193	1,012,136	904,289	971,060	943,147	993,733
Project Air Force	49,165	48,521	48,858	48,325	49,165	48,521	48,858	48,325
Science and Technology Policy Institute	7,459	8,401	8,086	9,080	7,459	8,401	8,086	9,080
Systems and Analyses Center	169,580	163,125	168,034	177,948	169,580	163,125	168,034	177,948
Industry-administered FFRDCs	7,421,736	7,469,443	7,838,917	8,758,076	7,306,629	7,357,635	7,719,730	8,650,429
Frederick National Laboratory for Cancer Research	642,165	704,223	748,500	751,452	642,165	704,223	748,500	751,452
Idaho National Laboratory	521,618	482,840	395,112	478,324	504,245	462,659	376,053	463,588
Lawrence Livermore National Laboratory	1,363,525	1,290,134	1,386,687	1,517,429	1,326,375	1,259,015	1,353,502	1,480,978
Los Alamos National Laboratory	1,987,000	1,972,769	2,145,232	2,461,275	1,962,000	1,950,268	2,120,857	2,440,514
Sandia National Laboratories	2,781,547	2,878,000	3,009,105	3,373,217	2,745,963	2,839,993	2,967,822	3,340,658
Savannah River National Laboratory	125,881	141,477	154,281	176,379	125,881	141,477	152,996	173,239

na = not applicable.

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

**Source(s):**

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