

TABLE 7

Total R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2010–19

(Dollars in thousands)

FFRDC	2010	2011 ^a	2012	2013	2014	2015	2016	2017	2018	2019
All FFRDCs	18,880,609	18,671,245	18,280,943	17,667,184	17,718,556	18,458,257	19,219,702	20,038,307	21,171,529	22,737,500
Aerospace Federally Funded Research and Development Center ^b	880,653	908,458	874,653	835,068	838,708	888,119	909,868	942,704	1,020,827	1,065,989
Ames Laboratory	30,836	32,442	33,853	34,234	41,824	45,845	46,886	53,527	36,858	33,612
Argonne National Laboratory	650,504	710,435	679,387	708,501	719,459	719,521	733,377	723,824	777,246	810,693
Arroyo Center	28,647	32,180	31,278	32,789	33,391	40,594	44,616	42,723	39,738	37,956
Brookhaven National Laboratory	535,546	526,571	516,921	529,634	573,364	587,194	579,087	556,875	552,640	590,470
Center for Advanced Aviation System Development	149,686	165,645	159,311	146,860	149,054	155,696	156,644	168,169	177,530	174,123
Center for Communications and Computing	71,927	72,600	62,600	51,477	63,199	56,478	61,625	66,692	68,237	68,371
Center for Enterprise Modernization	170,460	187,785	226,539	202,319	158,069	145,442	146,436	154,933	162,690	174,712
Center for Naval Analyses	109,068	85,165	91,628	86,132	80,283	80,358	84,232	90,401	95,198	96,697
Center for Nuclear Waste Regulatory Analyses	15,346	16,377	13,147	12,331	12,314	12,636	8,600	6,312	5,054	6,987
CMS Alliance to Modernize Healthcare	na	na	na	17,521	70,458	168,142	141,860	169,013	175,030	213,369
Fermi National Accelerator Laboratory	402,658	420,119	412,438	376,472	334,522	319,700	323,507	320,516	328,419	334,258
Frederick National Laboratory for Cancer Research	643,935	431,600	430,100	433,900	448,500	495,300	642,165	704,223	748,500	751,452
Homeland Security Operational Analysis Center	na	na	na	na	na	na	na	8,622	46,321	54,751
Homeland Security Studies and Analysis Institute	33,402	36,870	30,213	22,452	20,866	16,965	22,038	na	na	na
Homeland Security Systems Engineering and Development Institute	58,715	85,154	77,159	75,530	94,353	77,176	101,628	104,414	104,689	115,813
Idaho National Laboratory	478,356	425,072	536,399	496,818	479,801	476,376	521,618	482,840	395,112	478,324
Jet Propulsion Laboratory	1,640,341	1,543,969	1,493,613	1,519,258	1,664,539	1,749,689	1,852,369	2,324,826	2,733,908	2,709,063
Judiciary Engineering and Modernization Center	na	4,650	5,309	6,399	2,299	4,318	9,289	8,030	6,697	7,331
Lawrence Berkeley National Laboratory	759,381	788,386	767,554	768,563	762,601	792,457	797,831	813,267	832,457	872,237
Lawrence Livermore National Laboratory	1,370,747	1,424,993	1,353,454	1,313,293	1,170,571	1,273,066	1,363,525	1,290,134	1,386,687	1,517,429
Lincoln Laboratory	789,502	822,358	873,104	872,298	830,076	914,071	949,138	969,090	1,013,320	1,103,870
Los Alamos National Laboratory	2,505,913	2,307,197	2,056,878	1,708,000	1,767,000	1,865,000	1,987,000	1,972,769	2,145,232	2,461,275
National Astronomy and Ionosphere Ctr.	13,203	14,317	na	na	na	na	na	na	na	na
National Biodefense Analysis and Countermeasures Center	50,058	41,786	31,201	29,849	30,310	30,716	32,902	34,991	37,598	39,003
National Center for Atmospheric Research	220,328	198,231	169,743	172,527	162,259	166,385	177,422	171,551	158,260	199,476
National Cybersecurity Center of Excellence	na	na	na	na	na	7,843	13,076	13,436	19,556	22,205
National Defense Research Institute	51,652	46,330	53,832	59,460	62,073	56,736	62,848	69,013	57,743	67,647
National Radio Astronomy Observatory	137,607	81,305	79,168	93,253	85,327	89,689	90,411	91,720	100,691	101,901
National Renewable Energy Laboratory	326,652	386,539	398,873	347,368	359,998	378,436	362,087	357,916	388,500	455,016
National Security Engineering Center	925,027	941,187	946,737	928,614	885,382	919,441	966,542	1,012,155	1,078,610	1,124,861
National Solar Observatory	11,549	11,724	10,236	10,648	10,039	11,752	12,783	11,841	14,733	15,931

TABLE 7

Total R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2010–19

(Dollars in thousands)

FFRDC	2010	2011 ^a	2012	2013	2014	2015	2016	2017	2018	2019
NSF's National Optical-Infrared Astronomy Research Laboratory (NSF's NOIRLab)	45,596	36,165	36,321	30,021	25,161	23,660	24,917	25,906	33,874	38,262
Oak Ridge National Laboratory	1,538,412	1,558,073	1,553,460	1,451,684	1,293,722	1,333,332	1,283,729	1,403,204	1,399,445	1,470,372
Pacific Northwest National Laboratory	1,116,648	1,095,923	1,033,768	934,491	1,021,912	951,099	914,747	983,962	956,193	1,012,136
Princeton Plasma Physics Laboratory	83,932	84,863	81,389	85,088	97,768	81,348	82,246	81,444	82,435	91,271
Project Air Force	43,957	44,171	41,031	36,003	39,351	44,393	49,165	48,521	48,858	48,325
Sandia National Laboratories	2,157,022	2,277,166	2,293,307	2,412,476	2,507,099	2,621,891	2,781,547	2,878,000	3,009,105	3,373,217
Savannah River National Laboratory	127,160	134,530	132,357	115,857	121,013	121,675	125,881	141,477	154,281	176,379
Science and Technology Policy Institute	6,000	8,700	7,547	5,010	10,949	8,724	7,459	8,401	8,086	9,080
SLAC National Accelerator Laboratory	354,393	327,716	329,747	327,005	316,646	310,167	313,031	327,453	341,615	368,938
Software Engineering Institute	99,334	107,837	113,371	134,973	123,217	131,146	145,981	132,967	142,891	140,954
Systems and Analyses Center	156,000	156,200	149,150	142,977	145,211	157,645	169,580	163,125	168,034	177,948
Thomas Jefferson National Accelerator Facility	90,456	90,456	94,167	100,031	105,868	128,036	120,009	107,320	118,631	125,796

na = not applicable.

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

^a R&D expenditures decreased in FY 2011 due to removal of expenditures for capital projects. In this survey, R&D expenditures do not include capital projects. In previous years, some FFRDCs included capital expenditures in their R&D totals. Previous years include an unknown amount of capital expenditures, estimated to be less than \$500 million per year.

^b Prior to FY 2014, the Aerospace Corporation reported only internal R&D projects. After discussion with the National Center for Science and Engineering Statistics, the Aerospace Corporation agreed to report all R&D expenditures for FY 2014 and provide revised data to include all R&D expenditures for FYs 2010–13.

Source(s):

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