TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2020–23 (Dollars in thousands)

			otal		Federally financed				
FRDC	2020	2021	2022	2023	2020	2021	2022	2023	
All FFRDCs	23,514,241	24,921,476	26,006,971	29,316,897	23,133,501	24,509,691	25,605,479	28,880,018	
University- administered FFRDCs	7,003,132	6,850,276	7,165,067	8,179,862	6,867,741	6,700,555	7,015,547	8,010,234	
Ames Laboratory	32,844	34,214	38,520	40,638	32,302	34,016	38,032	40,091	
Argonne National Laboratory	859,658	856,568	962,973	1,234,635	840,237	832,400	934,724	1,205,264	
Fermi National Accelerator Laboratory	300,002	319,051	330,294	402,122	299,811	317,812	329,131	400,573	
Green Bank Observatory ^a	NA	8,629	10,752	12,326	NA	8,629	10,384	11,909	
Jet Propulsion Laboratory	2,638,412	2,388,355	2,417,556	2,671,305	2,638,412	2,388,355	2,417,556	2,671,305	
Lawrence Berkeley National Laboratory	916,082	966,972	1,031,716	1,190,504	862,965	910,428	971,554	1,131,175	
Lincoln Laboratory	1,115,927	1,136,133	1,142,615	1,265,060	1,093,081	1,110,465	1,119,338	1,234,615	
National Center for Atmospheric Research	188,484	181,010	188,238	210,233	175,316	161,163	171,310	184,647	
National Radio Astronomy Observatory	100,078	94,202	92,476	102,863	98,458	93,313	91,913	102,104	
National Solar Observatory	16,892	17,684	33,849	39,856	16,472	17,680	33,800	39,719	
NSF's National Optical-Infrared Astronomy Research Laboratory (NSF's NOIRLab)	72,686	75,251	81,505	94,257	69,685	73,393	79,193	92,841	
Princeton Plasma Physics Laboratory	107,662	115,505	120,347	131,042	103,856	113,591	119,828	127,260	
SLAC National Accelerator Laboratory	382,264	396,780	432,078	483,193	366,936	382,252	419,094	469,601	
Software Engineering Institute	141,291	120,443	129,316	130,141	141,291	120,443	129,316	130,141	
Thomas Jefferson National Accelerator Facility	130,850	139,479	152,832	171,687	128,919	136,615	150,374	168,989	
Nonprofit- administered FFRDCs	7,913,603	9,079,002	9,171,826	10,052,536	7,760,212	8,909,281	8,998,910	9,879,651	
Aerospace Federally Funded Research and Development Center	1,114,741	1,128,241	1,152,833	1,259,428	1,109,291	1,121,569	1,147,041	1,251,725	
Arroyo Center	35,248	38,304	40,856	42,433	35,248	38,304	40,856	42,433	
Brookhaven National Laboratory	595,466	637,658	655,988	691,417	569,925	620,000	639,527	678,623	
Center for Advanced Aviation System Development	180,634	230,484	189,490	186,163	163,497	207,828	164,992	166,246	
Center for Communications and Computing	67,072	65,255	74,759	77,391	67,072	65,255	74,759	77,391	
Center for Enterprise Modernization	190,408	263,661	235,436	258,155	190,408	263,661	235,317	258,155	

TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2020–23 (Dollars in thousands)

FFRDC		To	otal		Federally financed				
	2020	2021	2022	2023	2020	2021	2022	2023	
Center for Naval Analyses	95,874	96,391	93,567	96,103	95,874	96,391	93,567	96,103	
Center for Nuclear Waste Regulatory Analyses	6,762	5,630	4,323	4,405	6,359	5,233	3,595	3,467	
CMS Alliance to Modernize Healthcare	228,162	348,269	286,693	281,709	228,162	348,269	286,693	281,709	
Homeland Security Operational Analysis Center	44,736	34,888	52,984	66,264	44,736	34,888	52,984	66,264	
Homeland Security Systems Engineering and Development Institute	136,874	183,588	183,261	217,908	135,713	182,413	181,702	216,456	
Idaho National Laboratory	494,094	516,691	637,579	653,100	481,146	503,977	630,446	642,971	
Judiciary Engineering and Modernization Center	6,765	5,493	na	na	6,708	5,493	na	na	
National Biodefense Analysis and Countermeasures Center	42,330	44,968	45,870	41,321	42,330	44,968	45,869	41,321	
National Cybersecurity Center of Excellence	23,557	33,671	27,955	23,010	23,557	33,671	27,955	23,010	
National Defense Research Institute	64,134	66,170	61,097	67,157	64,134	66,170	61,097	67,157	
National Renewable Energy Laboratory	511,585	559,151	603,356	718,852	456,336	497,047	536,683	648,671	
National Security Engineering Center	1,143,701	1,468,298	1,286,520	1,370,949	1,142,013	1,463,965	1,282,762	1,367,998	
Oak Ridge National Laboratory	1,632,684	1,760,578	1,803,543	2,019,259	1,616,580	1,746,756	1,789,100	2,000,646	
Pacific Northwest National Laboratory	1,071,249	1,168,268	1,294,614	1,449,496	1,053,982	1,142,925	1,266,328	1,424,969	
Project Air Force	46,936	47,966	46,517	48,729	46,936	47,966	46,517	48,729	
Savannah River National Laboratory ^b	na	191,803	182,654	244,736	na	189,428	179,848	241,518	
Science and Technology Policy Institute	9,256	9,784	10,593	9,977	9,256	9,784	10,593	9,977	
Systems and Analyses Center	171,335	173,792	201,338	224,574	170,949	173,320	200,679	224,112	
Industry-administered FFRDCs	8,597,506	8,992,198	9,670,078	11,084,499	8,505,548	8,899,855	9,591,022	10,990,133	
Frederick National Laboratory for Cancer Research	745,726	861,605	904,182	929,754	745,726	861,605	904,182	929,754	
Lawrence Livermore National Laboratory	1,558,071	1,613,673	1,659,808	2,110,938	1,526,467	1,580,263	1,633,185	2,079,762	
Los Alamos National Laboratory	2,722,375	2,974,164	3,294,559	3,768,323	2,701,388	2,950,380	3,273,429	3,742,718	

TABLE 8

Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2020–23 (Dollars in thousands)

	Total				Federally financed			
FFRDC	2020	2021	2022	2023	2020	2021	2022	2023
Sandia National Laboratories	3,395,241	3,542,756	3,811,529	4,275,484	3,358,481	3,507,607	3,780,226	4,237,899
Savannah River								
National Laboratory ^b	176,093	na	na	na	173,486	na	na	na

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

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.

^a 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 the National Radio Astronomy Observatory included the expenditures for the Green Bank Observatory. The Green Bank Observatory began reporting separately on the FY 2021 survey.

^b In FY 2021, Savannah River National Laboratory acquired a new nonprofit administrator: Battelle Savannah River Alliance, LLC. Prior to the FY 2021 collection, Savannah River National Laboratory was administered by an industrial firm administrator: Savannah River Nuclear Solutions, LLC.