



National Center for Science and
Engineering Statistics

Data Tables Report

FFRDC Research and Development Expenditures: FY 2025

NSF 26-323 | August 20, 2026

Contents

General Notes	2
Data Tables	3
Technical Notes	19
Acknowledgments and Suggested Citation	25
Contact Us	26

General Notes

The FFRDC Research and Development Survey is the primary source of information on research and development (R&D) expenditures that are separately accounted for at federally funded research and development centers (FFRDCs) in the United States. Conducted annually for university-administered FFRDCs since FY 1953 and all FFRDCs since FY 2001, the survey collects information on R&D expenditures by source of funds and types of research and expenses. The survey is an annual census of the full population of eligible FFRDCs. See <https://ncses.nsf.gov/resource/master-gov-lists-ffrdc> for the Master Government List of FFRDCs.

The National Center for Science and Engineering Statistics (NCSES) has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN26-024).

Data Tables

Federally funded research and development center (FFRDC) expenditures

Table	Title
1	R&D expenditures at federally funded research and development centers, by source of funds: FYs 2001–25
2	Total and federally financed R&D expenditures at federally funded research and development centers, by type of R&D: FYs 2001–25
3	Federally financed R&D expenditures from federal agencies: FY 2025

FFRDC expenditures, by FFRDC

Table	Title
4	R&D expenditures at federally funded research and development centers, by source of funds and FFRDC: FY 2025
5	Federally financed R&D expenditures at federally funded research and development centers, by federal agency and FFRDC: FY 2025
6	Total and federally financed R&D expenditures at federally funded research and development centers, by type of R&D and FFRDC: FY 2025
7	Total R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2001–25
8	Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2022–25

FTEs and R&D personnel at FFRDCs

Table	Title
9	Headcount and FTEs of R&D personnel at federally funded research and development centers, by personnel function: FYs 2022–25

Response rates: FY 2025

Table	Title
A-1	Response rates for the FFRDC Research and Development Survey, by question: FY 2025

Table 1. R&D expenditures at federally funded research and development centers, by source of funds: FYs 2001–25

(Dollars in thousands)

Fiscal year	All R&D expenditures	Federal government	State and local government	Business	Nonprofit organizations	All other sources ^a
2001	10,071,307	9,709,221	19,389	144,043	na	198,654
2002	11,536,424	11,095,110	31,423	134,251	na	275,640
2003	12,126,880	11,681,318	33,301	138,685	na	273,576
2004	12,632,207	12,321,652	29,959	119,843	na	160,753
2005	13,254,522	12,917,206	32,339	129,036	na	175,941
2006	13,218,497	12,824,552	30,122	170,879	na	192,944
2007	13,824,987	13,401,081	32,072	172,592	na	219,242
2008	15,616,390	15,177,347	32,188	202,534	na	204,321
2009	16,390,111	15,942,851	35,442	189,721	na	222,097
2010	18,880,609	18,453,552	52,871	168,561	23,665	181,960
2011	18,671,245	18,276,088	26,744	190,111	38,878	139,424
2012	18,280,943	17,875,012	39,428	184,434	45,926	136,143
2013	17,667,184	17,284,513	50,449	186,911	39,390	105,921
2014	17,718,556	17,331,396	28,337	220,735	37,182	100,906
2015	18,458,257	18,097,189	18,427	208,780	27,984	105,877
2016	19,219,702	18,855,593	21,556	192,239	40,195	110,119
2017	20,038,307	19,667,804	29,029	192,107	46,526	102,841
2018	21,171,529	20,770,388	43,458	197,975	43,630	116,078
2019	22,737,500	22,338,855	51,167	180,583	48,238	118,657
2020	23,514,241	23,133,501	43,995	172,866	47,056	116,823
2021	24,921,476	24,509,691	43,774	195,954	49,016	123,041
2022	26,006,971	25,605,479	38,591	207,483	49,169	106,249
2023	29,316,897	28,880,018	35,407	224,361	42,429	134,682
2024	31,724,628	31,246,822	38,627	239,738	48,803	150,638
2025	31,833,205	31,332,192	41,811	256,707	43,969	158,526

na = not applicable; data from nonprofit organizations were not collected separately.

^a Prior to FY 2010, R&D expenditures from nonprofit organizations were collected under all other sources.**Source(s):**

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

Table 2. Total and federally financed R&D expenditures at federally funded research and development centers, by type of R&D: FYs 2001–25

(Dollars in millions and percent)

Fiscal year	Total							Federally financed						
	All R&D expenditures	Basic research		Applied research		Experimental development		All R&D expenditures	Basic research		Applied research		Experimental development	
		Amount	Percent	Amount	Percent	Amount	Percent		Amount	Percent	Amount	Percent	Amount	Percent
2001	10,071	3,875	38.5	na	na	na	na	9,709	3,726	38.4	na	na	na	na
2002	11,536	4,744	41.1	na	na	na	na	11,095	4,523	40.8	na	na	na	na
2003	12,127	5,122	42.2	na	na	na	na	11,681	4,880	41.8	na	na	na	na
2004	12,632	4,931	39.0	na	na	na	na	12,322	4,790	38.9	na	na	na	na
2005	13,255	5,110	38.5	na	na	na	na	12,917	4,977	38.5	na	na	na	na
2006	13,218	5,197	39.3	na	na	na	na	12,825	5,048	39.4	na	na	na	na
2007 ^a	13,825	5,296	38.3	3,479	25.2	4,411	31.9	13,401	5,151	38.4	3,314	24.7	4,319	32.2
2008	15,616	5,379	34.4	3,992	25.6	6,245	40.0	15,177	5,210	34.3	3,825	25.2	6,143	40.5
2009	16,390	5,871	35.8	4,545	27.7	5,974	36.4	15,943	5,714	35.8	4,346	27.3	5,884	36.9
2010	18,881	6,655	35.2	5,191	27.5	7,034	37.3	18,454	6,487	35.2	5,031	27.3	6,935	37.6
2011	18,671	6,582	35.3	5,175	27.7	6,914	37.0	18,276	6,439	35.2	5,006	27.4	6,830	37.4
2012	18,281	6,153	33.7	5,382	29.4	6,746	36.9	17,875	6,013	33.6	5,209	29.1	6,653	37.2
2013	17,667	4,186	23.7	6,818	38.6	6,663	37.7	17,285	4,081	23.6	6,636	38.4	6,568	38.0
2014	17,719	4,195	23.7	6,839	38.6	6,684	37.7	17,331	4,098	23.6	6,648	38.4	6,585	38.0
2015	18,458	4,094	22.2	7,292	39.5	7,072	38.3	18,097	4,012	22.2	7,118	39.3	6,968	38.5
2016	19,220	4,224	22.0	7,527	39.2	7,468	38.9	18,856	4,136	21.9	7,373	39.1	7,347	39.0
2017	20,038	4,111	20.5	7,931	39.6	7,996	39.9	19,668	4,039	20.5	7,756	39.4	7,873	40.0
2018	21,172	4,180	19.7	8,391	39.6	8,600	40.6	20,770	4,099	19.7	8,205	39.5	8,466	40.8
2019	22,738	4,536	19.9	9,200	40.5	9,002	39.6	22,339	4,455	19.9	9,014	40.4	8,869	39.7
2020	23,514	4,712	20.0	9,433	40.1	9,369	39.8	23,134	4,637	20.0	9,257	40.0	9,239	39.9
2021	24,921	5,021	20.1	9,951	39.9	9,949	39.9	24,510	4,945	20.2	9,765	39.8	9,799	40.0
2022	26,007	5,232	20.1	10,369	39.9	10,407	40.0	25,605	5,159	20.1	10,185	39.8	10,261	40.1
2023	29,317	5,856	20.0	11,922	40.7	11,539	39.4	28,880	5,771	20.0	11,715	40.6	11,394	39.5
2024	31,725	6,495	20.5	12,372	39.0	12,857	40.5	31,247	6,390	20.5	12,152	38.9	12,705	40.7
2025	31,833	6,611	20.8	12,507	39.3	12,716	39.9	31,332	6,510	20.8	12,254	39.1	12,568	40.1

na = not applicable; separate data for applied research and experimental development were not collected before FY 2007.

^a FY 2007 detail does not add to total because one institution was unable to provide a breakout of applied research and experimental development expenditures.

Note(s):
Because of rounding, detail may not add to total.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey.

Table 3. Federally financed R&D expenditures from federal agencies: FY 2025

(Dollars in thousands)

Federal agency	R&D expenditures
All federal agencies	31,332,192
Administrative Office of the U.S. Courts	31
Agency for International Development	2,939
Central Intelligence Agency	1,615
Consumer Product Safety Commission	2
Department of Agriculture	7,354
Department of Commerce	102,422
Department of Defense	7,096,078
Department of Energy	18,172,281
Department of Health and Human Services	1,172,272
Department of Homeland Security	568,800
Department of Housing and Urban Development	75
Department of Justice	20,777
Department of State	74,583
Department of the Interior	15,983
Department of the Treasury	142,779
Department of Transportation	226,975
Department of Veterans Affairs	85,988
Environmental Protection Agency	12,584
Executive Office of the President	2,794
General Services Administration	6,395
National Aeronautics and Space Administration	2,632,428
National Science Foundation	445,850
Nuclear Regulatory Commission	22,257
Office of Personnel Management	1,019
Office of the Director of National Intelligence	13,767
Tennessee Valley Authority	1,100
Other agencies not listed ^a	503,044

^a Some funding sources were not identified for security reasons or because the original source was not known.**Source(s):**

National Center for Science and Engineering Statistics, FFRDC Research and Development Survey, FY 2025.

Table 4. R&D expenditures at federally funded research and development centers, by source of funds and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	All R&D expenditures	Federal government	State and local government	Business	Nonprofit organizations	All other sources
All FFRDCs	31,833,205	31,332,192	41,811	256,707	43,969	158,526
University-administered FFRDCs	8,288,028	8,122,658	22,797	76,915	13,731	51,927
Ames National Laboratory	49,079	48,401	0	466	0	212
Argonne National Laboratory	1,248,328	1,214,360	878	27,268	707	5,115
Fermi National Accelerator Laboratory	392,036	389,129	0	2,734	57	116
Jet Propulsion Laboratory	2,281,569	2,281,569	0	0	0	0
Lawrence Berkeley National Laboratory	1,231,251	1,164,340	16,713	26,170	6,291	17,737
Lincoln Laboratory	1,504,118	1,490,895	0	4,150	1,236	7,837
National Radio Astronomy Observatory	129,001	128,107	0	229	217	448
National Solar Observatory	39,822	39,766	0	0	53	3
NSF National Center for Atmospheric Research	213,463	189,694	2,775	7,628	4,431	8,935
NSF National Optical-Infrared Astronomy Research Laboratory	117,630	116,122	0	0	602	906
Princeton Plasma Physics Laboratory	138,610	134,477	0	2,839	0	1,294
SLAC National Accelerator Laboratory	600,450	586,167	0	5,219	137	8,927
Software Engineering Institute	157,001	157,001	0	0	0	0
Thomas Jefferson National Accelerator Facility	185,670	182,630	2,431	212	0	397
Nonprofit-administered FFRDCs	11,754,881	11,563,275	17,838	98,071	28,091	47,606
Aerospace Federally Funded Research and Development Center	1,386,475	1,375,531	0	9,207	0	1,737
Arroyo Center	45,514	45,514	0	0	0	0
Brookhaven National Laboratory	760,892	748,362	1,913	8,838	11	1,768
Center for Advanced Aviation System Development	200,867	178,207	3,655	3,571	143	15,291
Center for Communications and Computing	89,010	89,010	0	0	0	0
Center for Enterprise Modernization	202,634	202,236	95	0	249	54
Center for Naval Analyses	109,637	109,637	0	0	0	0
Center for Nuclear Waste Regulatory Analyses	5,281	5,102	41	100	0	38
CMS Alliance to Modernize Healthcare	188,326	188,326	0	0	0	0
Homeland Security Operational Analysis Center	56,663	56,663	0	0	0	0
Homeland Security Systems Engineering and Development Institute	162,439	162,060	0	0	372	7
Idaho National Laboratory	NA	NA	NA	NA	NA	NA
National Biodefense Analysis and Countermeasures Center	44,266	44,266	0	0	0	0
National Cybersecurity Center of Excellence	29,616	29,616	0	0	0	0
National Defense Research Institute	79,304	79,304	0	0	0	0
National Renewable Energy Laboratory	879,428	827,343	5,073	33,622	10,920	2,470
National Security Engineering Center	1,504,115	1,493,714	0	46	4,428	5,927
Oak Ridge National Laboratory	2,286,846	2,258,500	690	15,640	2,177	9,839
Pacific Northwest National Laboratory	1,630,715	1,602,283	3,930	12,097	8,559	3,846
Project Air Force	54,987	54,987	0	0	0	0
Savannah River National Laboratory	249,166	245,815	0	3,351	0	0

Table 4. R&D expenditures at federally funded research and development centers, by source of funds and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	All R&D expenditures		Federal government		State and local government		Business		Nonprofit organizations		All other sources	
Science and Technology Policy Institute	8,350		8,350		0		0		0		0	
Systems and Analyses Center	248,119		247,901		0		0		0		218	
Industry-administered FFRDCs	11,790,296		11,646,259		1,176		81,721		2,147		58,993	
Frederick National Laboratory for Cancer Research	865,189		865,189		0		0		0		0	
Lawrence Livermore National Laboratory	2,179,730		2,136,131		522		16,091		2,147		24,839	
Los Alamos National Laboratory	4,076,960		4,031,401		0		45,559		0		0	
Sandia National Laboratories	4,668,417		4,613,538		654		20,071		0		34,154	

NA = not available; imputed data not reported at this level.

FFRDC = federally funded research and development center.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey, FY 2025.

Table 5. Federally financed R&D expenditures at federally funded research and development centers, by federal agency and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	All federal R&D expenditures	DOD	DOE	HHS	DHS	DOT	NASA	NSF	Other
All FFRDCs	31,332,192	7,096,078	18,172,281	1,172,272	568,800	226,975	2,632,428	445,850	1,017,508
University-administered FFRDCs	8,122,658	1,641,503	3,530,524	63,113	47,305	29,596	2,314,414	436,897	59,306
Ames National Laboratory	48,401	460	47,930	0	0	0	0	11	0
Argonne National Laboratory	1,214,360	26,423	1,123,859	14,354	20,363	4,873	2,041	24	22,423
Fermi National Accelerator Laboratory	389,129	5,001	383,978	0	0	0	150	0	0
Jet Propulsion Laboratory	2,281,569	0	0	0	0	0	2,281,569	0	0
Lawrence Berkeley National Laboratory	1,164,340	25,662	1,096,438	25,369	767	634	2,583	4,373	8,514
Lincoln Laboratory	1,490,895	1,406,533	9,114	12,666	15,357	19,819	13,440	596	13,370
National Radio Astronomy Observatory	128,107	1,681	0	0	0	0	534	125,817	75
National Solar Observatory	39,766	0	0	0	0	0	659	39,107	0
NSF National Center for Atmospheric Research	189,694	5,672	3,262	0	0	4,270	12,053	153,685	10,752
NSF National Optical-Infrared Astronomy Research Laboratory	116,122	89	4,449	0	0	0	615	110,969	0
Princeton Plasma Physics Laboratory	134,477	1,006	133,110	0	0	0	361	0	0
SLAC National Accelerator Laboratory	586,167	27,471	544,930	10,561	495	0	200	2,315	195
Software Engineering Institute	157,001	141,505	825	162	10,323	0	209	0	3,977
Thomas Jefferson National Accelerator Facility	182,630	0	182,629	1	0	0	0	0	0
Nonprofit-administered FFRDCs	11,563,275	3,666,483	6,013,362	223,805	429,890	192,129	251,605	8,773	777,228
Aerospace Federally Funded Research and Development Center	1,375,531	1,171,392	32,954	0	2,803	4,230	113,396	1,328	49,428
Arroyo Center	45,514	45,514	0	0	0	0	0	0	0
Brookhaven National Laboratory	748,362	3,008	719,051	3,112	465	0	8,190	0	14,536
Center for Advanced Aviation System Development	178,207	0	0	0	0	178,207	0	0	0
Center for Communications and Computing	89,010	89,010	0	0	0	0	0	0	0
Center for Enterprise Modernization	202,236	0	0	0	0	0	0	462	201,774
Center for Naval Analyses	109,637	109,637	0	0	0	0	0	0	0
Center for Nuclear Waste Regulatory Analyses	5,102	0	73	0	0	80	56	0	4,893
CMS Alliance to Modernize Healthcare	188,326	0	0	188,326	0	0	0	0	0
Homeland Security Operational Analysis Center	56,663	0	0	0	56,663	0	0	0	0
Homeland Security Systems Engineering and Development Institute	162,060	0	0	0	144,160	0	0	0	17,900
Idaho National Laboratory	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Biodefense Analysis and Countermeasures Center	44,266	9	0	0	28,604	0	0	0	15,653
National Cybersecurity Center of Excellence	29,616	0	0	0	0	0	0	0	29,616
National Defense Research Institute	79,304	75,375	0	0	0	214	0	0	3,715
National Renewable Energy Laboratory	827,343	22,155	760,736	0	4,441	2,547	1,961	0	35,503
National Security Engineering Center	1,493,714	1,295,906	1,163	0	0	0	0	0	196,645
Oak Ridge National Laboratory	2,258,500	97,144	1,946,794	6,054	7,833	4,351	44,173	0	152,151
Pacific Northwest National Laboratory	1,602,283	233,014	1,235,606	25,916	80,031	0	1,362	306	26,048
Project Air Force	54,987	54,987	0	0	0	0	0	0	0
Savannah River National Laboratory	245,815	19,988	223,487	0	1,072	0	0	0	1,268

Table 5. Federally financed R&D expenditures at federally funded research and development centers, by federal agency and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	All federal R&D expenditures		DOD	DOE	HHS	DHS	DOT	NASA	NSF	Other
Science and Technology Policy Institute	8,350		0	18	397	0	0	136	6,677	1,122
Systems and Analyses Center	247,901		227,120	1,303	0	13,959	0	0	0	5,519
Industry-administered FFRDCs	11,646,259		1,788,092	8,628,395	885,354	91,605	5,250	66,409	180	180,974
Frederick National Laboratory for Cancer Research	865,189		59	0	865,066	0	0	0	0	64
Lawrence Livermore National Laboratory	2,136,131		387,905	1,697,332	11,553	23,548	217	9,110	0	6,466
Los Alamos National Laboratory	4,031,401		113,707	3,757,008	8,038	3,732	0	55,997	180	92,739
Sandia National Laboratories	4,613,538		1,286,421	3,174,055	697	64,325	5,033	1,302	0	81,705

NA = not available; imputed data not reported at this level.

DHS = Department of Homeland Security; DOD = Department of Defense; DOE = Department of Energy; DOT = Department of Transportation; FFRDC = federally funded research and development center; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey, FY 2025.

Table 6. Total and federally financed R&D expenditures at federally funded research and development centers, by type of R&D and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	Sponsor	Location	Total				Federally financed			
			All R&D expenditures	Basic research	Applied research	Experimental development	All R&D expenditures	Basic research	Applied research	Experimental development
All FFRDCs	-	-	31,833,205	6,610,656	12,507,017	12,715,532	31,332,192	6,510,157	12,253,849	12,568,186
University-administered FFRDCs	-	-	8,288,028	3,242,136	1,566,564	3,479,328	8,122,658	3,164,621	1,499,926	3,458,111
Ames National Laboratory	DOE	Ames, IA	49,079	20,837	26,643	1,599	48,401	20,665	26,523	1,213
Argonne National Laboratory	DOE	Argonne, IL	1,248,328	236,887	528,324	483,117	1,214,360	236,887	494,759	482,714
Fermi National Accelerator Laboratory	DOE	Batavia, IL	392,036	382,842	9,194	0	389,129	382,723	6,406	0
Jet Propulsion Laboratory	NASA	Pasadena, CA	2,281,569	228,157	228,157	1,825,255	2,281,569	228,157	228,157	1,825,255
Lawrence Berkeley National Laboratory	DOE	Berkeley, CA	1,231,251	1,126,067	101,412	3,772	1,164,340	1,069,416	91,561	3,363
Lincoln Laboratory	DOD, OSD	Lexington, MA	1,504,118	12,523	607,947	883,648	1,490,895	12,523	607,947	870,425
National Radio Astronomy Observatory	NSF	Charlottesville, VA	129,001	114,208	911	13,882	128,107	114,131	442	13,534
National Solar Observatory	NSF	Boulder, CO	39,822	39,822	0	0	39,766	39,766	0	0
NSF National Center for Atmospheric Research	NSF	Boulder, CO	213,463	62,716	30,501	120,246	189,694	59,482	16,414	113,798
NSF National Optical-Infrared Astronomy Research Laboratory	NSF	Tucson, AZ	117,630	117,630	0	0	116,122	116,122	0	0
Princeton Plasma Physics Laboratory	DOE	Princeton, NJ	138,610	138,196	414	0	134,477	134,477	0	0
SLAC National Accelerator Laboratory	DOE	Menlo Park, CA	600,450	572,368	28,082	0	586,167	563,429	22,738	0
Software Engineering Institute	DOD, OSD	Pittsburgh, PA	157,001	4,213	4,979	147,809	157,001	4,213	4,979	147,809
Thomas Jefferson National Accelerator Facility	DOE	Newport News, VA	185,670	185,670	0	0	182,630	182,630	0	0
Nonprofit-administered FFRDCs	-	-	11,754,881	2,563,666	3,911,253	5,279,962	11,563,275	2,550,188	3,820,107	5,192,980
Aerospace Federally Funded Research and Development Center	DOD, Air Force	El Segundo, CA	1,386,475	24,857	141,838	1,219,780	1,375,531	24,310	131,441	1,219,780
Arroyo Center	DOD, Army	Santa Monica, CA	45,514	0	45,514	0	45,514	0	45,514	0
Brookhaven National Laboratory	DOE	Upton, NY	760,892	558,032	97,517	105,343	748,362	557,091	95,104	96,167
Center for Advanced Aviation System Development	DOT, FAA	McLean, VA	200,867	0	7,821	193,046	178,207	0	7,282	170,925
Center for Communications and Computing	DOD, NSA/CSS	Alexandria, VA	89,010	22,253	44,505	22,252	89,010	22,253	44,505	22,252
Center for Enterprise Modernization	Treasury/IRS, VA, SSA, DOC	McLean, VA	202,634	0	10,587	192,047	202,236	0	10,577	191,659
Center for Naval Analyses	DOD, Navy	Arlington, VA	109,637	0	109,637	0	109,637	0	109,637	0
Center for Nuclear Waste Regulatory Analyses	NRC	San Antonio, TX	5,281	0	5,281	0	5,102	0	5,102	0
CMS Alliance to Modernize Healthcare	HHS, CMS	Baltimore, MD	188,326	0	4,418	183,908	188,326	0	4,418	183,908
Homeland Security Operational Analysis Center	DHS, S&T	Arlington, VA	56,663	0	56,663	0	56,663	0	56,663	0
Homeland Security Systems Engineering and Development Institute	DHS, S&T	McLean, VA	162,439	0	4,170	158,269	162,060	0	4,160	157,900
Idaho National Laboratory	DOE	Idaho Falls, ID	NA	NA	NA	NA	NA	NA	NA	NA
National Biodefense Analysis and Countermeasures Center	DHS, S&T	Frederick, MD	44,266	0	44,266	0	44,266	0	44,266	0
National Cybersecurity Center of Excellence	DOC, NIST	Rockville, MD	29,616	0	659	28,957	29,616	0	659	28,957
National Defense Research Institute	DOD, OSD	Santa Monica, CA	79,304	0	79,304	0	79,304	0	79,304	0
National Renewable Energy Laboratory	DOE	Golden, CO	879,428	124,101	486,290	269,037	827,343	124,101	455,039	248,203
National Security Engineering Center	DOD,OSD	McLean, VA	1,504,115	0	84,993	1,419,122	1,493,714	0	84,695	1,409,019
Oak Ridge National Laboratory	DOE	Oak Ridge, TN	2,286,846	1,057,326	1,229,520	0	2,258,500	1,057,326	1,201,174	0
Pacific Northwest National Laboratory	DOE	Richland, WA	1,630,715	304,968	409,341	916,406	1,602,283	299,651	402,204	900,428
Project Air Force	DOD, Air Force	Santa Monica, CA	54,987	0	54,987	0	54,987	0	54,987	0

Table 6. Total and federally financed R&D expenditures at federally funded research and development centers, by type of R&D and FFRDC: FY 2025

(Dollars in thousands)

FFRDC	Sponsor	Location	Total							Federally financed								
			All R&D expenditures		Basic research		Applied research		Experimental development		All R&D expenditures		Basic research		Applied research		Experimental development	
Savannah River National Laboratory	DOE	Aiken, SC	249,166		12,459		124,582		112,125		245,815		12,291		122,907		110,617	
Science and Technology Policy Institute	NSF	Washington, DC	8,350		0		8,350		0		8,350		0		8,350		0	
Systems and Analyses Center	DOD, OSD	Alexandria, VA	248,119		0		248,119		0		247,901		0		247,901		0	
Industry-administered FFRDCs	-	-	11,790,296		804,854		7,029,200		3,956,242		11,646,259		795,348		6,933,816		3,917,095	
Frederick National Laboratory for Cancer Research	HHS, NIH	Frederick, MD	865,189		150,331		464,814		250,044		865,189		150,331		464,814		250,044	
Lawrence Livermore National Laboratory	DOE	Livermore, CA	2,179,730		125,370		1,537,147		517,213		2,136,131		119,509		1,499,409		517,213	
Los Alamos National Laboratory	DOE	Los Alamos, NM	4,076,960		326,157		3,710,033		40,770		4,031,401		322,512		3,668,575		40,314	
Sandia National Laboratories	DOE	Albuquerque, NM	4,668,417		202,996		1,317,206		3,148,215		4,613,538		202,996		1,301,018		3,109,524	

NA = not available; imputed data not reported at this level.

CMS = Centers for Medicare and Medicaid Services; DHS = Department of Homeland Security; DOC = Department of Commerce; DOD = Department of Defense; DOE = Department of Energy; DOT = Department of Transportation; FAA = Federal Aviation Administration; FFRDC = federally funded research and development center; HHS = Department of Health and Human Services; IRS = Internal Revenue Service; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NIST = National Institute of Science and Technology; NRC = Nuclear Regulatory Commission; NSA/CSS = National Security Agency/Central Security Service; NSF = National Science Foundation; OSD = Office of the Secretary of Defense; S&T = Science and Technology Directorate; SSA = Social Security Administration; Treasury = Department of Treasury; VA = Department of Veterans Affairs.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey, FY 2025.

Table 7. Total R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2001–25

(Dollars in thousands)

FFRDC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 ^a	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
All FFRDCs	10,071,307	11,536,424	12,126,880	12,632,207	13,254,522	13,218,497	13,824,987	15,616,390	16,390,111	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	23,514,241	24,921,476	26,006,971	29,316,897	31,724,628	31,833,205
Aerospace Federally Funded Research and Development Center ^b	17,600	26,306	32,745	32,529	32,500	34,200	36,490	38,940	41,470	880,653	908,458	874,653	835,068	838,708	888,119	909,868	942,704	1,020,827	1,065,989	1,114,741	1,128,241	1,152,833	1,259,428	1,318,429	1,386,475
Ames National Laboratory	22,916	23,416	25,213	27,227	29,293	26,460	25,254	27,306	29,012	30,836	32,442	33,853	34,234	41,824	45,845	46,886	53,527	36,858	33,612	32,844	34,214	38,520	40,638	39,563	49,079
Argonne National Laboratory	478,391	506,666	500,828	520,881	482,051	472,961	489,684	533,530	543,169	650,504	710,435	679,387	708,501	719,459	719,521	733,377	723,824	777,246	810,693	859,658	856,568	962,973	1,234,635	1,106,000	1,248,328
Arroyo Center	24,317	24,484	27,889	26,101	28,152	24,518	25,195	23,852	27,692	28,647	32,180	31,278	32,789	33,391	40,594	44,616	42,723	39,738	37,956	35,248	38,304	40,856	42,433	37,714	45,514
Brookhaven National Laboratory	454,500	454,482	452,728	450,342	483,039	490,686	510,212	480,455	569,240	535,546	526,571	516,921	529,634	573,364	587,194	579,087	556,875	552,640	590,470	595,466	637,658	655,988	691,417	760,512	760,892
Center for Advanced Aviation System Development	5,683	6,256	6,633	6,462	6,429	6,601	7,290	126,171	133,869	149,686	165,645	159,311	146,860	149,054	155,696	156,644	168,169	177,530	174,123	180,634	230,484	189,490	186,163	186,463	200,867
Center for Communications and Computing	43,100	45,296	45,960	50,238	50,800	51,500	57,400	59,500	66,293	71,927	72,600	62,600	51,477	63,199	56,478	61,625	66,692	68,237	68,371	67,072	65,255	74,759	77,391	85,168	89,010
Center for Enterprise Modernization	1,161	2,434	2,834	3,687	4,802	6,342	7,101	166,894	181,958	170,460	187,785	226,539	202,319	158,069	145,442	146,436	154,933	162,690	174,712	190,408	263,661	235,436	258,155	281,401	202,634
Center for Naval Analyses	69,102	72,712	75,869	79,087	83,837	87,499	99,993	106,967	109,694	109,068	85,165	91,628	86,132	80,283	80,358	84,232	90,401	95,198	96,697	95,874	96,391	93,567	96,103	100,011	109,637
Center for Nuclear Waste Regulatory Analyses	14,977	16,398	17,625	16,847	16,391	16,397	17,007	17,960	16,614	15,346	16,377	13,147	12,331	12,314	12,636	8,600	6,312	5,054	6,987	6,762	5,630	4,323	4,405	5,031	5,281
CMS Alliance to Modernize Healthcare	na	na	na	na	na	na	na	na	na	na	na	na	17,521	70,458	168,142	141,860	169,013	175,030	213,369	228,162	348,269	286,693	281,709	248,842	188,326
Fermi National Accelerator Laboratory	310,928	313,556	303,340	318,435	323,153	330,980	337,306	340,486	376,791	402,658	420,119	412,438	376,472	334,522	319,700	323,507	320,516	328,419	334,258	300,002	319,051	330,294	402,122	425,393	392,036
Frederick National Laboratory for Cancer Research	187,222	260,000	296,000	335,000	334,400	334,500	339,800	509,700	378,200	643,935	431,600	430,100	433,900	448,500	495,300	642,165	704,223	748,500	751,452	745,726	861,605	904,182	929,754	893,491	865,189
Green Bank Observatory ^c	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	NA	NA	NA	NA	8,629	10,752	12,326	13,582	na
Homeland Security Institute	na	na	na	na	NA	20,521	25,370	27,400	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Homeland Security Operational Analysis Center	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	8,622	46,321	54,751	44,736	34,888	52,984	66,264	77,563	56,663
Homeland Security Studies and Analysis Institute	na	na	na	na	na	na	na	na	32,173	33,402	36,870	30,213	22,452	20,866	16,965	22,038	na	na	na	na	na	na	na	na	na
Homeland Security Systems Engineering and Development Institute	na	na	na	na	na	na	na	na	3,387	58,715	85,154	77,159	75,530	94,353	77,176	101,628	104,414	104,689	115,813	136,874	183,588	183,261	217,908	255,498	162,439
Idaho National Laboratory ^d	270,636	259,562	330,154	180,306	232,289	163,074	248,322	236,037	388,062	478,356	425,072	536,399	496,818	479,801	476,376	521,618	482,840	395,112	478,324	494,094	516,691	637,579	653,100	1,617,015	NA
Jet Propulsion Laboratory	1,355,463	1,435,039	1,390,560	1,551,171	1,606,409	1,548,019	1,717,203	1,733,597	1,711,528	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	2,638,412	2,388,355	2,417,556	2,671,305	2,647,837	2,281,569
Judiciary Engineering and Modernization Center	na	na	na	na	na	na	na	na	na	na	4,650	5,309	6,399	2,299	4,318	9,289	8,030	6,697	7,331	6,765	5,493	na	na	na	na
Lawrence Berkeley National Laboratory	408,487	467,461	441,500	482,159	482,672	485,626	503,775	573,917	611,711	759,381	788,386	767,554	768,563	762,601	792,457	797,831	813,267	832,457	872,237	916,082	966,972	1,031,716	1,190,504	1,206,851	1,231,251
Lawrence Livermore National Laboratory	1,090,875	1,227,111	1,286,215	1,425,840	1,456,368	1,431,019	1,353,980	1,301,874	1,321,633	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	1,558,071	1,613,673	1,659,808	2,110,938	2,230,018	2,179,730
Lincoln Laboratory	380,200	451,200	522,851	594,822	627,201	622,993	618,011	641,386	706,555	789,502	822,358	873,104	872,298	830,076	914,071	949,138	969,090	1,013,320	1,103,870	1,115,927	1,136,133	1,142,615	1,265,060	1,377,063	1,504,118
Los Alamos National Laboratory	1,333,194 ^e	1,994,031	2,106,145	1,986,235	2,101,211	2,145,200	2,046,260	2,073,538	2,172,179	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	2,722,375	2,974,164	3,294,559	3,768,323	3,958,302	4,076,960
National Astronomy and Ionosphere Center	10,986	12,295	11,508	12,285	13,831	14,108	13,591	12,586	14,738	13,203	14,317	na	na	na	na	na	na	na	na	na	na	na	na	na	na
National Biodefense Analysis and Countermeasures Center	na	na	na	na	na	na	6,320	12,979	19,934	50,058	41,786	31,201	29,849	30,310	30,716	32,902	34,991	37,598	39,003	42,330	44,968	45,870	41,321	50,470	44,266
National Cybersecurity Center																									

Table 7. Total R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2001–25

(Dollars in thousands)

FFRDC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 ^a	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Princeton Plasma Physics Laboratory	76,021	73,610	66,764	75,255	81,803	78,151	75,720	78,154	81,113	83,932	84,863	81,389	85,088	97,768	81,348	82,246	81,444	82,435	91,271	107,662	115,505	120,347	131,042	140,958	138,610
Project Air Force	29,361	32,439	33,555	33,049	35,742	39,107	39,315	41,794	45,162	43,957	44,171	41,031	36,003	39,351	44,393	49,165	48,521	48,858	48,325	46,936	47,966	46,517	48,729	47,810	54,987
Sandia National Laboratories	1,416,796	1,583,348	1,742,861	1,833,571	1,946,435	1,968,488	2,031,309	2,076,786	2,043,509	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	3,395,241	3,542,756	3,811,529	4,275,484	4,634,973	4,668,417
Savannah River National Laboratory	87,164	93,602	94,423	94,326	98,650	102,547	114,895	118,400	130,292	127,160	134,530	132,357	115,857	121,013	121,675	125,881	141,477	154,281	176,379	176,093	191,803	182,654	244,736	253,483	249,166
Science and Technology Policy Institute	7,311	8,878	6,710	3,681	5,415	6,800	5,600	6,000	5,100	6,000	8,700	7,547	5,010	10,949	8,724	7,459	8,401	8,086	9,080	9,256	9,784	10,593	9,977	11,952	8,350
SLAC National Accelerator Laboratory	145,979	171,343	164,747	206,402	205,690	214,026	231,960	234,316	294,421	354,393	327,716	329,747	327,005	316,646	310,167	313,031	327,453	341,615	368,938	382,264	396,780	432,078	483,193	539,118	600,450
Software Engineering Institute	37,052	45,088	45,412	57,920	62,262	75,636	80,566	80,963	89,077	99,334	107,837	113,371	134,973	123,217	131,146	145,981	132,967	142,891	140,954	141,291	120,443	129,316	130,141	147,400	157,001
Systems and Analyses Center	92,930	98,236	110,200	126,226	118,600	130,400	141,500	146,500	166,000	156,000	156,200	149,150	142,977	145,211	157,645	169,580	163,125	168,034	177,948	171,335	173,792	201,338	224,574	234,871	248,119
Thomas Jefferson National Accelerator Facility	102,202	106,305	106,966	104,659	113,349	96,228	81,242	82,254	88,834	90,456	90,456	94,167	100,031	105,868	128,036	120,009	107,320	118,631	125,796	130,850	139,479	152,832	171,687	182,991	185,670

e = estimated by institution. na = not applicable. NA = not available; data were not provided by institution or imputed data not provided at this level.

FFRDC = federally funded research and development center.

^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.

^c Green Bank Observatory split from the National Radio Astronomy Observatory into separate FFRDCs on 1 October 2016; however, its expenditures continued to be reported under the National Radio Astronomy Observatory for FYs 2017–20. On 1 October 2024, Green Bank Observatory was reincorporated into the National Radio Astronomy Observatory and is no longer a separate FFRDC.

^d In FY 2024, Idaho National Laboratory (INL) revised reporting methodology to align with reporting practices of other Department of Energy laboratories. INL now categorizes all work as R&D, except for manufacturing and security or protection projects.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey.

Table 8. Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2022–25

(Dollars in thousands)

FFRDC	Total				Federally financed			
	2022	2023	2024	2025	2022	2023	2024	2025
All FFRDCs	26,006,971	29,316,897	31,724,628	31,833,205	25,605,479	28,880,018	31,246,822	31,332,192
University-administered FFRDCs	7,165,067	8,179,862	8,276,949	8,288,028	7,015,547	8,010,234	8,115,251	8,122,658
Ames National Laboratory	38,520	40,638	39,563	49,079	38,032	40,091	38,720	48,401
Argonne National Laboratory	962,973	1,234,635	1,106,000	1,248,328	934,724	1,205,264	1,075,816	1,214,360
Fermi National Accelerator Laboratory	330,294	402,122	425,393	392,036	329,131	400,573	423,663	389,129
Green Bank Observatory ^a	10,752	12,326	13,582	na	10,384	11,909	13,376	na
Jet Propulsion Laboratory	2,417,556	2,671,305	2,647,837	2,281,569	2,417,556	2,671,305	2,647,837	2,281,569
Lawrence Berkeley National Laboratory	1,031,716	1,190,504	1,206,851	1,231,251	971,554	1,131,175	1,140,346	1,164,340
Lincoln Laboratory	1,142,615	1,265,060	1,377,063	1,504,118	1,119,338	1,234,615	1,360,550	1,490,895
National Radio Astronomy Observatory	92,476	102,863	105,183	129,001	91,913	102,104	104,211	128,107
National Solar Observatory	33,849	39,856	38,632	39,822	33,800	39,719	38,503	39,766
NSF National Center for Atmospheric Research	188,238	210,233	201,507	213,463	171,310	184,647	176,986	189,694
NSF National Optical-Infrared Astronomy Research Laboratory	81,505	94,257	104,871	117,630	79,193	92,841	103,034	116,122
Princeton Plasma Physics Laboratory	120,347	131,042	140,958	138,610	119,828	127,260	135,705	134,477
SLAC National Accelerator Laboratory	432,078	483,193	539,118	600,450	419,094	469,601	527,402	586,167
Software Engineering Institute	129,316	130,141	147,400	157,001	129,316	130,141	147,400	157,001
Thomas Jefferson National Accelerator Facility	152,832	171,687	182,991	185,670	150,374	168,989	181,702	182,630
Nonprofit-administered FFRDCs	9,171,826	10,052,536	11,730,895	11,754,881	8,998,910	9,879,651	11,546,942	11,563,275
Aerospace Federally Funded Research and Development Center	1,152,833	1,259,428	1,318,429	1,386,475	1,147,041	1,251,725	1,309,782	1,375,531
Arroyo Center	40,856	42,433	37,714	45,514	40,856	42,433	37,714	45,514
Brookhaven National Laboratory	655,988	691,417	760,512	760,892	639,527	678,623	747,451	748,362
Center for Advanced Aviation System Development	189,490	186,163	186,463	200,867	164,992	166,246	163,783	178,207
Center for Communications and Computing	74,759	77,391	85,168	89,010	74,759	77,391	85,168	89,010
Center for Enterprise Modernization	235,436	258,155	281,401	202,634	235,317	258,155	281,230	202,236
Center for Naval Analyses	93,567	96,103	100,011	109,637	93,567	96,103	100,011	109,637
Center for Nuclear Waste Regulatory Analyses	4,323	4,405	5,031	5,281	3,595	3,467	4,407	5,102
CMS Alliance to Modernize Healthcare	286,693	281,709	248,842	188,326	286,693	281,709	248,842	188,326
Homeland Security Operational Analysis Center	52,984	66,264	77,563	56,663	52,984	66,264	77,563	56,663
Homeland Security Systems Engineering and Development Institute	183,261	217,908	255,498	162,439	181,702	216,456	250,334	162,060
Idaho National Laboratory ^b	637,579	653,100	1,617,015	NA	630,446	642,971	1,594,132	NA
National Biodefense Analysis and Countermeasures Center	45,870	41,321	50,470	44,266	45,869	41,321	50,470	44,266
National Cybersecurity Center of Excellence	27,955	23,010	23,557	29,616	27,955	23,010	23,557	29,616
National Defense Research Institute	61,097	67,157	71,499	79,304	61,097	67,157	71,499	79,304
National Renewable Energy Laboratory	603,356	718,852	898,498	879,428	536,683	648,671	847,755	827,343
National Security Engineering Center	1,286,520	1,370,949	1,442,573	1,504,115	1,282,762	1,367,998	1,431,657	1,493,714
Oak Ridge National Laboratory	1,803,543	2,019,259	2,113,418	2,286,846	1,789,100	2,000,646	2,091,191	2,258,500
Pacific Northwest National Laboratory	1,294,614	1,449,496	1,609,117	1,630,715	1,266,328	1,424,969	1,585,695	1,602,283

Table 8. Total and federally financed R&D expenditures at federally funded research and development centers, by FFRDC: FYs 2022–25

(Dollars in thousands)

FFRDC	Total				Federally financed			
	2022	2023	2024	2025	2022	2023	2024	2025
Project Air Force	46,517	48,729	47,810	54,987	46,517	48,729	47,810	54,987
Savannah River National Laboratory	182,654	244,736	253,483	249,166	179,848	241,518	250,382	245,815
Science and Technology Policy Institute	10,593	9,977	11,952	8,350	10,593	9,977	11,952	8,350
Systems and Analyses Center	201,338	224,574	234,871	248,119	200,679	224,112	234,557	247,901
Industry-administered FFRDCs	9,670,078	11,084,499	11,716,784	11,790,296	9,591,022	10,990,133	11,584,629	11,646,259
Frederick National Laboratory for Cancer Research	904,182	929,754	893,491	865,189	904,182	929,754	893,491	865,189
Lawrence Livermore National Laboratory	1,659,808	2,110,938	2,230,018	2,179,730	1,633,185	2,079,762	2,188,825	2,136,131
Los Alamos National Laboratory	3,294,559	3,768,323	3,958,302	4,076,960	3,273,429	3,742,718	3,918,269	4,031,401
Sandia National Laboratories	3,811,529	4,275,484	4,634,973	4,668,417	3,780,226	4,237,899	4,584,044	4,613,538

na = not applicable. NA = not available; imputed data not reported at this level.

FFRDC = federally funded research and development center.

^a On 1 October 2024, Green Bank Observatory was reincorporated into the National Radio Astronomy Observatory and is no longer a separate FFRDC.

^b In FY 2024, Idaho National Laboratory (INL) revised reporting methodology to align with reporting practices of other Department of Energy laboratories. INL now categorizes all work as R&D, except for manufacturing and security or protection projects.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey.

Table 9. Headcount and FTEs of R&D personnel at federally funded research and development centers, by personnel function: FYs 2022–25

(Number)

Personnel function	2022		2023		2024		2025	
	Headcount	FTEs	Headcount	FTEs	Headcount	FTEs	Headcount	FTEs
All personnel functions	100,397	76,491	101,485	78,684	102,712	81,288	96,266	76,559
Researchers	47,970	36,131	47,592	36,962	47,871	39,054	45,978	37,690
R&D technicians	25,921	20,195	26,285	21,126	25,514	20,556	23,487	18,870
R&D support staff	26,506	20,165	27,608	20,596	29,327	21,678	26,801	19,999

FTE = full-time equivalent.

Note(s):
FTE R&D personnel are calculated as the total working effort spent on R&D during a specific period divided by the total effort representing a full-time schedule within the same period.

Source(s):
National Center for Science and Engineering Statistics, FFRDC Research and Development Survey.

Table A-1. Response rates for the FFRDC Research and Development Survey, by question: FY 2025

(Number)

Question	All FFRDCs	All respondents ^a	Complete question responses	Partial question responses	Total question responses	Question nonresponses	Question response rate (%)
Question 1	41	40	40	0	40	0	100.0
Question 2	41	40	40	0	40	0	100.0
Question 3	41	40	40	0	40	0	100.0
Question 4	41	40	26	3	29	11	72.5
Question 5	41	40	39	0	39	1	97.5
Question 6	41	40	33	1	34	6	85.0

FFRDC = federally funded research and development center.

^a In FY 2025, one FFRDC did not respond to the survey and data for all questions were imputed.**Source(s):**

National Center for Science and Engineering Statistics, FFRDC Research and Development Survey, FY 2025.

Technical Notes

Survey Overview

Purpose. The FFRDC Research and Development Survey is conducted by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation (NSF). It is the primary source of information on separately accounted research and development (R&D) expenditures at federally funded research and development centers (FFRDCs) in the United States.

Data collection authority. The information is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the America COMPETES Reauthorization Act of 2010. The Office of Management and Budget control number for the FY 2025 FFRDC R&D Survey is 3145-0100, with an expiration date of 30 September 2028. NCSES has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN26-024).

Survey contractor. ICF.

Survey sponsor. NCSES.

Key Survey Information

Frequency. Annual.

Initial survey year. FY 2001.

Reference period. FY 2025.

Response unit. Establishment.

Sample or census. Census.

Population size. 41.

Sample size. The survey is a census of all known FFRDCs.

Survey Design

Target population. All FFRDCs.

Sampling frame. The total survey universe is identified through the Master Government List of FFRDCs (<https://ncses.nsf.gov/resource/master-gov-lists-ffrdc>). NSF is responsible for maintaining this list and queries all federal agencies annually to determine any changes to, additions to, or deletions from the list.

Sample design. The FFRDC R&D Survey is a census of all current FFRDCs identified on the Master Government List of FFRDCs.

Data Collection and Processing Methods

Data collection. The FY 2025 survey announcements were sent by email to all FFRDCs in November 2025. The data collection period concluded in April 2026. Respondents could choose to complete a questionnaire downloaded from the Web or use a Web-based data collection system to respond to the survey. Every effort was made to maintain close contact with respondents to preserve the consistency and continuity of the resulting data. Survey data reports were available on the survey website for each FFRDC; these reports showed comparisons between the current year and the 2 prior years of data and noted any substantive disparities.

Respondents using the Web-based data collection system were asked to explain significant differences between current year reporting and past year reporting while completing the questionnaire. Questionnaires were carefully examined by survey staff for completeness upon receipt. Reviews focused on unexplained missing data and explanations provided for changes in reporting patterns. If additional explanations or data revisions were needed, respondents were sent personalized emails asking them to provide any necessary revisions before the final processing and tabulation of data. These emails included a link to the Web-based collection system to help respondents view and correct their data.

Respondents were encouraged to correct prior year data, if necessary. When respondents updated or amended figures from past years, NCSES made corresponding changes to trend data in the FY 2025 data tables and to the underlying microdata. For accurate historical data, use only the most recently released data tables.

Mode. Respondents could respond to the survey by completing a PDF questionnaire downloaded from the Web or by using a Web-based data collection system. All FFRDCs submitted data using the Web-based survey.

Response rates. The FFRDC R&D survey was completed by 40 of the 41 FFRDCs included on the Master Government List of FFRDCs during FY 2025.

Data editing. The FFRDC R&D Survey was subject to very little editing; respondents were contacted and asked to resolve possible self-reporting issues themselves. Questionnaires were carefully examined by survey staff upon receipt. These reviews focused on unexplained missing data and explanations provided for changes in reporting patterns. If additional explanations or data revisions were needed, respondents were sent personalized email messages asking them to provide any necessary revisions before the final processing and tabulation of data.

Imputation. Missing values were imputed based on the previous year's reported data and the current year data reported by peer organizations. For the one FFRDC that had not responded by the closing date of the survey, R&D expenditures were imputed by applying inflationary and deflationary adjustments to the prior year's key values. The key values were total R&D expenditures (Question 1) and total executed operating budget (Question 5). The adjustments were ratios derived from the 2-year trend data of responding organizations with similar characteristics, including sponsoring agency and activity type on the NSF [Master Government List of FFRDCs](#). Values not identified as key values were imputed by applying ratios derived from the organization's previous year data.

In addition to imputation of unit nonresponse, missing values for full-time equivalents (FTEs) and headcount of researchers, R&D technicians, and R&D support staff (Question 6) were also imputed. The procedures combined statistical modeling to impute the total values, and then allocated the total to impute the subtypes using ratio-based allocation.

Weighting. FFRDC R&D Survey data were not weighted.

Variance estimation. No variance estimation techniques were used.

Survey Quality Measures

Sampling error. Because the FY 2025 survey was a survey distributed to all organizations in the universe, there was no sampling error.

Coverage error. Given the availability of a comprehensive FFRDC list, there is no known coverage error for this survey. FFRDCs are identified through the NSF [Master Government List of FFRDCs](#). NSF is responsible for maintaining the master list and queries all federal agencies annually to determine changes to, additions to, or deletions from the list.

Nonresponse error. Most FFRDCs have incorporated the data needed to complete most of the survey questions into their record-keeping systems. Eleven FFRDCs chose not to complete any of Question 4 of the survey, which asks for expenditures by type of cost. Those FFRDCs are managed by private companies or universities for whom cost structures are considered proprietary. Other FFRDCs answered some but not all sections of Question 4: two could not provide software and equipment

expenditures, and one could not provide equipment expenditures. One FFRDC did not report its operating budget (Question 5). Six FFRDCs chose not to complete Question 6 of the survey, which asks for FTEs and headcounts for R&D staff. All of those FFRDCs are managed by private companies for whom staffing structure information is considered proprietary. One FFRDC could not provide FTEs and headcounts for R&D support staff because they could not separate R&D support staff from administrative support staff. The totals referenced here include one FFRDC that did not respond to any questions and was considered a unit nonresponse. Variables for Questions 4 and 5 are not tabulated and are not included in the public use file. Question 6 values are included in data tables aggregated for all FFRDCs. However, they are not tabulated at the organizational level or included in the public use file.

Measurement error. NCSES discovered during the FY 2011 survey cycle that seven FFRDCs were including capital project expenditures in the R&D totals reported on the survey. Corrections made for the FY 2011 survey cycle lowered total expenditures by \$468 million. However, previous years still include an unknown amount of capital expenditures in the total. The amount is estimated to be less than \$500 million per year.

Prior to the FY 2011 survey, the five FFRDCs administered by the MITRE Corporation had reported only internally funded R&D expenditures. After discussions with NCSES, these five FFRDCs agreed to report all FY 2011 operating expenditures for R&D and to revise their data for FYs 2008–10.

NCSES discovered during the FY 2013 survey cycle that Los Alamos National Laboratory (LANL) was reporting some expenditures that were not for R&D, as defined by this survey. Corrections made for the FY 2013 survey cycle lowered the laboratory's total expenditures by \$349 million. LANL also was incorrectly reporting that all expenditures were for basic research. In corrections made for FY 2013, LANL reported that \$1,554 million (91%) of its total research expenditures was for applied research. LANL data from previous years still include an unknown amount of expenditures that were not for R&D and categorize all expenditures as basic research.

Prior to FY 2014, the Aerospace FFRDC reported only expenditures on internal R&D projects. After discussions with NCSES, 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. R&D expenditures increased by more than \$800 million each year.

Prior to the FY 2021 collection, NCSES discovered that the Green Bank Observatory had split from the National Radio Astronomy Observatory on 1 October 2016, both retained FFRDC status. For FY 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.

During the FY 2024 survey cycle, the Idaho National Laboratory (INL) changed reporting methodology to align with practices of other Department of Energy supported laboratories. INL began categorizing all projects as R&D except for manufacturing and for security and protection projects. INL's reported R&D expenditures increased from \$653 million in FY 2023 to \$1,617 million in FY 2024.

INL did not provide data for the FY 2025 survey cycle. Their totals were imputed.

Data Comparability (Changes)

Annual data are available for FYs 2001–25. When the review for consistency between each year's data and submissions in prior years reveals discrepancies, it is sometimes necessary to modify prior year data. For accurate historical data, use only the most recently released data tables. Individuals wishing to analyze trends other than those in the most recent NCSES publication are encouraged to contact NCSES for more information about the comparability of data over time.

Changes in survey coverage and population. Most years, there are some changes to the FFRDC population that may affect trend analyses. FFRDCs have been created, decertified, renamed, or restructured, as described below:

- On 20 December 2006, the National Biodefense Analysis and Countermeasure Center was created.

- Prior to FY 2009, the Center for Enterprise Modernization was listed as the Internal Revenue Service FFRDC.
- On 5 March 2009, the Homeland Security Studies and Analysis Institute and the Homeland Security Systems Engineering and Development Institute were created. These new FFRDCs replaced the Homeland Security Institute.
- On 1 October 2009, the National Solar Observatory split from the National Optical Astronomy Observatory, with both retaining their FFRDC status.
- On 2 September 2010, the Judiciary Engineering and Modernization Center was created.
- Prior to FY 2011, the National Security Engineering Center was listed as C3I FFRDC.
- On 1 October 2011, the National Astronomy and Ionosphere Center was decertified as an FFRDC.
- Prior to FY 2012, the Frederick National Laboratory for Cancer Research was listed as the National Cancer Institute at Frederick.
- On 27 September 2012, the Centers for Medicare and Medicaid Services FFRDC was created. On 15 August 2013, its name was changed to the CMS Alliance to Modernize Healthcare.
- Prior to FY 2013, the Systems and Analyses Center was listed as the Studies and Analyses Center.
- On 19 September 2014, the National Cybersecurity Center of Excellence was created.
- On 15 September 2016, the Homeland Security Operational Analysis Center was created.
- On 1 October 2016, Green Bank Observatory was split out from the National Radio Astronomy Observatory, both retained FFRDC status.
- The Homeland Security Studies and Analysis Institute was phased out on 31 October 2016.
- In June 2020, the National Optical Astronomy Observatory changed its name to NSF National Optical-Infrared Astronomy Research Laboratory or NSF's NOIRLab.
- The Judiciary Engineering and Modernization Center was decertified as an FFRDC in January 2021.
- On 1 October 2024, Green Bank Observatory was reincorporated back into the National Radio Astronomy Observatory FFRDC and is no longer a separate FFRDC.

Changes in questionnaire. FFRDCs are asked to provide R&D expenditures by source of funding and type of R&D. In FY 2016, NCSES added a question asking for R&D expenditures funded by seven specific federal agencies. In FY 2019, NCSES added a question asking which federal agencies not specifically listed in the previous question funded the expenditures. In FY 2022, NCSES added a question (Question 6) asking for FTEs and headcounts for personnel by R&D function.

Changes in reporting procedures or classification. The FFRDC R&D Survey has been conducted annually for university-administered FFRDCs since FY 1953 and for all FFRDCs since FY 2001.

Definitions

Federal agency. Any agency of the United States government. Expenditures were reported by seven specific agencies (Department of Defense; Department of Energy; Department of Health and Human Services, including the National Institutes of Health; Department of Homeland Security; Department of Transportation; National Aeronautics and Space Administration; and National Science Foundation). FFRDCs listed up to ten other agencies with corresponding expenditure amounts.

Fiscal year. FFRDC's financial year.

Full-time equivalent (FTE). Calculated as the total working effort spent on research during the fiscal year divided by the total effort representing a full-time schedule within the same period.

Headcount. The number of personnel paid from R&D accounts during the fiscal year.

Research and development (R&D). R&D activity is creative and systematic work undertaken to increase the stock of knowledge—including knowledge of humankind, culture, and society—and to devise new applications of available knowledge. R&D covers three activities: basic research, applied research, and experimental development. R&D does not include outreach, non-research training programs, capital projects (i.e., construction or renovation of research facilities), routine testing, or policy development.

R&D expenditures. Expenditures for R&D activities from the organization's current operating funds that were separately accounted for. For the purposes of the survey, R&D includes expenditures from funds designated for research. Expenditures came from internal or external funding and included recovered and unrecovered indirect costs. Funds passed through to subrecipient organizations were also included.

R&D functions.

- *Researchers.* Professionals engaged in the conception or creation of new knowledge, products, processes, methods, and systems and in the management of the projects concerned. Researchers contribute more to the creative aspects of R&D, whereas technicians provide technical support.
- *R&D technicians.* Persons whose main tasks require technical knowledge and experience in one or more fields of science or engineering but who contribute to R&D by performing technical tasks such as computer programming, data analysis, ensuring accurate testing, operating lab equipment, and preparing and processing samples under the supervision of researchers.
- *R&D support staff.* Employees not directly involved with the conduct of a research project but support the researchers and technicians. These employees might include clerical staff, financial and personnel administrators, report writers, patent agents, safety trainers, equipment specialists, and other related employees.

Source of funds.

- *U.S. federal government.* Any agency of the U.S. government. Federal funds that were passed through to the reporting organization to another organization were included.
- *State and local government.* Any state, county, municipality, or other local government entity in the United States, including state health agencies.
- *Business.* Domestic or foreign for-profit organizations. Funds from a company's nonprofit foundation were not reported here; they were reported under nonprofit organizations.
- *Nonprofit organizations.* Domestic or foreign nonprofit foundations and organizations. Funds from universities and colleges were not reported here; they were reported in all other sources.
- *All other sources.* Sources not reported in other categories, such as funds from foreign governments and foreign or U.S. universities.

Total operating budget. Total executed operating budget excluding capital construction costs.

Type of cost. R&D expenditures were reported in the following categories:

- *Salaries, wages, and fringe benefits.* Compensation for all R&D personnel, whether full time or part time, temporary or permanent, including salaries, wages, and fringe benefits paid from organization funds and from external support.
- *Software purchases.* Payments for all software, both purchases of software packages and license fees for systems.

- *Equipment.* Payments for movable equipment, including ancillary costs such as delivery and setup.
- *Subcontracts.* Payments to subcontractors or subrecipients for services on R&D projects.
- *Other direct costs.* Other costs that did not fit into one of the above categories, including (but not limited to) travel, computer usage fees, and supplies.
- *Indirect costs.* Included all indirect costs (overhead) associated with R&D projects.

Type of R&D. R&D expenditures were reported in the following categories:

- *Basic research.* Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.
- *Applied research.* Original investigation undertaken to acquire new knowledge. It is directed primarily toward a specific, practical aim or objective.
- *Experimental development.* Systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

Acknowledgments and Suggested Citation

Acknowledgments

NCSES thanks the FFRDCs that provided information for this report.

Suggested Citation

National Center for Science and Engineering Statistics (NCSES). 2026. *FFRDC Research and Development Expenditures: FY 2025*. NSF 26-323. Alexandria, VA: U.S. National Science Foundation. Available at <https://nces.nsf.gov/surveys/ffrdc-research-development/2025>.

Contact Us

National Center for Science and Engineering Statistics
Directorate for Social, Behavioral and Economic Sciences
U.S. National Science Foundation
Tel: (703) 292-8780
FIRS: (800) 877-8339
TDD: (800) 281-8749
Email: ncsesweb@nsf.gov