



National Center for Science and  
Engineering Statistics

# Federal Facilities Research and Development: Fiscal Year 2022

Data Tables | NSF 25-306 | November 07, 2024

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## General Notes

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These tables present the results of the Fiscal Year 2022 Federal Facilities Research and Development (FFRD) Survey from the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation.

NCSES has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN24-064).

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TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
All agencies	34,497,051	4,749,151	9,569,899	20,178,001	34,067,764	4,710,280	9,376,171	19,981,312	429,287	38,870	193,728	196,688
Department of Agriculture	1,685,343	712,151	782,628	190,564	1,661,254	707,051	766,601	187,602	24,089	5,101	16,027	2,962
Agricultural Research Service	1,237,476	618,738	494,990	123,748	1,237,476	618,738	494,990	123,748	0	0	0	0
Midwest Area	165,788	82,894	66,315	16,579	165,788	82,894	66,315	16,579	0	0	0	0
Northeast Area	261,199	130,600	104,480	26,120	261,199	130,600	104,480	26,120	0	0	0	0
Pacific West Area	208,801	104,400	83,520	20,880	208,801	104,400	83,520	20,880	0	0	0	0
Plains Area	314,563	157,282	125,825	31,456	314,563	157,282	125,825	31,456	0	0	0	0
Southeast Area	287,125	143,563	114,850	28,713	287,125	143,563	114,850	28,713	0	0	0	0
Animal and Plant Health Inspection Service	48,982	4,138	33,070	11,774	36,005	2,516	23,337	10,152	12,977	1,622	9,732	1,622
Forest Pest Methods Laboratory	6,618	0	6,618	0	6,618	0	6,618	0	0	0	0	0
Insect Management and Molecular Diagnostics Laboratory	1,358	0	847	511	1,358	0	847	511	0	0	0	0
National Veterinary Services Laboratories/ Center for Veterinary Biologics	5,790	0	579	5,211	5,790	0	579	5,211	0	0	0	0
National Wildlife Research Center	33,101	4,138	24,826	4,138	20,125	2,516	15,093	2,516	12,977	1,622	9,732	1,622
Plant Pathogen Confirmatory Diagnostics Laboratory	1,665	0	0	1,665	1,665	0	0	1,665	0	0	0	0
Treatment and Inspection Methods Laboratory	450	0	200	250	450	0	200	250	0	0	0	0
Economic Research Service	78,038	0	78,038	0	78,038	0	78,038	0	0	0	0	0
Forest Service	299,844	88,756	160,621	50,467	288,731	85,277	154,327	49,127	11,113	3,479	6,294	1,339
Forest Products Laboratory	19,275	4,753	14,258	264	18,057	4,452	13,357	247	1,218	300	901	17
International Institute of Tropical Forestry	7,856	2,357	3,142	2,357	7,798	2,339	3,119	2,339	58	18	23	18
Northern Research Station	53,497	21,277	31,612	608	49,840	19,823	29,451	566	3,657	1,455	2,161	42
Pacific Northwest Research Station	52,212	14,032	28,826	9,355	48,895	13,141	26,994	8,760	3,318	892	1,832	594
Pacific Southwest Research Station	22,703	6,425	10,521	5,756	20,813	5,890	9,646	5,277	1,890	535	876	479
Rocky Mountain Research Station	76,579	21,284	39,416	15,879	75,739	21,051	38,983	15,705	841	234	433	174
Southern Research Station	50,301	17,756	26,458	6,086	50,170	17,710	26,389	6,071	132	46	69	16
Washington Office Research and Development	17,420	871	6,387	10,162	17,420	871	6,387	10,162	0	0	0	0
National Agricultural Statistics Service	10,226	0	5,651	4,575	10,226	0	5,651	4,575	0	0	0	0
Natural Resources Conservation Service	10,777	520	10,258	0	10,777	520	10,258	0	0	0	0	0
Plant Materials Center	10,258	0	10,258	0	10,258	0	10,258	0	0	0	0	0
Soil Science Research Branch	520	520	0	0	520	520	0	0	0	0	0	0
Department of Commerce	1,373,618	236,032	979,281	158,306	1,372,285	236,032	978,184	158,069	1,334	0	1,097	236
Census Bureau	156,946	0	115,793	41,153	155,612	0	114,696	40,917	1,334	0	1,097	236
National Institute of Standards and Technology	660,622	236,032	417,587	7,003	660,622	236,032	417,587	7,003	0	0	0	0
National Oceanic and Atmospheric Administration	548,741	0	438,592	110,149	548,741	0	438,592	110,149	0	0	0	0
Mission Support	21,517	0	19,279	2,237	21,517	0	19,279	2,237	0	0	0	0

TABLE 1

**Federal facility R&D expenditures, by type of R&D: FY 2022**

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Office of the Chief Administrative Officer	21,504	0	19,267	2,237	21,504	0	19,267	2,237	0	0	0	0
Office of the Chief Information Officer	13	0	12	1	13	0	12	1	0	0	0	0
National Environmental Satellite, Data, and Information Service	33,185	0	30,544	2,641	33,185	0	30,544	2,641	0	0	0	0
Center for Satellite Applications and Research	27,813	0	26,471	1,342	27,813	0	26,471	1,342	0	0	0	0
National Centers for Environmental Information	5,372	0	4,073	1,299	5,372	0	4,073	1,299	0	0	0	0
National Marine Fisheries Service	65,086	0	48,664	16,422	65,086	0	48,664	16,422	0	0	0	0
Alaska Fisheries Science Center	10,842	0	8,371	2,470	10,842	0	8,371	2,470	0	0	0	0
Alaska Regional Office	3,500	0	3,324	175	3,500	0	3,324	175	0	0	0	0
Greater Atlantic Region Fisheries Office	2,467	0	1,788	679	2,467	0	1,788	679	0	0	0	0
Northeast Fisheries Science Center	6,421	0	4,235	2,186	6,421	0	4,235	2,186	0	0	0	0
Northwest Fisheries Science Center	5,252	0	3,871	1,381	5,252	0	3,871	1,381	0	0	0	0
Office of Habitat Conservation	1,993	0	1,993	0	1,993	0	1,993	0	0	0	0	0
Office of Protected Resources	767	0	625	142	767	0	625	142	0	0	0	0
Office of Science and Technology	3,037	0	2,178	859	3,037	0	2,178	859	0	0	0	0
Office of Sustainable Fisheries	858	0	434	424	858	0	434	424	0	0	0	0
Pacific Island Fisheries Science Center	4,380	0	3,040	1,340	4,380	0	3,040	1,340	0	0	0	0
Pacific Islands Regional Office	1,978	0	1,554	425	1,978	0	1,554	425	0	0	0	0
Southeast Fisheries Science Center	8,142	0	4,888	3,254	8,142	0	4,888	3,254	0	0	0	0
Southeast Regional Office	3,597	0	2,425	1,171	3,597	0	2,425	1,171	0	0	0	0
Southwest Fisheries Science Center	5,811	0	4,194	1,617	5,811	0	4,194	1,617	0	0	0	0
West Coast Region	6,042	0	5,744	297	6,042	0	5,744	297	0	0	0	0
National Ocean Service	46,567	0	36,751	9,815	46,567	0	36,751	9,815	0	0	0	0
Center for Operational Oceanographic Products and Services	1,392	0	66	1,326	1,392	0	66	1,326	0	0	0	0
Integrated Ocean Observing System	1,968	0	1,609	359	1,968	0	1,609	359	0	0	0	0
National Centers for Coastal Ocean Science	27,813	0	26,471	1,342	27,813	0	26,471	1,342	0	0	0	0
National Geodetic Survey	7,123	0	3,191	3,932	7,123	0	3,191	3,932	0	0	0	0
Office for Coastal Management	143	0	141	2	143	0	141	2	0	0	0	0
Office of Response and Restoration	1,213	0	708	504	1,213	0	708	504	0	0	0	0
Office of the Coast Survey	6,914	0	4,566	2,349	6,914	0	4,566	2,349	0	0	0	0
National Weather Service	20,210	0	3,813	16,397	20,210	0	3,813	16,397	0	0	0	0
National Centers for Environmental Prediction	11,695	0	3,163	8,532	11,695	0	3,163	8,532	0	0	0	0
Office of Science and Technology Integration	2,258	0	650	1,608	2,258	0	650	1,608	0	0	0	0
Office of Water Prediction	6,257	0	0	6,257	6,257	0	0	6,257	0	0	0	0
Oceanic and Atmospheric Research	336,599	0	274,383	62,216	336,599	0	274,383	62,216	0	0	0	0

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Air Resources Laboratory	8,013	0	6,097	1,917	8,013	0	6,097	1,917	0	0	0	0
Atlantic Oceanographic and Meteorological Laboratory	25,169	0	18,700	6,469	25,169	0	18,700	6,469	0	0	0	0
Chemical Sciences Laboratory	21,670	0	19,794	1,876	21,670	0	19,794	1,876	0	0	0	0
Climate Program Office	36,844	0	25,262	11,582	36,844	0	25,262	11,582	0	0	0	0
Earth System Research Laboratories	2,995	0	2,127	868	2,995	0	2,127	868	0	0	0	0
Geophysical Fluid Dynamics Laboratory	26,840	0	24,860	1,981	26,840	0	24,860	1,981	0	0	0	0
Global Monitoring Laboratory	18,811	0	16,919	1,892	18,811	0	16,919	1,892	0	0	0	0
Global Ocean Monitoring and Observing Program	16,745	0	10,206	6,539	16,745	0	10,206	6,539	0	0	0	0
Global Systems Laboratory	15,959	0	8,796	7,163	15,959	0	8,796	7,163	0	0	0	0
Great Lakes Environmental Research Laboratory	12,660	0	12,568	92	12,660	0	12,568	92	0	0	0	0
National Sea Grant College Program	21,562	0	20,810	752	21,562	0	20,810	752	0	0	0	0
National Severe Storms Laboratory	26,747	0	20,769	5,978	26,747	0	20,769	5,978	0	0	0	0
Ocean Acidification Program	1,475	0	1,471	4	1,475	0	1,471	4	0	0	0	0
Office of Ocean Exploration and Research	24,242	0	23,401	841	24,242	0	23,401	841	0	0	0	0
Office of Research Transition and Application	7,988	0	6,616	1,372	7,988	0	6,616	1,372	0	0	0	0
Pacific Marine Environment Laboratory	26,030	0	21,173	4,858	26,030	0	21,173	4,858	0	0	0	0
Physical Sciences Laboratory	19,840	0	16,962	2,877	19,840	0	16,962	2,877	0	0	0	0
Weather Program Office	23,007	0	17,852	5,156	23,007	0	17,852	5,156	0	0	0	0
Office of Marine and Aviation Operations	25,577	0	25,156	420	25,577	0	25,156	420	0	0	0	0
Marine and Aviation Operations Center	5,424	0	5,004	420	5,424	0	5,004	420	0	0	0	0
National Oceanic and Atmospheric Administration	20,152	0	20,152	0	20,152	0	20,152	0	0	0	0	0
National Telecommunications and Information Administration	7,310	i	7,310	i	7,310	i	7,310	i	0	i	0	i
Institute for Telecommunication Sciences	7,310	i	7,310	i	7,310	i	7,310	i	0	i	0	i
Department of Defense	20,864,136	763,485	2,784,669	17,315,982	20,680,994	763,377	2,757,171	17,160,446	183,142	107	27,498	155,537
Defense Information Systems Agency	64,816	0	0	64,816	63,366	0	0	63,366	1,450	0	0	1,450
Department of the Air Force	6,364,822	i	1,225,972	i	6,364,822	i	1,225,972	i	0	i	0	i
Materiel Command	6,364,822	i	1,225,972	i	6,364,822	i	1,225,972	i	0	i	0	i
Air Force Civil Engineer Center	27,922	i	0	i	27,922	i	0	i	0	i	0	i
Air Force Life Cycle Management Center	2,560,962	i	0	i	2,560,962	i	0	i	0	i	0	i
Air Force Nuclear Weapons Center	511,311	i	0	i	511,311	i	0	i	0	i	0	i
Air Force Research Laboratory	2,670,981	i	1,225,972	i	2,670,981	i	1,225,972	i	0	i	0	i
Air Force Test Center	593,645	i	0	i	593,645	i	0	i	0	i	0	i
Department of the Army	5,816,747	273,149	997,694	4,545,904	5,765,621	273,149	971,580	4,520,892	51,126	0	26,114	25,012
Army Cyber Command	455,350	i	78,102	i	455,350	i	78,102	i	0	i	0	i

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Army Engineer Research and Development Center	725,537	20,058	103,211	602,268	718,545	20,058	102,184	596,303	6,992	0	1,027	5,965
Army Medical Research and Development Command	472,520	27,494	207,055	237,970	458,435	27,494	193,037	237,905	14,085	0	14,019	66
Army Research Institute for the Behavioral and Social Sciences	455,350 i	21,383 i	78,102 i	355,865 i	455,350 i	21,383 i	78,102 i	355,865 i	0 i	0 i	0 i	0 i
Combat Capabilities Development Command (DEVCOM)	3,630,576	182,018	515,149	2,933,410	3,630,552	182,018	515,131	2,933,404	24	0	18	6
Armaments Center	708,689	3,221	101,516	603,953	708,672	3,221	101,498	603,953	18	0	18	0
Army Research Laboratory	251,882	61,449	88,896	101,536	251,882	61,449	88,896	101,536	0	0	0	0
Aviation and Missile Center	1,920,096	17,042	199,335	1,703,719	1,920,090	17,042	199,335	1,703,713	6	0	0	6
Chemical Biological Center	102,085	3,725	12,025	86,335	102,085	3,725	12,025	86,335	0	0	0	0
Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance Center	214,162	2,100	35,802	176,260	214,162	2,100	35,802	176,260	0	0	0	0
Data and Analysis Center	10,018	0	7,378	2,640	10,018	0	7,378	2,640	0	0	0	0
DEVCOM Headquarters	88,100	16,834	1,131	70,135	88,100	16,834	1,131	70,135	0	0	0	0
Ground Vehicle Systems Center	236,569	75,106	31,837	129,626	236,569	75,106	31,837	129,626	0	0	0	0
Soldier Center	98,974	2,541	37,228	59,206	98,974	2,541	37,228	59,206	0	0	0	0
Space and Missile Defense Command	77,414	814	16,075	60,525	47,388	814	5,024	41,550	30,026	0	11,051	18,975
Department of the Navy	5,783,576	236,690	561,003	4,985,883	5,662,867	236,583	559,619	4,866,665	120,709	107	1,384	119,218
Bureau of Medicine and Surgery	129,796	18,897	68,364	42,535	128,050	18,790	66,981	42,279	1,746	107	1,384	255
Naval Medical Research Command <sup>a</sup>	129,796	18,897	68,364	42,535	128,050	18,790	66,981	42,279	1,746	107	1,384	255
Naval Health Research Center	26,826	5,538	17,484	3,804	26,530	5,538	17,188	3,804	296	0	296	0
Naval Medical Research Unit - Dayton	22,122	1,759	3,097	17,266	22,122	1,759	3,097	17,266	0	0	0	0
Naval Medical Research Unit - INDO PACIFIC	1,314	0	0	1,314	1,314	0	0	1,314	0	0	0	0
Naval Medical Research Unit - San Antonio	11,803	1,903	2,416	7,484	11,764	1,864	2,416	7,484	39	39	0	0
Naval Medical Research Unit - South	9,466	5,847	2,015	1,604	8,310	5,778	928	1,604	1,156	68	1,088	0
Naval Submarine Medical Research Laboratory	8,990	525	4,384	4,080	8,990	525	4,384	4,080	0	0	0	0
Marine Corps	287,952 i	11,784 i	27,931 i	248,237 i	287,952 i	11,784 i	27,931 i	248,237 i	0 i	0 i	0 i	0 i
Naval Air Warfare Center Aircraft Division	857,385	1,538	4,558	851,288	738,422	1,538	4,558	732,326	118,963	0	0	118,963
Naval Air Warfare Center Weapon Division	777,721	3,719	22,073	751,928	777,721	3,719	22,073	751,928	0	0	0	0
Naval Facilities Engineering and Expeditionary Warfare Center	57,092	611	948	55,534	57,092	611	948	55,534	0	0	0	0
Naval Information Warfare Systems Command	565,094	10,824	49,168	505,102	565,094	10,824	49,168	505,102	0	0	0	0
Naval Information Warfare Center Atlantic	145,315	2,044	12,510	130,761	145,315	2,044	12,510	130,761	0	0	0	0
Naval Information Warfare Center Pacific	419,779	8,780	36,658	374,341	419,779	8,780	36,658	374,341	0	0	0	0
Naval Observatory	29,941 i	1,225 i	2,904 i	25,811 i	29,941 i	1,225 i	2,904 i	25,811 i	0 i	0 i	0 i	0 i
Naval Oceanographic Office	29,941 i	1,225 i	2,904 i	25,811 i	29,941 i	1,225 i	2,904 i	25,811 i	0 i	0 i	0 i	0 i
Naval Sea Systems Command Warfare Centers	2,180,415	20,580	138,245	2,021,590	2,180,415	20,580	138,245	2,021,590	0	0	0	0

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Naval Surface Warfare Center	1,842,591	17,143	106,587	1,718,861	1,842,591	17,143	106,587	1,718,861	0	0	0	0
Naval Undersea Warfare Center	337,824	3,437	31,658	302,729	337,824	3,437	31,658	302,729	0	0	0	0
Office of Naval Research	868,240	166,286	243,907	458,047	868,240	166,286	243,907	458,047	0	0	0	0
Naval Research Laboratory	868,240	166,286	243,907	458,047	868,240	166,286	243,907	458,047	0	0	0	0
Missile Defense Agency	420,524	0	0	420,524	420,524	0	0	420,524	0	0	0	0
Space Force	2,413,651	83,186	0	2,330,466	2,403,794	83,186	0	2,320,608	9,857	0	0	9,857
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	27,003	0	0	27,003	27,003	0	0	27,003	0	0	0	0
Commercial Satellite Communications (SATCOM)	20,205	0	0	20,205	20,205	0	0	20,205	0	0	0	0
Counter Communications System	5,895	0	0	5,895	5,895	0	0	5,895	0	0	0	0
Electro-Optical/ Infrared Weather Systems	1,862	0	0	1,862	1,862	0	0	1,862	0	0	0	0
Evolved Strategic SATCOM	108,519	0	0	108,519	108,519	0	0	108,519	0	0	0	0
Global Positioning Systems III Follow-on	138,971	0	0	138,971	138,971	0	0	138,971	0	0	0	0
Ground Based Optical Sensor System	45,388	0	0	45,388	45,388	0	0	45,388	0	0	0	0
Joint Execution and Tasking System for Space	2,087	0	0	2,087	2,087	0	0	2,087	0	0	0	0
National Security Space Launch	91,491	0	0	91,491	91,491	0	0	91,491	0	0	0	0
NAVSTAR Global Positioning System (User Equipment)	290,005	0	0	290,005	290,005	0	0	290,005	0	0	0	0
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	334,688	0	0	334,688	334,688	0	0	334,688	0	0	0	0
Next-Generation Overhead Persistent Infrared Block 0 Polar	343,144	0	0	343,144	343,144	0	0	343,144	0	0	0	0
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	311,140	0	0	311,140	311,140	0	0	311,140	0	0	0	0
Next-Generation Overhead Persistent Infrared Integration	23,796	0	0	23,796	23,796	0	0	23,796	0	0	0	0
Next-Generation Overhead Persistent Infrared Space Mod Initiative	56,529	0	0	56,529	56,529	0	0	56,529	0	0	0	0
Polar MILSATCOM Enhanced Polar System Recapitalization	50,402	0	0	50,402	50,402	0	0	50,402	0	0	0	0
Protected Tactical Enterprise Service	51,780	0	0	51,780	51,780	0	0	51,780	0	0	0	0
Protected Tactical Service	185,948	0	0	185,948	185,948	0	0	185,948	0	0	0	0
Rocket System Launch Program	21,481	0	0	21,481	21,481	0	0	21,481	0	0	0	0
Space Control Technology	31,361	0	0	31,361	31,361	0	0	31,361	0	0	0	0
Space Rapid Capabilities Office	83,186	83,186	0	0	83,186	83,186	0	0	0	0	0	0
Space Situation Awareness Systems	100,674	0	0	100,674	100,674	0	0	100,674	0	0	0	0
Space Situational Awareness Environmental Monitoring	364	0	0	364	364	0	0	364	0	0	0	0
Space Systems Prototype Transitions Assault Breaker II	49,909	0	0	49,909	49,909	0	0	49,909	0	0	0	0
Space Test and Training Range Development	742	0	0	742	742	0	0	742	0	0	0	0
Space Test Program	24,717	0	0	24,717	14,860	0	0	14,860	9,857	0	0	9,857



TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Weather System Follow-On	12,364	0	0	12,364	12,364	0	0	12,364	0	0	0	0
Department of Energy	100,005	4,975	85,004	10,026	99,508	4,975	84,582	9,951	497	0	422	75
National Energy Technology Laboratory	100,005	4,975	85,004	10,026	99,508	4,975	84,582	9,951	497	0	422	75
Department of Health and Human Services	3,359,936	1,280,379	1,831,264	248,292	3,321,851	1,266,372	1,817,533	237,946	38,085	14,007	13,731	10,346
Centers for Disease Control and Prevention	145,593	26,256	111,189	8,148	145,152	25,932	111,159	8,060	441	323	30	88
National Center for Emerging and Zoonotic Infectious Diseases	3,094	233	2,613	248	3,094	233	2,613	248	0	0	0	0
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	28,238	444	27,794	0	28,238	444	27,794	0	0	0	0	0
National Center for Immunization and Respiratory Diseases	44,783	0	41,657	3,126	44,783	0	41,657	3,126	0	0	0	0
National Center on Birth Defects and Developmental Disabilities	243	243	0	0	0	0	0	0	243	243	0	0
National Institute for Occupational Safety and Health	69,235	25,335	39,125	4,774	69,037	25,255	39,096	4,687	198	80	30	88
Food and Drug Administration	458,410	0	434,645	23,765	458,397	0	434,632	23,765	13	0	13	0
Center for Biologics Evaluation and Research	66,565	0	66,565	0	66,565	0	66,565	0	0	0	0	0
Center for Devices and Radiological Health	7,913	0	7,913	0	7,900	0	7,900	0	13	0	13	0
Center for Drug Evaluation and Research	73,608	0	73,608	0	73,608	0	73,608	0	0	0	0	0
Center for Food Safety and Applied Nutrition	95,059	0	71,294	23,765	95,059	0	71,294	23,765	0	0	0	0
Center for Tobacco Products	93,521	0	93,521	0	93,521	0	93,521	0	0	0	0	0
Center for Veterinary Medicine	20,184	0	20,184	0	20,184	0	20,184	0	0	0	0	0
National Center for Toxicological Research	88,645	0	88,645	0	88,645	0	88,645	0	0	0	0	0
Office of Regulatory Affairs	3,000	0	3,000	0	3,000	0	3,000	0	0	0	0	0
Oncology Center of Excellence	9,915	0	9,915	0	9,915	0	9,915	0	0	0	0	0
National Institutes of Health	2,755,933	1,254,123	1,285,430	216,379	2,718,302	1,240,440	1,271,741	206,121	37,631	13,684	13,689	10,258
Clinical Center	618,605	0	618,605	0	617,933	0	617,933	0	672	0	672	0
Eunice Kennedy Shriver National Institute of Child Health and Human Development	221,061	89,354	131,706	0	219,874	88,874	130,999	0	1,187	480	707	0
National Cancer Institute	104,607	68,300	5,605	30,702	103,604	68,300	4,602	30,702	1,003	0	1,003	0
National Center for Advancing Translational Sciences	150,884	0	150,884	0	149,644	0	149,644	0	1,241	0	1,241	0
National Center for Complementary and Integrative Health	15,500	4,727	10,773	0	15,440	4,667	10,773	0	60	60	0	0
National Eye Institute	105,189	104,291	0	898	99,753	99,753	0	0	5,435	4,537	0	898
National Heart, Lung, and Blood Institute	173,071	173,071	0	0	173,071	173,071	0	0	0	0	0	0
National Human Genome Research Institute	133,478	93,435	40,043	0	130,460	91,322	39,138	0	3,018	2,113	906	0
National Institute of Allergy and Infectious Diseases	425,092	189,271	117,032	118,789	403,809	185,832	108,451	109,526	21,283	3,439	8,581	9,263
National Institute of Arthritis and Musculoskeletal and Skin Diseases	57,611	1,070	56,541	0	57,611	1,070	56,541	0	0	0	0	0
National Institute of Biomedical Imaging and Bioengineering	5,900	0	3,200	2,700	5,900	0	3,200	2,700	0	0	0	0
National Institute of Dental and Craniofacial Research	70,666	40,893	29,773	0	70,666	40,893	29,773	0	0	0	0	0
National Institute of Diabetes and Digestive and Kidney Diseases	142,684	111,941	26,363	4,380	142,133	111,459	26,320	4,354	551	482	43	26

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
National Institute of Environmental Health Sciences	124,012	92,719	31,294	0	123,813	92,519	31,294	0	199	199	0	0
National Institute of Mental Health	1,128	0	0	1,128	1,128	0	0	1,128	0	0	0	0
National Institute of Neurological Disorders and Stroke	217,704	135,557	30,050	52,097	215,738	134,020	29,620	52,097	1,966	1,536	430	0
National Institute of Nursing Research	3,923	58	3,771	94	3,923	58	3,771	94	0	0	0	0
National Institute on Aging	4,299	0	4,299	0	4,299	0	4,299	0	0	0	0	0
National Institute on Alcohol Abuse and Alcoholism	48,509	34,981	13,528	0	48,384	34,856	13,528	0	125	125	0	0
National Institute on Deafness and Other Communication Disorders	29,974	19,826	6,570	3,579	29,701	19,731	6,462	3,507	273	94	107	71
National Institute on Drug Abuse	66,351	66,351	0	0	65,733	65,733	0	0	618	618	0	0
National Institute on Minority Health and Health Disparities	9,919	2,764	5,393	1,762	9,919	2,764	5,393	1,762	0	0	0	0
National Library of Medicine	25,766	25,516	0	250	25,766	25,516	0	250	0	0	0	0
Department of Homeland Security	39,016	20,300	8,216	10,500	39,016	20,300	8,216	10,500	0	0	0	0
Coast Guard	17,500	0	7,000	10,500	17,500	0	7,000	10,500	0	0	0	0
Acquisition Directorate, Research and Development Center	17,500	0	7,000	10,500	17,500	0	7,000	10,500	0	0	0	0
Cybersecurity and Infrastructure Security Agency	1,216	0	1,216	0	1,216	0	1,216	0	0	0	0	0
Science and Technology Directorate	20,300	20,300	0	0	20,300	20,300	0	0	0	0	0	0
Office of National Laboratories	20,300	20,300	0	0	20,300	20,300	0	0	0	0	0	0
Chemical Security Analysis Center	4,390	4,390	0	0	4,390	4,390	0	0	0	0	0	0
National Urban Security Technology Laboratory	3,480	3,480	0	0	3,480	3,480	0	0	0	0	0	0
Plum Island Animal Disease Center	1,550	1,550	0	0	1,550	1,550	0	0	0	0	0	0
Transportation Security Laboratory	10,880	10,880	0	0	10,880	10,880	0	0	0	0	0	0
Department of the Interior	1,170,882	132,230	841,112	197,540	1,033,063	112,574	750,482	170,007	137,818	19,655	90,631	27,532
Bureau of Land Management	301	130	171	0	301	130	171	0	0	0	0	0
Bureau of Ocean Energy Management	36,016	0	24,706	11,310	36,016	0	24,706	11,310	0	0	0	0
Bureau of Reclamation	16,124	0	9,674	6,450	16,124	0	9,674	6,450	0	0	0	0
Fish and Wildlife Service	24,000	0	24,000	0	24,000	0	24,000	0	0	0	0	0
Geological Survey	1,079,102	132,100	767,822	179,180	941,284	112,444	677,192	151,648	137,818	19,655	90,631	27,532
Core Science Systems Mission Area	126,178	5,878	102,687	17,613	121,638	5,632	99,006	17,000	4,540	245	3,681	614
Ecosystems Mission Area	387,056	27,214	321,937	37,906	369,430	25,980	307,307	36,143	17,626	1,234	14,630	1,763
Energy and Minerals Mission Area	88,126	24,757	51,835	11,534	87,623	24,616	51,537	11,470	503	140	298	64
Natural Hazards Mission Area	156,535	23,109	90,832	42,594	152,145	22,448	88,306	41,391	4,391	662	2,526	1,203
Water Resources Mission Area	321,206	51,142	200,531	69,534	210,448	33,768	131,035	45,645	110,758	17,374	69,495	23,889
National Park Service	15,339	0	14,739	600	15,339	0	14,739	600	0	0	0	0
Department of Transportation	129,610	0	129,610	0	85,372	0	85,372	0	44,238	0	44,238	0
Federal Aviation Administration	74,873	0	74,873	0	31,529	0	31,529	0	43,344	0	43,344	0

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Office of Aerospace Medicine	16,319	0	16,319	0	16,319	0	16,319	0	0	0	0	0
Office of NextGen	58,554	0	58,554	0	15,210	0	15,210	0	43,344	0	43,344	0
Federal Highway Administration	31,961	0	31,961	0	31,067	0	31,067	0	894	0	894	0
Intelligence Transportation Systems Joint Program Office	15,026	0	15,026	0	14,888	0	14,888	0	137	0	137	0
Office of Administrations	11,000	0	11,000	0	10,509	0	10,509	0	491	0	491	0
Office of Operations	1,999	0	1,999	0	1,910	0	1,910	0	89	0	89	0
Office of Planning	653	0	653	0	623	0	623	0	29	0	29	0
Office of Research, Development, and Technology	3,283	0	3,283	0	3,137	0	3,137	0	147	0	147	0
National Highway Traffic Safety Administration	3,634	0	3,634	0	3,634	0	3,634	0	0	0	0	0
Office of Vehicle Safety Research	3,634	0	3,634	0	3,634	0	3,634	0	0	0	0	0
Vehicle Research and Test Center	3,634	0	3,634	0	3,634	0	3,634	0	0	0	0	0
Office of the Assistant Secretary for Research and Technology	19,142	0	19,142	0	19,142	0	19,142	0	0	0	0	0
John A. Volpe National Transportation Systems Center	19,142	0	19,142	0	19,142	0	19,142	0	0	0	0	0
Department of Veterans Affairs	1,529,302	578,452	918,189	32,662	1,529,302	578,452	918,189	32,662	0	0	0	0
Office of Research and Development Central Office	113,943	78,726	35,100	117	113,943	78,726	35,100	117	0	0	0	0
Veterans Integrated Services Network (VISN) 1: New England Health Care System	248,067	26,306	217,432	4,330	248,067	26,306	217,432	4,330	0	0	0	0
Bedford Health Care System	12,543	2,449	9,833	261	12,543	2,449	9,833	261	0	0	0	0
Boston Health Care System, Jamaica Plain Campus	159,315	13,629	143,993	1,693	159,315	13,629	143,993	1,693	0	0	0	0
Central Western Massachusetts Health Care	1,613	182	1,431	0	1,613	182	1,431	0	0	0	0	0
Connecticut Health Care System, West Haven Medical Center	45,873	5,736	38,926	1,211	45,873	5,736	38,926	1,211	0	0	0	0
Manchester Medical Center	144	144	0	0	144	144	0	0	0	0	0	0
Providence Medical Center	19,570	1,910	16,621	1,039	19,570	1,910	16,621	1,039	0	0	0	0
Togus Maine Health Care System	292	0	292	0	292	0	292	0	0	0	0	0
White River Junction Medical Center	8,717	2,256	6,336	124	8,717	2,256	6,336	124	0	0	0	0
VISN 2: New York/ New Jersey Veterans Health Care Network	53,168	27,051	24,166	1,951	53,168	27,051	24,166	1,951	0	0	0	0
Bronx Health Care, James J. Peters Medical Center	27,179	11,481	14,282	1,416	27,179	11,481	14,282	1,416	0	0	0	0
New Jersey Health Care	6,282	3,317	2,824	140	6,282	3,317	2,824	140	0	0	0	0
New York Harbor Health Care	7,626	4,328	3,131	167	7,626	4,328	3,131	167	0	0	0	0
Northport Medical Center	4,139	3,155	984	0	4,139	3,155	984	0	0	0	0	0
Western New York Health Care, Buffalo Medical Center	7,942	4,771	2,944	227	7,942	4,771	2,944	227	0	0	0	0
VISN 4: Health Care	44,924	14,197	28,719	2,008	44,924	14,197	28,719	2,008	0	0	0	0
Coatesville Medical Center	154	0	153	1	154	0	153	1	0	0	0	0
Philadelphia Health Care, Corporal Michael J. Crescenz Medical Center	20,663	5,528	14,260	875	20,663	5,528	14,260	875	0	0	0	0
Pittsburgh Medical Center-University Drive	24,093	8,669	14,294	1,130	24,093	8,669	14,294	1,130	0	0	0	0

TABLE 1

**Federal facility R&D expenditures, by type of R&D: FY 2022**

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Wilkes-Barre Medical Center	14	0	12	2	14	0	12	2	0	0	0	0
VISN 5: Capitol Health Care Network	40,732	29,178	10,890	664	40,732	29,178	10,890	664	0	0	0	0
Huntington Health Care, Hershel (Woody) Williams Medical Center	1,223	1,141	82	0	1,223	1,141	82	0	0	0	0	0
Maryland Health Care, Baltimore Medical Center	23,383	16,550	6,228	605	23,383	16,550	6,228	605	0	0	0	0
Washington DC Health Care, Washington Medical Center	16,126	11,487	4,581	58	16,126	11,487	4,581	58	0	0	0	0
VISN 6: Mid-Atlantic Health Care Network	55,346	15,969	37,955	1,422	55,346	15,969	37,955	1,422	0	0	0	0
Asheville Health Care, Charles George Medical Center	778	275	503	0	778	275	503	0	0	0	0	0
Durham Medical Center	33,256	2,552	29,644	1,060	33,256	2,552	29,644	1,060	0	0	0	0
Hampton Medical Center	250	130	121	0	250	130	121	0	0	0	0	0
Richmond Health Care, Hunter Holmes McGuire Hospital	13,915	9,317	4,363	235	13,915	9,317	4,363	235	0	0	0	0
Salem Medical Center	3,703	1,838	1,738	127	3,703	1,838	1,738	127	0	0	0	0
Salisbury Health Care, W.G. (Bill) Hefner Salisbury Medical Center	3,443	1,857	1,586	0	3,443	1,857	1,586	0	0	0	0	0
VISN 7: Southeast Network	88,038	45,034	40,205	2,799	88,038	45,034	40,205	2,799	0	0	0	0
Atlanta Medical Center	33,002	16,662	14,644	1,696	33,002	16,662	14,644	1,696	0	0	0	0
Augusta Health Care, Charlie Norwood Medical Center	5,240	4,339	900	0	5,240	4,339	900	0	0	0	0	0
Birmingham Medical Center	11,113	5,602	5,352	158	11,113	5,602	5,352	158	0	0	0	0
Charleston Health Care, Ralph H. Johnson Medical Center	31,940	14,712	16,345	883	31,940	14,712	16,345	883	0	0	0	0
Columbia South Carolina Health Care, William Jennings Bryan Dorn Medical Center	4,253	2,909	1,306	38	4,253	2,909	1,306	38	0	0	0	0
Tuscaloosa Medical Center	2,490	809	1,658	23	2,490	809	1,658	23	0	0	0	0
VISN 8: Sunshine Health Care Network	39,065	18,953	18,582	1,530	39,065	18,953	18,582	1,530	0	0	0	0
Bay Pines Health Care System	2,316	1,498	818	0	2,316	1,498	818	0	0	0	0	0
Caribbean Health Care System	526	526	0	0	526	526	0	0	0	0	0	0
Miami Health Care System	11,126	7,043	3,956	127	11,126	7,043	3,956	127	0	0	0	0
North Florida/ South Georgia Health Care System	12,506	1,879	9,467	1,160	12,506	1,879	9,467	1,160	0	0	0	0
Orlando Medical Center	592	293	293	6	592	293	293	6	0	0	0	0
Tampa Health Care, James A. Haley Veterans' Hospital	11,999	7,714	4,047	238	11,999	7,714	4,047	238	0	0	0	0
VISN 9: MidSouth Health Care Network	51,828	35,551	16,092	185	51,828	35,551	16,092	185	0	0	0	0
Lexington Medical Center (Troy Bowling Campus)	5,146	3,806	1,284	56	5,146	3,806	1,284	56	0	0	0	0
Louisville Health Care, Robley Rex Medical Center	3,476	2,825	619	31	3,476	2,825	619	31	0	0	0	0
Memphis Medical Center	7,373	4,022	3,351	0	7,373	4,022	3,351	0	0	0	0	0
Mountain Home Health Care, James H. Quillen Medical Center	3,218	2,679	518	22	3,218	2,679	518	22	0	0	0	0
Tennessee Valley Health Care, Nashville Medical Center	32,614	22,218	10,320	77	32,614	22,218	10,320	77	0	0	0	0
VISN 10: Health Care System	107,300	44,616	59,449	3,235	107,300	44,616	59,449	3,235	0	0	0	0
Ann Arbor Health Care System	31,274	8,063	22,718	493	31,274	8,063	22,718	493	0	0	0	0

TABLE 1

**Federal facility R&D expenditures, by type of R&D: FY 2022**

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Battle Creek Medical Center	5	0	4	1	5	0	4	1	0	0	0	0
Cincinnati Medical Center	7,700	6,536	1,148	16	7,700	6,536	1,148	16	0	0	0	0
Dayton Medical Center	1,167	526	641	0	1,167	526	641	0	0	0	0	0
Detroit Health Care, John D. Dingell Medical Center	9,562	4,355	4,664	543	9,562	4,355	4,664	543	0	0	0	0
Indiana Health Care, Richard L. Roudebush Medical Center	27,341	14,136	13,031	175	27,341	14,136	13,031	175	0	0	0	0
Northeast Ohio Health Care, Louis Stokes Cleveland Medical Center	30,251	11,001	17,243	2,007	30,251	11,001	17,243	2,007	0	0	0	0
VISN 12: Great Lakes Health Care System	75,386	31,855	41,885	1,646	75,386	31,855	41,885	1,646	0	0	0	0
Chicago Health Care, Jesse Brown Medical Center	19,642	16,079	3,343	219	19,642	16,079	3,343	219	0	0	0	0
Hines Health Care, Edward Hines Junior Hospital	29,727	2,681	25,978	1,068	29,727	2,681	25,978	1,068	0	0	0	0
Madison Health Care, William S. Middleton Memorial Veterans' Hospital	18,242	9,089	9,003	150	18,242	9,089	9,003	150	0	0	0	0
Milwaukee Health Care, Clement J. Zablocki Medical Center	7,776	4,006	3,562	209	7,776	4,006	3,562	209	0	0	0	0
VISN 15: Heartland Health Care Network	12,330	9,271	3,049	10	12,330	9,271	3,049	10	0	0	0	0
Kansas City Medical Center	4,515	3,823	693	0	4,515	3,823	693	0	0	0	0	0
St. Louis Health Care, John J. Cochran Veterans Hospital	7,814	5,448	2,356	10	7,814	5,448	2,356	10	0	0	0	0
VISN 16: South Central Health Care Network	47,956	15,888	31,531	536	47,956	15,888	31,531	536	0	0	0	0
Central Arkansas Health Care, Eugene J. Towbin Health Care Center	13,208	5,343	7,673	193	13,208	5,343	7,673	193	0	0	0	0
Houston Health Care, Michael E. DeBakey Medical Center	26,763	3,824	22,596	343	26,763	3,824	22,596	343	0	0	0	0
Jackson Health Care, G.V. (Sonny) Montgomery Medical Center	1,119	1,119	0	0	1,119	1,119	0	0	0	0	0	0
Shreveport Health Care, Overton Brooks Medical Center	497	193	304	0	497	193	304	0	0	0	0	0
Southeast Louisiana Health Care System	6,368	5,409	959	0	6,368	5,409	959	0	0	0	0	0
VISN 17: Heart of Texas Health Care Network	27,491	16,748	10,347	396	27,491	16,748	10,347	396	0	0	0	0
Central Texas Health Care	3,132	1,752	1,219	161	3,132	1,752	1,219	161	0	0	0	0
North Texas, Dallas Medical Center	6,955	2,105	4,733	117	6,955	2,105	4,733	117	0	0	0	0
South Texas Health Care	17,403	12,891	4,394	118	17,403	12,891	4,394	118	0	0	0	0
VISN 19: Rocky Mountain Network	90,167	34,447	52,689	3,031	90,167	34,447	52,689	3,031	0	0	0	0
Eastern Colorado, Rocky Mountain Regional Medical Center	33,422	16,528	16,036	857	33,422	16,528	16,036	857	0	0	0	0
Eastern Oklahoma, Jack C. Montgomery Medical Center	436	258	178	0	436	258	178	0	0	0	0	0
Oklahoma City Medical Center	8,676	7,689	988	0	8,676	7,689	988	0	0	0	0	0
Salt Lake City Health Care	47,633	9,972	35,486	2,174	47,633	9,972	35,486	2,174	0	0	0	0
VISN 20: Northwest Network	111,071	26,798	81,697	2,575	111,071	26,798	81,697	2,575	0	0	0	0
Boise Medical Center	2,749	2,749	0	0	2,749	2,749	0	0	0	0	0	0
Portland Health Care System	48,302	13,392	33,540	1,370	48,302	13,392	33,540	1,370	0	0	0	0
Puget Sound Health Care, Seattle Medical Center	60,019	10,657	48,157	1,205	60,019	10,657	48,157	1,205	0	0	0	0
VISN 21: Sierra Pacific Network	148,509	42,692	103,907	1,910	148,509	42,692	103,907	1,910	0	0	0	0

TABLE 1

## Federal facility R&amp;D expenditures, by type of R&amp;D: FY 2022

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Central California Health Care System	409	339	71	0	409	339	71	0	0	0	0	0
Northern California Health Care System	7,744	3,904	3,558	281	7,744	3,904	3,558	281	0	0	0	0
Pacific Islands Health Care System	2,180	914	1,266	0	2,180	914	1,266	0	0	0	0	0
Palo Alto Health Care System	74,320	14,530	58,928	862	74,320	14,530	58,928	862	0	0	0	0
San Francisco Health Care System	62,638	22,656	39,221	762	62,638	22,656	39,221	762	0	0	0	0
Sierra Nevada Health Care System	577	10	562	5	577	10	562	5	0	0	0	0
Southern Nevada Health Care System	640	339	301	0	640	339	301	0	0	0	0	0
VISN 22: Desert Pacific Health Care Network	136,105	48,699	83,622	3,785	136,105	48,699	83,622	3,785	0	0	0	0
Greater Los Angeles, West Los Angeles Medical Center	31,993	14,350	17,058	585	31,993	14,350	17,058	585	0	0	0	0
Loma Linda Health Care System	5,570	2,373	2,976	220	5,570	2,373	2,976	220	0	0	0	0
Long Beach Health Care System	8,534	4,040	4,477	16	8,534	4,040	4,477	16	0	0	0	0
New Mexico Health Care System	26,569	3,458	23,110	0	26,569	3,458	23,110	0	0	0	0	0
Phoenix Health Care System	3,448	1,749	1,496	203	3,448	1,749	1,496	203	0	0	0	0
San Diego Health Care System	55,386	18,935	33,744	2,707	55,386	18,935	33,744	2,707	0	0	0	0
Southern Arizona Health Care System	4,606	3,793	760	54	4,606	3,793	760	54	0	0	0	0
VISN 23: Midwest Health Care Network	37,877	16,474	20,871	532	37,877	16,474	20,871	532	0	0	0	0
Fargo Health Care System	144	0	144	0	144	0	144	0	0	0	0	0
Minneapolis Health Care System	26,578	7,039	19,007	532	26,578	7,039	19,007	532	0	0	0	0
Nebraska-Western Iowa Health Care System	10,283	8,680	1,603	0	10,283	8,680	1,603	0	0	0	0	0
Sioux Falls Health Care System	823	755	68	0	823	755	68	0	0	0	0	0
St. Cloud Health Care	49	0	49	0	49	0	49	0	0	0	0	0
Other agencies	4,245,202	1,021,147	1,209,925	2,014,129	4,245,118	1,021,147	1,209,841	2,014,129	84	0	84	0
Environmental Protection Agency	292,399	0	214,914	77,486	292,399	0	214,914	77,486	0	0	0	0
Center for Computational Toxicology and Exposure	54,685	0	40,193	14,491	54,685	0	40,193	14,491	0	0	0	0
Center for Environmental Measurement and Modeling	84,799	0	62,327	22,472	84,799	0	62,327	22,472	0	0	0	0
Center for Environmental Solutions and Emergency Response	52,849	0	38,844	14,005	52,849	0	38,844	14,005	0	0	0	0
Center for Public Health and Environmental Assessment	82,802	0	60,860	21,943	82,802	0	60,860	21,943	0	0	0	0
Office of Science Advisor, Policy, and Engagement	17,264	0	12,689	4,575	17,264	0	12,689	4,575	0	0	0	0
Federal Trade Commission	1,492	0	1,492	0	1,492	0	1,492	0	0	0	0	0
Library of Congress	2,902	1,233	1,361	307	2,818	1,233	1,277	307	84	0	84	0
Digital Services Directorate	433	433	0	0	433	433	0	0	0	0	0	0
Preservation Directorate	2,469	801	1,361	307	2,385	801	1,277	307	84	0	84	0
National Aeronautics and Space Administration (NASA)	3,764,686	836,191	992,158	1,936,337	3,764,686	836,191	992,158	1,936,337	0	0	0	0
Ames Research Center	276,848	86,034	168,632	22,182	276,848	86,034	168,632	22,182	0	0	0	0

**TABLE 1**  
**Federal facility R&D expenditures, by type of R&D: FY 2022**

(Thousands of dollars)

Agency or facility	Total R&D expenditures				Federally funded				Nonfederally funded			
	All R&D	Basic research	Applied research	Experimental development	All federal R&D	Basic research	Applied research	Experimental development	All nonfederal R&D	Basic research	Applied research	Experimental development
Armstrong (Dryden) Flight Research Center	28,301	2,377	24,727	1,197	28,301	2,377	24,727	1,197	0	0	0	0
Glenn Research Center	240,357	34,470	151,168	54,719	240,357	34,470	151,168	54,719	0	0	0	0
Goddard Space Flight Center	1,067,753	214,780	57,671	795,302	1,067,753	214,780	57,671	795,302	0	0	0	0
Johnson Space Center	799,127	124,394	286,095	388,638	799,127	124,394	286,095	388,638	0	0	0	0
Kennedy Space Center	178,778	35,478	32,282	111,017	178,778	35,478	32,282	111,017	0	0	0	0
Langley Research Center	240,270	39,765	158,544	41,961	240,270	39,765	158,544	41,961	0	0	0	0
Marshall Space Flight Center	691,175	154,049	89,272	447,855	691,175	154,049	89,272	447,855	0	0	0	0
NASA Headquarters	233,119	144,831	22,950	65,339	233,119	144,831	22,950	65,339	0	0	0	0
Stennis Space Center	8,957	13	816	8,127	8,957	13	816	8,127	0	0	0	0
Smithsonian Institution	183,723 i	183,723 i	0 i	0 i	183,723 i	183,723 i	0 i	0 i	0 i	0 i	0 i	0 i
Archives of American Art	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
Center for Astrophysics	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
Smithsonian Astrophysical Observatory	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
National Museum of Natural History	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
Smithsonian Conservation Biology Institute	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
Smithsonian Environmental Research Center	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i
Smithsonian Tropical Research Institute	30,620 i	30,620 i	0 i	0 i	30,620 i	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i

i = more than 50% of the estimate is imputed, including cases where there is only one facility listed and its data are imputed.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command includes both the headquarters and listed subfacilities totals.

**Source(s):**  
National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

TABLE 2

## Federal DOD facility research, development, test, and evaluation expenditures, by type of RDT&amp;E: FY 2022

(Thousands of dollars)

Agency or facility	RDT&E expenditures						Federally funded RDT&E expenditures						Nonfederally funded RDT&E expenditures					
	All RDT&E	R&D				Operational system development	All federal RDT&E	R&D				Operational system development	All nonfederal RDT&E	R&D				Operational system development
		All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development	
All DOD agencies	22,429,339	20,864,136	763,485	2,784,669	17,315,982	1,565,203	22,158,225	20,680,994	763,377	2,757,171	17,160,446	1,477,231	271,113	183,142	107	27,498	155,537	87,971
Defense Information Systems Agency	298,440	64,816	0	0	64,816	233,624	222,456	63,366	0	0	63,366	159,090	75,984	1,450	0	0	1,450	74,534
Department of the Air Force	6,551,871	6,364,822	170,459	1,225,972	4,968,390	187,049	6,551,871	6,364,822	170,459	1,225,972	4,968,390	187,049	0	0	0	0	0	0
Materiel Command	6,551,871	6,364,822	170,459	1,225,972	4,968,390	187,049	6,551,871	6,364,822	170,459	1,225,972	4,968,390	187,049	0	0	0	0	0	0
Air Force Civil Engineer Center	27,922	27,922	0	0	27,922	0	27,922	27,922	0	0	27,922	0	0	0	0	0	0	0
Air Force Life Cycle Management Center	2,661,569	2,560,962	0	0	2,560,962	100,606	2,661,569	2,560,962	0	0	2,560,962	100,606	0	0	0	0	0	0
Air Force Nuclear Weapons Center	556,070	511,311	0	0	511,311	44,759	556,070	511,311	0	0	511,311	44,759	0	0	0	0	0	0
Air Force Research Laboratory	2,681,862	2,670,981	170,459	1,225,972	1,274,549	10,881	2,681,862	2,670,981	170,459	1,225,972	1,274,549	10,881	0	0	0	0	0	0
Air Force Test Center	624,447	593,645	0	0	593,645	30,803	624,447	593,645	0	0	593,645	30,803	0	0	0	0	0	0
Department of the Army	6,137,010	5,816,747	273,149	997,694	4,545,904	320,263	6,083,638	5,765,621	273,149	971,580	4,520,892	318,017	53,372	51,126	0	26,114	25,012	2,246
Army Cyber Command	477,297	455,350	21,383	78,102	355,865	21,947	477,297	455,350	21,383	78,102	355,865	21,947	0	0	0	0	0	0
Army Engineer Research and Development Center	726,443	725,537	20,058	103,211	602,268	906	719,452	718,545	20,058	102,184	596,303	906	6,992	6,992	0	1,027	5,965	0
Army Medical Research and Development Command	481,401	472,520	27,494	207,055	237,970	8,881	467,316	458,435	27,494	193,037	237,905	8,881	14,085	14,085	0	14,019	66	0
Army Research Institute for the Behavioral and Social Sciences	477,297	455,350	21,383	78,102	355,865	21,947	477,297	455,350	21,383	78,102	355,865	21,947	0	0	0	0	0	0
Combat Capabilities Development Command (DEVCOM)	3,894,911	3,630,576	182,018	515,149	2,933,410	264,335	3,894,888	3,630,552	182,018	515,131	2,933,404	264,335	24	24	0	18	6	0
Armaments Center	817,771	708,689	3,221	101,516	603,953	109,082	817,753	708,672	3,221	101,498	603,953	109,082	18	18	0	18	0	0
Army Research Laboratory	252,265	251,882	61,449	88,896	101,536	383	252,265	251,882	61,449	88,896	101,536	383	0	0	0	0	0	0
Aviation and Missile Center	2,049,415	1,920,096	17,042	199,335	1,703,719	129,319	2,049,409	1,920,090	17,042	199,335	1,703,713	129,319	6	6	0	0	6	0
Chemical Biological Center	108,950	102,085	3,725	102,085	86,335	6,865	108,950	102,085	3,725	102,085	86,335	6,865	0	0	0	0	0	0
Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance Center	231,570	214,162	2,100	35,802	176,260	17,408	231,570	214,162	2,100	35,802	176,260	17,408	0	0	0	0	0	0
Data and Analysis Center	10,018	10,018	0	7,378	2,640	0	10,018	10,018	0	7,378	2,640	0	0	0	0	0	0	0
DEVCOM Headquarters	88,100	88,100	16,834	1,131	70,135	0	88,100	88,100	16,834	1,131	70,135	0	0	0	0	0	0	0
Ground Vehicle Systems Center	236,569	236,569	75,106	31,837	129,626	0	236,569	236,569	75,106	31,837	129,626	0	0	0	0	0	0	0
Soldier Center	100,253	98,974	2,541	37,228	59,206	1,279	100,253	98,974	2,541	37,228	59,206	1,279	0	0	0	0	0	0
Space and Missile Defense Command	79,660	77,414	814	16,075	60,525	2,246	47,388	47,388	814	5,024	41,550	0	32,272	30,026	0	11,051	18,975	2,246
Department of the Navy	6,607,843	5,783,576	236,690	561,003	4,985,883	824,267	6,475,943	5,662,867	236,583	559,619	4,866,665	813,076	131,900	120,709	107	1,384	119,218	11,191
Bureau of Medicine and Surgery	132,340	129,796	18,897	68,364	42,535	2,544	130,594	128,050	18,790	66,981	42,279	2,544	1,746	1,746	107	1,384	255	0
Naval Medical Research Command <sup>a</sup>	132,340	129,796	18,897	68,364	42,535	2,544	130,594	128,050	18,790	66,981	42,279	2,544	1,746	1,746	107	1,384	255	0
Naval Health Research Center	27,215	26,826	5,538	17,484	3,804	389	26,919	26,530	5,538	17,188	3,804	389	296	296	0	296	0	0
Naval Medical Research Unit - Dayton	24,242	22,122	1,759	3,097	17,266	2,119	24,242	22,122	1,759	3,097	17,266	2,119	0	0	0	0	0	0
Naval Medical Research Unit - INDO PACIFIC	1,314	1,314	0	0	1,314	0	1,314	1,314	0	0	1,314	0	0	0	0	0	0	0
Naval Medical Research Unit - San Antonio	11,839	11,803	1,903	2,416	7,484	35	11,800	11,764	1,864	2,416	7,484	35	39	39	39	0	0	0
Naval Medical Research Unit - South	9,466	9,466	5,847	2,015	1,604	0	8,310	8,310	5,778	928	1,604	0	1,156	1,156	68	1,088	0	0
Naval Submarine Medical Research Laboratory	8,990	8,990	525	4,384	4,080	0	8,990	8,990	525	4,384	4,080	0	0	0	0	0	0	0



TABLE 2

Federal DOD facility research, development, test, and evaluation expenditures, by type of RDT&E: FY 2022

(Thousands of dollars)

Agency or facility	RDT&E expenditures						Federally funded RDT&E expenditures						Nonfederally funded RDT&E expenditures					
	All RDT&E	R&D				Operational system development	All federal RDT&E	R&D				Operational system development	All nonfederal RDT&E	R&D				Operational system development
		All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development	
Marine Corps	326,863 i	287,952 i	11,784 i	27,931 i	248,237 i	38,911 i	326,863 i	287,952 i	11,784 i	27,931 i	248,237 i	38,911 i	0 i	0 i	0 i	0 i	0 i	0 i
Naval Air Warfare Center Aircraft Division	891,612	857,385	1,538	4,558	851,288	34,228	772,650	738,422	1,538	4,558	732,326	34,228	118,963	118,963	0	0	118,963	0
Naval Air Warfare Center Weapon Division	956,186	777,721	3,719	22,073	751,928	178,465	956,186	777,721	3,719	22,073	751,928	178,465	0	0	0	0	0	0
Naval Facilities Engineering and Expeditionary Warfare Center	89,580	57,092	611	948	55,534	32,489	89,580	57,092	611	948	55,534	32,489	0	0	0	0	0	0
Naval Information Warfare Systems Command	805,548	565,094	10,824	49,168	505,102	240,454	794,357	565,094	10,824	49,168	505,102	229,263	11,191	0	0	0	0	11,191
Naval Information Warfare Center Atlantic	227,208	145,315	2,044	12,510	130,761	81,893	227,208	145,315	2,044	12,510	130,761	81,893	0	0	0	0	0	0
Naval Information Warfare Center Pacific	578,340	419,779	8,780	36,658	374,341	158,561	567,149	419,779	8,780	36,658	374,341	147,370	11,191	0	0	0	0	11,191
Naval Observatory	33,986 i	29,941 i	1,225 i	2,904 i	25,811 i	4,046 i	33,986 i	29,941 i	1,225 i	2,904 i	25,811 i	4,046 i	0 i	0 i	0 i	0 i	0 i	0 i
Naval Oceanographic Office	33,986 i	29,941 i	1,225 i	2,904 i	25,811 i	4,046 i	33,986 i	29,941 i	1,225 i	2,904 i	25,811 i	4,046 i	0 i	0 i	0 i	0 i	0 i	0 i
Naval Sea Systems Command Warfare Centers	2,433,226	2,180,415	20,580	138,245	2,021,590	252,811	2,433,226	2,180,415	20,580	138,245	2,021,590	252,811	0	0	0	0	0	0
Naval Surface Warfare Center	2,030,696	1,842,591	17,143	106,587	1,718,861	188,105	2,030,696	1,842,591	17,143	106,587	1,718,861	188,105	0	0	0	0	0	0
Naval Undersea Warfare Center	402,530	337,824	3,437	31,658	302,729	64,706	402,530	337,824	3,437	31,658	302,729	64,706	0	0	0	0	0	0
Office of Naval Research	904,515	868,240	166,286	243,907	458,047	36,274	904,515	868,240	166,286	243,907	458,047	36,274	0	0	0	0	0	0
Naval Research Laboratory	904,515	868,240	166,286	243,907	458,047	36,274	904,515	868,240	166,286	243,907	458,047	36,274	0	0	0	0	0	0
Missile Defense Agency	420,524	420,524	0	0	420,524	0	420,524	420,524	0	0	420,524	0	0	0	0	0	0	0
Space Force	2,413,651	2,413,651	83,186	0	2,330,466	0	2,403,794	2,403,794	83,186	0	2,320,608	0	9,857	9,857	0	0	9,857	0
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	27,003	27,003	0	0	27,003	0	27,003	27,003	0	0	27,003	0	0	0	0	0	0	0
Commercial Satellite Communications (SATCOM)	20,205	20,205	0	0	20,205	0	20,205	20,205	0	0	20,205	0	0	0	0	0	0	0
Counter Communications System	5,895	5,895	0	0	5,895	0	5,895	5,895	0	0	5,895	0	0	0	0	0	0	0
Electro-Optical/ Infrared Weather Systems	1,862	1,862	0	0	1,862	0	1,862	1,862	0	0	1,862	0	0	0	0	0	0	0
Evolved Strategic SATCOM	108,519	108,519	0	0	108,519	0	108,519	108,519	0	0	108,519	0	0	0	0	0	0	0
Global Positioning Systems III Follow-on	138,971	138,971	0	0	138,971	0	138,971	138,971	0	0	138,971	0	0	0	0	0	0	0
Ground Based Optical Sensor System	45,388	45,388	0	0	45,388	0	45,388	45,388	0	0	45,388	0	0	0	0	0	0	0
Joint Execution and Tasking System for Space	2,087	2,087	0	0	2,087	0	2,087	2,087	0	0	2,087	0	0	0	0	0	0	0
National Security Space Launch	91,491	91,491	0	0	91,491	0	91,491	91,491	0	0	91,491	0	0	0	0	0	0	0
NAVSTAR Global Positioning System (User Equipment)	290,005	290,005	0	0	290,005	0	290,005	290,005	0	0	290,005	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	334,688	334,688	0	0	334,688	0	334,688	334,688	0	0	334,688	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Block 0 Polar	343,144	343,144	0	0	343,144	0	343,144	343,144	0	0	343,144	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	311,140	311,140	0	0	311,140	0	311,140	311,140	0	0	311,140	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Integration	23,796	23,796	0	0	23,796	0	23,796	23,796	0	0	23,796	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Space Mod Initiative	56,529	56,529	0	0	56,529	0	56,529	56,529	0	0	56,529	0	0	0	0	0	0	0
Polar MILSATCOM Enhanced Polar System Recapitalization	50,402	50,402	0	0	50,402	0	50,402	50,402	0	0	50,402	0	0	0	0	0	0	0
Protected Tactical Enterprise Service	51,780	51,780	0	0	51,780	0	51,780	51,780	0	0	51,780	0	0	0	0	0	0	0
Protected Tactical Service	185,948	185,948	0	0	185,948	0	185,948	185,948	0	0	185,948	0	0	0	0	0	0	0

**TABLE 2**  
**Federal DOD facility research, development, test, and evaluation expenditures, by type of RDT&E: FY 2022**  
 (Thousands of dollars)

Agency or facility	RDT&E expenditures						Federally funded RDT&E expenditures						Nonfederally funded RDT&E expenditures						
	All RDT&E	R&D				Operational system development	All federal RDT&E	R&D				Operational system development	All nonfederal RDT&E	R&D				Operational system development	
		All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development			All R&D	Basic research	Applied research	Experimental development		
Rocket System Launch Program	21,481	21,481	0	0	21,481	0	21,481	21,481	0	0	21,481	0	0	0	0	0	0	0	0
Space Control Technology	31,361	31,361	0	0	31,361	0	31,361	31,361	0	0	31,361	0	0	0	0	0	0	0	0
Space Rapid Capabilities Office	83,186	83,186	83,186	0	0	0	83,186	83,186	83,186	0	0	0	0	0	0	0	0	0	0
Space Situation Awareness Systems	100,674	100,674	0	0	100,674	0	100,674	100,674	0	0	100,674	0	0	0	0	0	0	0	0
Space Situational Awareness Environmental Monitoring	364	364	0	0	364	0	364	364	0	0	364	0	0	0	0	0	0	0	0
Space Systems Prototype Transitions Assault Breaker II	49,909	49,909	0	0	49,909	0	49,909	49,909	0	0	49,909	0	0	0	0	0	0	0	0
Space Test and Training Range Development	742	742	0	0	742	0	742	742	0	0	742	0	0	0	0	0	0	0	0
Space Test Program	24,717	24,717	0	0	24,717	0	14,860	14,860	0	0	14,860	9,857	9,857	0	0	0	9,857	0	0
Weather System Follow-On	12,364	12,364	0	0	12,364	0	12,364	12,364	0	0	12,364	0	0	0	0	0	0	0	0

i = more than 50% of the estimate is imputed, including cases where there is only one facility listed and its data are imputed.

DOD = Department of Defense; RDT&E = Research, development, test, and evaluation.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command is for the headquarters only.

**Source(s):**  
 National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
All agencies	34,497,051	34,067,764	117,132	72,294	11,485	228,376	Yes
Department of Agriculture	1,685,343	1,661,254 i	8,510	974	1,963	12,643	Yes
Agricultural Research Service	1,237,476	1,237,476 i	0 i	0 i	0 i	0 i	No
Midwest Area	165,788	165,788 i	0 i	0 i	0 i	0 i	No
Northeast Area	261,199	261,199 i	0 i	0 i	0 i	0 i	No
Pacific West Area	208,801	208,801 i	0 i	0 i	0 i	0 i	No
Plains Area	314,563	314,563 i	0 i	0 i	0 i	0 i	No
Southeast Area	287,125	287,125 i	0 i	0 i	0 i	0 i	No
Animal and Plant Health Inspection Service	48,982	36,005	1,946	0	0	11,030	Yes
Forest Pest Methods Laboratory	6,618	6,618	0	0	0	0	Yes
Insect Management and Molecular Diagnostics Laboratory	1,358	1,358	0	0	0	0	Yes
National Veterinary Services Laboratories/ Center for Veterinary Biologics	5,790	5,790	0	0	0	0	Yes
National Wildlife Research Center	33,101	20,125	1,946	0	0	11,030	Yes
Plant Pathogen Confirmatory Diagnostics Laboratory	1,665	1,665	0	0	0	0	Yes
Treatment and Inspection Methods Laboratory	450	450	0	0	0	0	Yes
Economic Research Service	78,038	78,038	0	0	0	0	Yes
Forest Service	299,844	288,731	6,563	974	1,963	1,612	No
Forest Products Laboratory	19,275	18,057	11	720	267	220	No
International Institute of Tropical Forestry	7,856	7,798	0	0	21	38	No
Northern Research Station	53,497	49,840	1,409	30	1,242	976	No
Pacific Northwest Research Station	52,212	48,895	3,250	0	65	3	No
Pacific Southwest Research Station	22,703	20,813	1,443	49	260	137	No
Rocky Mountain Research Station	76,579	75,739	450	167	109	116	No
Southern Research Station	50,301	50,170	0	8	0	123	No
Washington Office Research and Development	17,420	17,420	0	0	0	0	No
National Agricultural Statistics Service	10,226	10,226	0	0	0	0	Yes
Natural Resources Conservation Service	10,777	10,777	0	0	0	0	Yes
Plant Materials Center	10,258	10,258	0	0	0	0	Yes
Soil Science Research Branch	520	520	0	0	0	0	Yes
Department of Commerce	1,373,618	1,372,285	23	147	1	1,163	Yes
Census Bureau	156,946	155,612	23	147	1	1,163	Yes
National Institute of Standards and Technology	660,622	660,622	0	0	0	0	Yes
National Oceanic and Atmospheric Administration	548,741	548,741	0	0	0	0	Not provided
Mission Support	21,517	21,517	0	0	0	0	Not provided
Office of the Chief Administrative Officer	21,504	21,504	0	0	0	0	Not provided

TABLE 3

## Federal facility R&amp;D expenditures, by source of funds: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Office of the Chief Information Officer	13	13	0	0	0	0	Not provided
National Environmental Satellite, Data, and Information Service	33,185	33,185	0	0	0	0	Not provided
Center for Satellite Applications and Research	27,813	27,813	0	0	0	0	Not provided
National Centers for Environmental Information	5,372	5,372	0	0	0	0	Not provided
National Marine Fisheries Service	65,086	65,086	0	0	0	0	Not provided
Alaska Fisheries Science Center	10,842	10,842	0	0	0	0	Not provided
Alaska Regional Office	3,500	3,500	0	0	0	0	Not provided
Greater Atlantic Region Fisheries Office	2,467	2,467	0	0	0	0	Not provided
Northeast Fisheries Science Center	6,421	6,421	0	0	0	0	Not provided
Northwest Fisheries Science Center	5,252	5,252	0	0	0	0	Not provided
Office of Habitat Conservation	1,993	1,993	0	0	0	0	Not provided
Office of Protected Resources	767	767	0	0	0	0	Not provided
Office of Science and Technology	3,037	3,037	0	0	0	0	Not provided
Office of Sustainable Fisheries	858	858	0	0	0	0	Not provided
Pacific Island Fisheries Science Center	4,380	4,380	0	0	0	0	Not provided
Pacific Islands Regional Office	1,978	1,978	0	0	0	0	Not provided
Southeast Fisheries Science Center	8,142	8,142	0	0	0	0	Not provided
Southeast Regional Office	3,597	3,597	0	0	0	0	Not provided
Southwest Fisheries Science Center	5,811	5,811	0	0	0	0	Not provided
West Coast Region	6,042	6,042	0	0	0	0	Not provided
National Ocean Service	46,567	46,567	0	0	0	0	Not provided
Center for Operational Oceanographic Products and Services	1,392	1,392	0	0	0	0	Not provided
Integrated Ocean Observing System	1,968	1,968	0	0	0	0	Not provided
National Centers for Coastal Ocean Science	27,813	27,813	0	0	0	0	Not provided
National Geodetic Survey	7,123	7,123	0	0	0	0	Not provided
Office for Coastal Management	143	143	0	0	0	0	Not provided
Office of Response and Restoration	1,213	1,213	0	0	0	0	Not provided
Office of the Coast Survey	6,914	6,914	0	0	0	0	Not provided
National Weather Service	20,210	20,210	0	0	0	0	Not provided
National Centers for Environmental Prediction	11,695	11,695	0	0	0	0	Not provided
Office of Science and Technology Integration	2,258	2,258	0	0	0	0	Not provided
Office of Water Prediction	6,257	6,257	0	0	0	0	Not provided
Oceanic and Atmospheric Research	336,599	336,599	0	0	0	0	Not provided
Air Resources Laboratory	8,013	8,013	0	0	0	0	Not provided
Atlantic Oceanographic and Meteorological Laboratory	25,169	25,169	0	0	0	0	Not provided

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures		Source of funds					Any public-private partnership funding <sup>a</sup>
			Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Chemical Sciences Laboratory	21,670		21,670	0	0	0	0	Not provided
Climate Program Office	36,844		36,844	0	0	0	0	Not provided
Earth System Research Laboratories	2,995		2,995	0	0	0	0	Not provided
Geophysical Fluid Dynamics Laboratory	26,840		26,840	0	0	0	0	Not provided
Global Monitoring Laboratory	18,811		18,811	0	0	0	0	Not provided
Global Ocean Monitoring and Observing Program	16,745		16,745	0	0	0	0	Not provided
Global Systems Laboratory	15,959		15,959	0	0	0	0	Not provided
Great Lakes Environmental Research Laboratory	12,660		12,660	0	0	0	0	Not provided
National Sea Grant College Program	21,562		21,562	0	0	0	0	Not provided
National Severe Storms Laboratory	26,747		26,747	0	0	0	0	Not provided
Ocean Acidification Program	1,475		1,475	0	0	0	0	Not provided
Office of Ocean Exploration and Research	24,242		24,242	0	0	0	0	Not provided
Office of Research Transition and Application	7,988		7,988	0	0	0	0	Not provided
Pacific Marine Environment Laboratory	26,030		26,030	0	0	0	0	Not provided
Physical Sciences Laboratory	19,840		19,840	0	0	0	0	Not provided
Weather Program Office	23,007		23,007	0	0	0	0	Not provided
Office of Marine and Aviation Operations	25,577		25,577	0	0	0	0	Not provided
Marine and Aviation Operations Center	5,424		5,424	0	0	0	0	Not provided
National Oceanic and Atmospheric Administration	20,152		20,152	0	0	0	0	Not provided
National Telecommunications and Information Administration	7,310	i	7,310	0	0	0	0	Not provided
Institute for Telecommunication Sciences	7,310	i	7,310	0	0	0	0	Not provided
Department of Defense	20,864,136		20,680,994	1,194	26,497	6,147	149,304	Yes
Defense Information Systems Agency	64,816		63,366	0	1,058	0	392	Yes
Department of the Air Force	6,364,822	i	6,364,822	0	0	0	0	Not provided
Materiel Command	6,364,822	i	6,364,822	0	0	0	0	Not provided
Air Force Civil Engineer Center	27,922	i	27,922	0	0	0	0	Not provided
Air Force Life Cycle Management Center	2,560,962	i	2,560,962	0	0	0	0	Not provided
Air Force Nuclear Weapons Center	511,311	i	511,311	0	0	0	0	Not provided
Air Force Research Laboratory	2,670,981	i	2,670,981	0	0	0	0	Not provided
Air Force Test Center	593,645	i	593,645	0	0	0	0	Not provided
Department of the Army	5,816,747		5,765,621	1,121	9,799	6,100	34,107	Yes
Army Cyber Command	455,350	i	455,350	0	0	0	0	Not provided
Army Engineer Research and Development Center	725,537		718,545	1,121	5,090	0	781	Yes
Army Medical Research and Development Command	472,520		458,435	0	4,684	6,100	3,301	No
Army Research Institute for the Behavioral and Social Sciences	455,350	i	455,350	0	0	0	0	Not provided

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Combat Capabilities Development Command (DEVCOM)	3,630,576	3,630,552	0	24	0	0	Yes
Armaments Center	708,689	708,672	0	18	0	0	Yes
Army Research Laboratory	251,882	251,882	0	0	0	0	Not provided
Aviation and Missile Center	1,920,096	1,920,090	0	6	0	0	No
Chemical Biological Center	102,085	102,085	0	0	0	0	Yes
Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance Center	214,162	214,162	0	0	0	0	Yes
Data and Analysis Center	10,018	10,018	0	0	0	0	Yes
DEVCOM Headquarters	88,100	88,100	0	0	0	0	Yes
Ground Vehicle Systems Center	236,569	236,569	0	0	0	0	Yes
Soldier Center	98,974	98,974	0	0	0	0	Yes
Space and Missile Defense Command	77,414	47,388	0	0	0	30,026	Yes
Department of the Navy	5,783,576	5,662,867	73	6,133	48	114,455	Yes
Bureau of Medicine and Surgery	129,796	128,050	0	30	48	1,668	Yes
Naval Medical Research Command <sup>b</sup>	129,796	128,050	0	30	48	1,668	Yes
Naval Health Research Center	26,826	26,530	0	0	0	296	Yes
Naval Medical Research Unit - Dayton	22,122	22,122	0	0	0	0	Yes
Naval Medical Research Unit - INDO PACIFIC	1,314	1,314	0	0	0	0	Yes
Naval Medical Research Unit - San Antonio	11,803	11,764	0	0	0	39	Yes
Naval Medical Research Unit - South	9,466	8,310	0	30	48	1,078	Yes
Naval Submarine Medical Research Laboratory	8,990	8,990	0	0	0	0	Yes
Marine Corps	287,952 i	287,952 i	0 i	0 i	0 i	0 i	Not provided
Naval Air Warfare Center Aircraft Division	857,385	738,422	73	6,103	0	112,787	No
Naval Air Warfare Center Weapon Division	777,721	777,721	0	0	0	0	Yes
Naval Facilities Engineering and Expeditionary Warfare Center	57,092	57,092	0	0	0	0	Yes
Naval Information Warfare Systems Command	565,094	565,094	0	0	0	0	Yes
Naval Information Warfare Center Atlantic	145,315	145,315	0	0	0	0	Yes
Naval Information Warfare Center Pacific	419,779	419,779	0	0	0	0	Yes
Naval Observatory	29,941 i	29,941 i	0 i	0 i	0 i	0 i	Not provided
Naval Oceanographic Office	29,941 i	29,941 i	0 i	0 i	0 i	0 i	Not provided
Naval Sea Systems Command Warfare Centers	2,180,415	2,180,415	0	0	0	0	Yes
Naval Surface Warfare Center	1,842,591	1,842,591	0	0	0	0	Yes
Naval Undersea Warfare Center	337,824	337,824	0	0	0	0	Yes
Office of Naval Research	868,240	868,240	0	0	0	0	No
Naval Research Laboratory	868,240	868,240	0	0	0	0	No
Missile Defense Agency	420,524	420,524	0	0	0	0	Yes

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Space Force	2,413,651	2,403,794	0	9,507	0	350	Yes
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	27,003	27,003	0	0	0	0	Yes
Commercial Satellite Communications (SATCOM)	20,205	20,205	0	0	0	0	Yes
Counter Communications System	5,895	5,895	0	0	0	0	Yes
Electro-Optical/ Infrared Weather Systems	1,862	1,862	0	0	0	0	Yes
Evolved Strategic SATCOM	108,519	108,519	0	0	0	0	Yes
Global Positioning Systems III Follow-on	138,971	138,971	0	0	0	0	Yes
Ground Based Optical Sensor System	45,388	45,388	0	0	0	0	Yes
Joint Execution and Tasking System for Space	2,087	2,087	0	0	0	0	Yes
National Security Space Launch	91,491	91,491	0	0	0	0	No
NAVSTAR Global Positioning System (User Equipment)	290,005	290,005	0	0	0	0	Yes
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	334,688	334,688	0	0	0	0	Yes
Next-Generation Overhead Persistent Infrared Block 0 Polar	343,144	343,144	0	0	0	0	No
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	311,140	311,140	0	0	0	0	Yes
Next-Generation Overhead Persistent Infrared Integration	23,796	23,796	0	0	0	0	Yes
Next-Generation Overhead Persistent Infrared Space Mod Initiative	56,529	56,529	0	0	0	0	Yes
Polar MILSATCOM Enhanced Polar System Recapitalization	50,402	50,402	0	0	0	0	Yes
Protected Tactical Enterprise Service	51,780	51,780	0	0	0	0	Yes
Protected Tactical Service	185,948	185,948	0	0	0	0	Yes
Rocket System Launch Program	21,481	21,481	0	0	0	0	Yes
Space Control Technology	31,361	31,361	0	0	0	0	Yes
Space Rapid Capabilities Office	83,186	83,186	0	0	0	0	Yes
Space Situation Awareness Systems	100,674	100,674	0	0	0	0	Yes
Space Situational Awareness Environmental Monitoring	364	364	0	0	0	0	Yes
Space Systems Prototype Transitions Assault Breaker II	49,909	49,909	0	0	0	0	Yes
Space Test and Training Range Development	742	742	0	0	0	0	Yes
Space Test Program	24,717	14,860	0	9,507	0	350	Yes
Weather System Follow-On	12,364	12,364	0	0	0	0	Yes
Department of Energy	100,005	99,508	0 i	0 i	0 i	497 i	No
National Energy Technology Laboratory	100,005	99,508	0 i	0 i	0 i	497 i	No
Department of Health and Human Services	3,359,936	3,321,851	0	17,337	2,569	18,178	Yes
Centers for Disease Control and Prevention	145,593	145,152	0	0	110	331	Yes
National Center for Emerging and Zoonotic Infectious Diseases	3,094	3,094	0	0	0	0	Yes
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	28,238	28,238	0	0	0	0	No
National Center for Immunization and Respiratory Diseases	44,783	44,783	0	0	0	0	Yes

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**  
 (Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
National Center on Birth Defects and Developmental Disabilities	243	0	0	0	0	243	Yes
National Institute for Occupational Safety and Health	69,235	69,037	0	0	110	88	No
Food and Drug Administration	458,410	458,397	0	0	13	0	Yes
Center for Biologics Evaluation and Research	66,565	66,565	0	0	0	0	Yes
Center for Devices and Radiological Health	7,913	7,900	0	0	13	0	Yes
Center for Drug Evaluation and Research	73,608	73,608	0	0	0	0	Yes
Center for Food Safety and Applied Nutrition	95,059	95,059	0	0	0	0	Yes
Center for Tobacco Products	93,521	93,521	0	0	0	0	Yes
Center for Veterinary Medicine	20,184	20,184	0	0	0	0	Yes
National Center for Toxicological Research	88,645	88,645	0	0	0	0	Yes
Office of Regulatory Affairs	3,000	3,000	0	0	0	0	Yes
Oncology Center of Excellence	9,915	9,915	0	0	0	0	Yes
National Institutes of Health	2,755,933	2,718,302	0	17,337	2,446	17,848	Yes
Clinical Center	618,605	617,933	0	672	0	0	No
Eunice Kennedy Shriver National Institute of Child Health and Human Development	221,061	219,874	0	1,000	176	11	No
National Cancer Institute	104,607	103,604	0	0	1,003	0	Yes
National Center for Advancing Translational Sciences	150,884	149,644	0	1,186	47	8	Yes
National Center for Complementary and Integrative Health	15,500	15,440	0	0	60	0	Yes
National Eye Institute	105,189	99,753	0	0	0	5,435	Yes
National Heart, Lung, and Blood Institute	173,071	173,071	0	0	0	0	Yes
National Human Genome Research Institute	133,478	130,460	0	2,267	751	0	No
National Institute of Allergy and Infectious Diseases	425,092	403,809	0	11,148	0	10,135	No
National Institute of Arthritis and Musculoskeletal and Skin Diseases	57,611	57,611	0	0	0	0	Yes
National Institute of Biomedical Imaging and Bioengineering	5,900	5,900	0	0	0	0	Not provided
National Institute of Dental and Craniofacial Research	70,666	70,666	0	0	0	0	Yes
National Institute of Diabetes and Digestive and Kidney Diseases	142,684	142,133	0	539	0	12	Yes
National Institute of Environmental Health Sciences	124,012	123,813	0	0	199	0	Yes
National Institute of Mental Health	1,128	1,128	0	0	0	0	Yes
National Institute of Neurological Disorders and Stroke	217,704	215,738	0	0	0	1,966	Yes
National Institute of Nursing Research	3,923	3,923	0	0	0	0	Yes
National Institute on Aging	4,299	4,299	0	0	0	0	Yes
National Institute on Alcohol Abuse and Alcoholism	48,509	48,384	0	124	1	0	Yes
National Institute on Deafness and Other Communication Disorders	29,974	29,701	0	273	0	0	No
National Institute on Drug Abuse	66,351	65,733	0	127	210	281	No
National Institute on Minority Health and Health Disparities	9,919	9,919	0	0	0	0	Yes



**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
National Library of Medicine	25,766	25,766	0	0	0	0	Yes
Department of Homeland Security	39,016	39,016	0	0	0	0	Yes
Coast Guard	17,500	17,500	0	0	0	0	Yes
Acquisition Directorate, Research and Development Center	17,500	17,500	0	0	0	0	Yes
Cybersecurity and Infrastructure Security Agency	1,216 i	1,216 i	0 i	0 i	0 i	0 i	Not provided
Science and Technology Directorate	20,300	20,300	0	0	0	0	Yes
Office of National Laboratories	20,300	20,300	0	0	0	0	Yes
Chemical Security Analysis Center	4,390	4,390	0	0	0	0	Yes
National Urban Security Technology Laboratory	3,480	3,480	0	0	0	0	Yes
Plum Island Animal Disease Center	1,550	1,550	0	0	0	0	Yes
Transportation Security Laboratory	10,880	10,880	0	0	0	0	Yes
Department of the Interior	1,170,882	1,033,063	105,998	0	0	31,820	Yes
Bureau of Land Management	301	301	0	0	0	0	Yes
Bureau of Ocean Energy Management	36,016	36,016	0	0	0	0	No
Bureau of Reclamation	16,124	16,124	0	0	0	0	No
Fish and Wildlife Service	24,000	24,000	0	0	0	0	Yes
Geological Survey	1,079,102	941,284	105,998	0	0	31,820	No
Core Science Systems Mission Area	126,178	121,638	3,703	0	0	837	No
Ecosystems Mission Area	387,056	369,430	41	0	0	17,585	No
Energy and Minerals Mission Area	88,126	87,623	0	0	0	503	No
Natural Hazards Mission Area	156,535	152,145	69	0	0	4,322	No
Water Resources Mission Area	321,206	210,448	102,185	0	0	8,573	No
National Park Service	15,339	15,339	0	0	0	0	Yes
Department of Transportation	129,610	85,372	1,407	27,340	720	14,771	Yes
Federal Aviation Administration	74,873	31,529	513	27,340	720	14,771	Yes
Office of Aerospace Medicine	16,319	16,319	0	0	0	0	Yes
Office of NextGen	58,554	15,210	513	27,340	720	14,771	Yes
Federal Highway Administration	31,961	31,067	894	0	0	0	Not provided
Intelligence Transportation Systems Joint Program Office	15,026	14,888	137	0	0	0	Not provided
Office of Administrations	11,000	10,509	491	0	0	0	Not provided
Office of Operations	1,999	1,910	89	0	0	0	Not provided
Office of Planning	653	623	29	0	0	0	Not provided
Office of Research, Development, and Technology	3,283	3,137	147	0	0	0	Not provided
National Highway Traffic Safety Administration	3,634	3,634	0	0	0	0	Yes
Office of Vehicle Safety Research	3,634	3,634	0	0	0	0	Yes

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures		Source of funds					Any public-private partnership funding <sup>a</sup>	
			Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations		
Vehicle Research and Test Center	3,634		3,634	0	0	0	0	0	Yes
Office of the Assistant Secretary for Research and Technology	19,142	i	19,142	0	0	0	0	0	Not provided
John A. Volpe National Transportation Systems Center	19,142	i	19,142	0	0	0	0	0	Not provided
Department of Veterans Affairs	1,529,302		1,529,302	0	0	0	0	0	Yes
Office of Research and Development Central Office	113,943		113,943	0	0	0	0	0	Yes
Veterans Integrated Services Network (VISN) 1: New England Health Care System	248,067		248,067	0	0	0	0	0	No
Bedford Health Care System	12,543		12,543	0	0	0	0	0	No
Boston Health Care System, Jamaica Plain Campus	159,315		159,315	0	0	0	0	0	No
Central Western Massachusetts Health Care	1,613		1,613	0	0	0	0	0	No
Connecticut Health Care System, West Haven Medical Center	45,873		45,873	0	0	0	0	0	No
Manchester Medical Center	144		144	0	0	0	0	0	No
Providence Medical Center	19,570		19,570	0	0	0	0	0	No
Togus Maine Health Care System	292		292	0	0	0	0	0	No
White River Junction Medical Center	8,717		8,717	0	0	0	0	0	No
VISN 2: New York/ New Jersey Veterans Health Care Network	53,168		53,168	0	0	0	0	0	No
Bronx Health Care, James J. Peters Medical Center	27,179		27,179	0	0	0	0	0	No
New Jersey Health Care	6,282		6,282	0	0	0	0	0	No
New York Harbor Health Care	7,626		7,626	0	0	0	0	0	No
Northport Medical Center	4,139		4,139	0	0	0	0	0	No
Western New York Health Care, Buffalo Medical Center	7,942		7,942	0	0	0	0	0	No
VISN 4: Health Care	44,924		44,924	0	0	0	0	0	No
Coatesville Medical Center	154		154	0	0	0	0	0	No
Philadelphia Health Care, Corporal Michael J. Crescenz Medical Center	20,663		20,663	0	0	0	0	0	No
Pittsburgh Medical Center-University Drive	24,093		24,093	0	0	0	0	0	No
Wilkes-Barre Medical Center	14		14	0	0	0	0	0	No
VISN 5: Capitol Health Care Network	40,732		40,732	0	0	0	0	0	No
Huntington Health Care, Hershel (Woody) Williams Medical Center	1,223		1,223	0	0	0	0	0	No
Maryland Health Care, Baltimore Medical Center	23,383		23,383	0	0	0	0	0	No
Washington DC Health Care, Washington Medical Center	16,126		16,126	0	0	0	0	0	No
VISN 6: Mid-Atlantic Health Care Network	55,346		55,346	0	0	0	0	0	No
Asheville Health Care, Charles George Medical Center	778		778	0	0	0	0	0	No
Durham Medical Center	33,256		33,256	0	0	0	0	0	No
Hampton Medical Center	250		250	0	0	0	0	0	No
Richmond Health Care, Hunter Holmes McGuire Hospital	13,915		13,915	0	0	0	0	0	No
Salem Medical Center	3,703		3,703	0	0	0	0	0	No

TABLE 3

## Federal facility R&amp;D expenditures, by source of funds: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Salisbury Health Care, W.G. (Bill) Hefner Salisbury Medical Center	3,443	3,443	0	0	0	0	No
VISN 7: Southeast Network	88,038	88,038	0	0	0	0	No
Atlanta Medical Center	33,002	33,002	0	0	0	0	No
Augusta Health Care, Charlie Norwood Medical Center	5,240	5,240	0	0	0	0	No
Birmingham Medical Center	11,113	11,113	0	0	0	0	No
Charleston Health Care, Ralph H. Johnson Medical Center	31,940	31,940	0	0	0	0	No
Columbia South Carolina Health Care, William Jennings Bryan Dorn Medical Center	4,253	4,253	0	0	0	0	No
Tuscaloosa Medical Center	2,490	2,490	0	0	0	0	No
VISN 8: Sunshine Health Care Network	39,065	39,065	0	0	0	0	No
Bay Pines Health Care System	2,316	2,316	0	0	0	0	No
Caribbean Health Care System	526	526	0	0	0	0	No
Miami Health Care System	11,126	11,126	0	0	0	0	No
North Florida/ South Georgia Health Care System	12,506	12,506	0	0	0	0	No
Orlando Medical Center	592	592	0	0	0	0	No
Tampa Health Care, James A. Haley Veterans' Hospital	11,999	11,999	0	0	0	0	No
VISN 9: MidSouth Health Care Network	51,828	51,828	0	0	0	0	No
Lexington Medical Center (Troy Bowling Campus)	5,146	5,146	0	0	0	0	No
Louisville Health Care, Robley Rex Medical Center	3,476	3,476	0	0	0	0	No
Memphis Medical Center	7,373	7,373	0	0	0	0	No
Mountain Home Health Care, James H. Quillen Medical Center	3,218	3,218	0	0	0	0	No
Tennessee Valley Health Care, Nashville Medical Center	32,614	32,614	0	0	0	0	No
VISN 10: Health Care System	107,300	107,300	0	0	0	0	No
Ann Arbor Health Care System	31,274	31,274	0	0	0	0	No
Battle Creek Medical Center	5	5	0	0	0	0	No
Cincinnati Medical Center	7,700	7,700	0	0	0	0	No
Dayton Medical Center	1,167	1,167	0	0	0	0	No
Detroit Health Care, John D. Dingell Medical Center	9,562	9,562	0	0	0	0	No
Indiana Health Care, Richard L. Roudebush Medical Center	27,341	27,341	0	0	0	0	No
Northeast Ohio Health Care, Louis Stokes Cleveland Medical Center	30,251	30,251	0	0	0	0	No
VISN 12: Great Lakes Health Care System	75,386	75,386	0	0	0	0	No
Chicago Health Care, Jesse Brown Medical Center	19,642	19,642	0	0	0	0	No
Hines Health Care, Edward Hines Junior Hospital	29,727	29,727	0	0	0	0	No
Madison Health Care, William S. Middleton Memorial Veterans' Hospital	18,242	18,242	0	0	0	0	No
Milwaukee Health Care, Clement J. Zablocki Medical Center	7,776	7,776	0	0	0	0	No
VISN 15: Heartland Health Care Network	12,330	12,330	0	0	0	0	No

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
Kansas City Medical Center	4,515	4,515	0	0	0	0	No
St. Louis Health Care, John J. Cochran Veterans Hospital	7,814	7,814	0	0	0	0	No
VISN 16: South Central Health Care Network	47,956	47,956	0	0	0	0	No
Central Arkansas Health Care, Eugene J. Towbin Health Care Center	13,208	13,208	0	0	0	0	No
Houston Health Care, Michael E. DeBakey Medical Center	26,763	26,763	0	0	0	0	No
Jackson Health Care, G.V. (Sonny) Montgomery Medical Center	1,119	1,119	0	0	0	0	No
Shreveport Health Care, Overton Brooks Medical Center	497	497	0	0	0	0	No
Southeast Louisiana Health Care System	6,368	6,368	0	0	0	0	No
VISN 17: Heart of Texas Health Care Network	27,491	27,491	0	0	0	0	No
Central Texas Health Care	3,132	3,132	0	0	0	0	No
North Texas, Dallas Medical Center	6,955	6,955	0	0	0	0	No
South Texas Health Care	17,403	17,403	0	0	0	0	No
VISN 19: Rocky Mountain Network	90,167	90,167	0	0	0	0	No
Eastern Colorado, Rocky Mountain Regional Medical Center	33,422	33,422	0	0	0	0	No
Eastern Oklahoma, Jack C. Montgomery Medical Center	436	436	0	0	0	0	No
Oklahoma City Medical Center	8,676	8,676	0	0	0	0	No
Salt Lake City Health Care	47,633	47,633	0	0	0	0	No
VISN 20: Northwest Network	111,071	111,071	0	0	0	0	No
Boise Medical Center	2,749	2,749	0	0	0	0	No
Portland Health Care System	48,302	48,302	0	0	0	0	No
Puget Sound Health Care, Seattle Medical Center	60,019	60,019	0	0	0	0	No
VISN 21: Sierra Pacific Network	148,509	148,509	0	0	0	0	No
Central California Health Care System	409	409	0	0	0	0	No
Northern California Health Care System	7,744	7,744	0	0	0	0	No
Pacific Islands Health Care System	2,180	2,180	0	0	0	0	No
Palo Alto Health Care System	74,320	74,320	0	0	0	0	No
San Francisco Health Care System	62,638	62,638	0	0	0	0	No
Sierra Nevada Health Care System	577	577	0	0	0	0	No
Southern Nevada Health Care System	640	640	0	0	0	0	No
VISN 22: Desert Pacific Health Care Network	136,105	136,105	0	0	0	0	No
Greater Los Angeles, West Los Angeles Medical Center	31,993	31,993	0	0	0	0	No
Loma Linda Health Care System	5,570	5,570	0	0	0	0	No
Long Beach Health Care System	8,534	8,534	0	0	0	0	No
New Mexico Health Care System	26,569	26,569	0	0	0	0	No
Phoenix Health Care System	3,448	3,448	0	0	0	0	No

**TABLE 3**  
**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures	Source of funds					Any public-private partnership funding <sup>a</sup>
		Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations	
San Diego Health Care System	55,386	55,386	0	0	0	0	No
Southern Arizona Health Care System	4,606	4,606	0	0	0	0	No
VISN 23: Midwest Health Care Network	37,877	37,877	0	0	0	0	No
Fargo Health Care System	144	144	0	0	0	0	No
Minneapolis Health Care System	26,578	26,578	0	0	0	0	No
Nebraska-Western Iowa Health Care System	10,283	10,283	0	0	0	0	No
Sioux Falls Health Care System	823	823	0	0	0	0	No
St. Cloud Health Care	49	49	0	0	0	0	No
Other agencies	4,245,202	4,245,118	0	0	84	0	Yes
Environmental Protection Agency	292,399	292,399	0	0	0	0	No
Center for Computational Toxicology and Exposure	54,685	54,685	0	0	0	0	No
Center for Environmental Measurement and Modeling	84,799	84,799	0	0	0	0	No
Center for Environmental Solutions and Emergency Response	52,849	52,849	0	0	0	0	No
Center for Public Health and Environmental Assessment	82,802	82,802	0	0	0	0	No
Office of Science Advisor, Policy, and Engagement	17,264	17,264	0	0	0	0	No
Federal Trade Commission	1,492 i	1,492 i	0 i	0 i	0 i	0 i	Not provided
Library of Congress	2,902	2,818	0	0	84	0	Yes
Digital Services Directorate	433	433	0	0	0	0	Yes
Preservation Directorate	2,469	2,385	0	0	84	0	Yes
National Aeronautics and Space Administration (NASA)	3,764,686	3,764,686	0	0	0	0	Not provided
Ames Research Center	276,848	276,848	0	0	0	0	Not provided
Armstrong (Dryden) Flight Research Center	28,301	28,301	0	0	0	0	Not provided
Glenn Research Center	240,357	240,357	0	0	0	0	Not provided
Goddard Space Flight Center	1,067,753	1,067,753	0	0	0	0	Not provided
Johnson Space Center	799,127	799,127	0	0	0	0	Not provided
Kennedy Space Center	178,778	178,778	0	0	0	0	Not provided
Langley Research Center	240,270	240,270	0	0	0	0	Not provided
Marshall Space Flight Center	691,175	691,175	0	0	0	0	Not provided
NASA Headquarters	233,119	233,119	0	0	0	0	Not provided
Stennis Space Center	8,957	8,957	0	0	0	0	Not provided
Smithsonian Institution	183,723 i	183,723 i	0 i	0 i	0 i	0 i	Not provided
Archives of American Art	30,620 i	30,620 i	0 i	0 i	0 i	0 i	Not provided
Center for Astrophysics	30,620 i	30,620 i	0 i	0 i	0 i	0 i	Not provided
Smithsonian Astrophysical Observatory	30,620 i	30,620 i	0 i	0 i	0 i	0 i	Not provided
National Museum of Natural History	30,620 i	30,620 i	0 i	0 i	0 i	0 i	Not provided

TABLE 3

**Federal facility R&D expenditures, by source of funds: FY 2022**

(Thousands of dollars)

Agency or facility	All R&D expenditures		Source of funds					Any public-private partnership funding <sup>a</sup>			
			Federal government	State and local government	Businesses	Nonprofit organizations	All other organizations				
Smithsonian Conservation Biology Institute	30,620	i	30,620	i	0	i	0	i	0	i	Not provided
Smithsonian Environmental Research Center	30,620	i	30,620	i	0	i	0	i	0	i	Not provided
Smithsonian Tropical Research Institute	30,620	i	30,620	i	0	i	0	i	0	i	Not provided

i = more than 50% of the estimate is imputed, including cases where there is only one facility listed and its data are imputed.

<sup>a</sup> Not provided means the respondent did not provide a response to this question on the survey and no imputation was performed for this question.<sup>b</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command includes both the headquarters and listed subfacilities totals.**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.















TABLE 4

## Federal facility R&amp;D expenditures, by funding agency: FY 2022

(Thousands of dollars)

Agency or facility	All federally funded R&D expenditures	Funding agency											
		Department of Agriculture	Department of Commerce	Department of Defense	Department of Energy	Department of Health and Human Services	Department of Homeland Security	Department of the Interior	Department of Transportation	Department of Veterans Affairs	Environmental Protection Agency	National Aeronautics and Space Administration	Other federal agencies
National Library of Medicine	25,766	0	0	0	0	25,766	0	0	0	0	0	0	0
Department of Homeland Security	39,016	0	0	0	0	0	21,516	0	0	0	0	0	0
Coast Guard	17,500	0	0	0	0	0	0	0	0	0	0	0	17,500
Acquisition Directorate, Research and Development Center	17,500	0	0	0	0	0	0	0	0	0	0	0	17,500
Cybersecurity and Infrastructure Security Agency	1,216	0	0	0	0	0	1,216	0	0	0	0	0	0
Science and Technology Directorate	20,300	0	0	0	0	0	20,300	0	0	0	0	0	0
Office of National Laboratories	20,300	0	0	0	0	0	20,300	0	0	0	0	0	0
Chemical Security Analysis Center	4,390	0	0	0	0	0	4,390	0	0	0	0	0	0
National Urban Security Technology Laboratory	3,480	0	0	0	0	0	3,480	0	0	0	0	0	0
Plum Island Animal Disease Center	1,550	0	0	0	0	0	1,550	0	0	0	0	0	0
Transportation Security Laboratory	10,880	0	0	0	0	0	10,880	0	0	0	0	0	0
Department of the Interior	1,033,063	14,073	2,098	57,605	6,569	502	0	894,953	235	178	23,126	12,429	21,296
Bureau of Land Management	301	0	0	0	0	0	0	301	0	0	0	0	0
Bureau of Ocean Energy Management	36,016	0	0	0	0	0	0	36,016	0	0	0	0	0
Bureau of Reclamation	16,124	0	0	0	0	0	0	16,124	0	0	0	0	0
Fish and Wildlife Service	24,000	0	0	0	0	0	0	24,000	0	0	0	0	0
Geological Survey	941,284	14,073	2,098	57,605	6,569	502	0	803,173	235	178	23,126	12,429	21,296
Core Science Systems Mission Area	121,638	11,549	114	451	161	18	0	100,852	18	9	622	5,065	2,779
Ecosystems Mission Area	369,430	2,003	1,662	26,723	2,348	267	0	319,259	55	0	10,976	100	6,037
Energy and Minerals Mission Area	87,623	0	0	3,246	161	0	0	83,042	0	0	50	66	1,059
Natural Hazards Mission Area	152,145	23	205	1,307	264	0	0	137,426	0	169	134	6,861	5,755
Water Resources Mission Area	210,448	498	117	25,878	3,634	217	0	162,594	162	0	11,345	338	5,666
National Park Service	15,339	0	0	0	0	0	0	15,339	0	0	0	0	0
Department of Transportation	85,372	0	92	5,172	0	485	0	0	70,143	0	0	2,519	6,962
Federal Aviation Administration	31,529	0	92	5,172	0	485	0	0	16,299	0	0	2,519	6,962
Office of Aerospace Medicine	16,319	0	0	0	0	0	0	0	16,299	0	0	0	20
Office of NextGen	15,210	0	92	5,172	0	485	0	0	0	0	0	2,519	6,942
Federal Highway Administration	31,067	0	0	0	0	0	0	0	31,067	0	0	0	0
Intelligence Transportation Systems Joint Program Office	14,888	0	0	0	0	0	0	0	14,888	0	0	0	0
Office of Administrations	10,509	0	0	0	0	0	0	0	10,509	0	0	0	0
Office of Operations	1,910	0	0	0	0	0	0	0	1,910	0	0	0	0
Office of Planning	623	0	0	0	0	0	0	0	623	0	0	0	0
Office of Research, Development, and Technology	3,137	0	0	0	0	0	0	0	3,137	0	0	0	0
National Highway Traffic Safety Administration	3,634	0	0	0	0	0	0	0	3,634	0	0	0	0
Office of Vehicle Safety Research	3,634	0	0	0	0	0	0	0	3,634	0	0	0	0

TABLE 4

## Federal facility R&amp;D expenditures, by funding agency: FY 2022

(Thousands of dollars)

Agency or facility	All federally funded R&D expenditures	Funding agency											
		Department of Agriculture	Department of Commerce	Department of Defense	Department of Energy	Department of Health and Human Services	Department of Homeland Security	Department of the Interior	Department of Transportation	Department of Veterans Affairs	Environmental Protection Agency	National Aeronautics and Space Administration	Other federal agencies
Vehicle Research and Test Center	3,634	0	0	0	0	0	0	0	0	3,634	0	0	0
Office of the Assistant Secretary for Research and Technology	19,142 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	19,142 i	0 i	0 i	0 i
John A. Volpe National Transportation Systems Center	19,142 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	19,142 i	0 i	0 i	0 i
Department of Veterans Affairs	1,529,302	0	0	0	0	0	0	0	0	0	1,529,302	0	0
Office of Research and Development Central Office	113,943	0	0	0	0	0	0	0	0	0	113,943	0	0
Veterans Integrated Services Network (VISN) 1: New England Health Care System	248,067	0	0	0	0	0	0	0	0	0	248,067	0	0
Bedford Health Care System	12,543	0	0	0	0	0	0	0	0	0	12,543	0	0
Boston Health Care System, Jamaica Plain Campus	159,315	0	0	0	0	0	0	0	0	0	159,315	0	0
Central Western Massachusetts Health Care	1,613	0	0	0	0	0	0	0	0	0	1,613	0	0
Connecticut Health Care System, West Haven Medical Center	45,873	0	0	0	0	0	0	0	0	0	45,873	0	0
Manchester Medical Center	144	0	0	0	0	0	0	0	0	0	144	0	0
Providence Medical Center	19,570	0	0	0	0	0	0	0	0	0	19,570	0	0
Togus Maine Health Care System	292	0	0	0	0	0	0	0	0	0	292	0	0
White River Junction Medical Center	8,717	0	0	0	0	0	0	0	0	0	8,717	0	0
VISN 2: New York/ New Jersey Veterans Health Care Network	53,168	0	0	0	0	0	0	0	0	0	53,168	0	0
Bronx Health Care, James J. Peters Medical Center	27,179	0	0	0	0	0	0	0	0	0	27,179	0	0
New Jersey Health Care	6,282	0	0	0	0	0	0	0	0	0	6,282	0	0
New York Harbor Health Care	7,626	0	0	0	0	0	0	0	0	0	7,626	0	0
Northport Medical Center	4,139	0	0	0	0	0	0	0	0	0	4,139	0	0
Western New York Health Care, Buffalo Medical Center	7,942	0	0	0	0	0	0	0	0	0	7,942	0	0
VISN 4: Health Care	44,924	0	0	0	0	0	0	0	0	0	44,924	0	0
Coatesville Medical Center	154	0	0	0	0	0	0	0	0	0	154	0	0
Philadelphia Health Care, Corporal Michael J. Crescenzo Medical Center	20,663	0	0	0	0	0	0	0	0	0	20,663	0	0
Pittsburgh Medical Center-University Drive	24,093	0	0	0	0	0	0	0	0	0	24,093	0	0
Wilkes-Barre Medical Center	14	0	0	0	0	0	0	0	0	0	14	0	0
VISN 5: Capitol Health Care Network	40,732	0	0	0	0	0	0	0	0	0	40,732	0	0
Huntington Health Care, Hershel (Woody) Williams Medical Center	1,223	0	0	0	0	0	0	0	0	0	1,223	0	0
Maryland Health Care, Baltimore Medical Center	23,383	0	0	0	0	0	0	0	0	0	23,383	0	0
Washington DC Health Care, Washington Medical Center	16,126	0	0	0	0	0	0	0	0	0	16,126	0	0
VISN 6: Mid-Atlantic Health Care Network	55,346	0	0	0	0	0	0	0	0	0	55,346	0	0
Asheville Health Care, Charles George Medical Center	778	0	0	0	0	0	0	0	0	0	778	0	0
Durham Medical Center	33,256	0	0	0	0	0	0	0	0	0	33,256	0	0
Hampton Medical Center	250	0	0	0	0	0	0	0	0	0	250	0	0
Richmond Health Care, Hunter Holmes McGuire Hospital	13,915	0	0	0	0	0	0	0	0	0	13,915	0	0
Salem Medical Center	3,703	0	0	0	0	0	0	0	0	0	3,703	0	0









TABLE 4

Federal facility R&D expenditures, by funding agency: FY 2022

(Thousands of dollars)

Agency or facility	All federally funded R&D expenditures	Funding agency											
		Department of Agriculture	Department of Commerce	Department of Defense	Department of Energy	Department of Health and Human Services	Department of Homeland Security	Department of the Interior	Department of Transportation	Department of Veterans Affairs	Environmental Protection Agency	National Aeronautics and Space Administration	Other federal agencies
Smithsonian Conservation Biology Institute	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	30,620 i
Smithsonian Environmental Research Center	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	30,620 i
Smithsonian Tropical Research Institute	30,620 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	30,620 i

i = more than 50% of the estimate is imputed, including cases where there is only one facility listed and its data are imputed.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command includes both the headquarters and listed subfacilities totals.

Source(s): National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
All agencies	34,497,051	1,076,009	6,705,027	1,561,889	1,798,608	247,027	2,435,019	23,625	272,520	17,624,189	2,753,137
Department of Agriculture	1,685,343	875,344	476,112	11,674	4,900	4,986	86,703	0	84,683	11,566	129,375
Agricultural Research Service	1,237,476	553,690	469,492	1,448	4,900	0	71,501	0	2,673	10,024	123,748
Midwest Area	165,788	74,179	62,899	194	657	0	9,579	0	358	1,343	16,579
Northeast Area	261,199	116,870	99,098	306	1,034	0	15,092	0	564	2,116	26,120
Pacific West Area	208,801	93,425	79,218	244	827	0	12,065	0	451	1,691	20,880
Plains Area	314,563	140,747	119,344	368	1,246	0	18,175	0	679	2,548	31,456
Southeast Area	287,125	128,470	108,934	336	1,137	0	16,590	0	620	2,326	28,713
Animal and Plant Health Inspection Service	48,982	30,114	6,620	0	0	1,324	1,324	0	3,972	0	5,627
Forest Pest Methods Laboratory	6,618	6,618	0	0	0	0	0	0	0	0	0
Insect Management and Molecular Diagnostics Laboratory	1,358	1,358	0	0	0	0	0	0	0	0	0
National Veterinary Services Laboratories/ Center for Veterinary Biologics	5,790	5,790	0	0	0	0	0	0	0	0	0
National Wildlife Research Center	33,101	14,234	6,620	0	0	1,324	1,324	0	3,972	0	5,627
Plant Pathogen Confirmatory Diagnostics Laboratory	1,665	1,665	0	0	0	0	0	0	0	0	0
Treatment and Inspection Methods Laboratory	450	450	0	0	0	0	0	0	0	0	0
Economic Research Service	78,038	0	0	0	0	0	0	0	78,038	0	0
Forest Service	299,844	280,762	0	0	0	3,662	13,878	0	0	1,542	0
Forest Products Laboratory	19,275	193	0	0	0	3,662	13,878	0	0	1,542	0
International Institute of Tropical Forestry	7,856	7,856	0	0	0	0	0	0	0	0	0
Northern Research Station	53,497	53,497	0	0	0	0	0	0	0	0	0
Pacific Northwest Research Station	52,212	52,212	0	0	0	0	0	0	0	0	0
Pacific Southwest Research Station	22,703	22,703	0	0	0	0	0	0	0	0	0
Rocky Mountain Research Station	76,579	76,579	0	0	0	0	0	0	0	0	0
Southern Research Station	50,301	50,301	0	0	0	0	0	0	0	0	0
Washington Office Research and Development	17,420	17,420	0	0	0	0	0	0	0	0	0
National Agricultural Statistics Service	10,226	0	0	10,226	0	0	0	0	0	0	0
Natural Resources Conservation Service	10,777	10,777	0	0	0	0	0	0	0	0	0
Plant Materials Center	10,258	10,258	0	0	0	0	0	0	0	0	0
Soil Science Research Branch	520	520	0	0	0	0	0	0	0	0	0
Department of Commerce	1,373,618	0	29,424	200,877	557,894	15,752	228,758	0	91,492	230,661	18,759

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Census Bureau	156,946	0	0	54,883	0	10,993	0	0	91,070	0	0
National Institute of Standards and Technology	660,622	0	29,424	145,994	9,153	4,760	228,758	0	422	223,351	18,759
National Oceanic and Atmospheric Administration	548,741	0	0	0	548,741	0	0	0	0	0	0
Mission Support	21,517	0	0	0	21,517	0	0	0	0	0	0
Office of the Chief Administrative Officer	21,504	0	0	0	21,504	0	0	0	0	0	0
Office of the Chief Information Officer	13	0	0	0	13	0	0	0	0	0	0
National Environmental Satellite, Data, and Information Service	33,185	0	0	0	33,185	0	0	0	0	0	0
Center for Satellite Applications and Research	27,813	0	0	0	27,813	0	0	0	0	0	0
National Centers for Environmental Information	5,372	0	0	0	5,372	0	0	0	0	0	0
National Marine Fisheries Service	65,086	0	0	0	65,086	0	0	0	0	0	0
Alaska Fisheries Science Center	10,842	0	0	0	10,842	0	0	0	0	0	0
Alaska Regional Office	3,500	0	0	0	3,500	0	0	0	0	0	0
Greater Atlantic Region Fisheries Office	2,467	0	0	0	2,467	0	0	0	0	0	0
Northeast Fisheries Science Center	6,421	0	0	0	6,421	0	0	0	0	0	0
Northwest Fisheries Science Center	5,252	0	0	0	5,252	0	0	0	0	0	0
Office of Habitat Conservation	1,993	0	0	0	1,993	0	0	0	0	0	0
Office of Protected Resources	767	0	0	0	767	0	0	0	0	0	0
Office of Science and Technology	3,037	0	0	0	3,037	0	0	0	0	0	0
Office of Sustainable Fisheries	858	0	0	0	858	0	0	0	0	0	0
Pacific Island Fisheries Science Center	4,380	0	0	0	4,380	0	0	0	0	0	0
Pacific Islands Regional Office	1,978	0	0	0	1,978	0	0	0	0	0	0
Southeast Fisheries Science Center	8,142	0	0	0	8,142	0	0	0	0	0	0
Southeast Regional Office	3,597	0	0	0	3,597	0	0	0	0	0	0
Southwest Fisheries Science Center	5,811	0	0	0	5,811	0	0	0	0	0	0
West Coast Region	6,042	0	0	0	6,042	0	0	0	0	0	0
National Ocean Service	46,567	0	0	0	46,567	0	0	0	0	0	0
Center for Operational Oceanographic Products and Services	1,392	0	0	0	1,392	0	0	0	0	0	0
Integrated Ocean Observing System	1,968	0	0	0	1,968	0	0	0	0	0	0
National Centers for Coastal Ocean Science	27,813	0	0	0	27,813	0	0	0	0	0	0
National Geodetic Survey	7,123	0	0	0	7,123	0	0	0	0	0	0
Office for Coastal Management	143	0	0	0	143	0	0	0	0	0	0

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field												
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields			
Office of Response and Restoration	1,213	0	0	0	1,213	0	0	0	0	0	0			
Office of the Coast Survey	6,914	0	0	0	6,914	0	0	0	0	0	0			
National Weather Service	20,210	0	0	0	20,210	0	0	0	0	0	0			
National Centers for Environmental Prediction	11,695	0	0	0	11,695	0	0	0	0	0	0			
Office of Science and Technology Integration	2,258	0	0	0	2,258	0	0	0	0	0	0			
Office of Water Prediction	6,257	0	0	0	6,257	0	0	0	0	0	0			
Oceanic and Atmospheric Research	336,599	0	0	0	336,599	0	0	0	0	0	0			
Air Resources Laboratory	8,013	0	0	0	8,013	0	0	0	0	0	0			
Atlantic Oceanographic and Meteorological Laboratory	25,169	0	0	0	25,169	0	0	0	0	0	0			
Chemical Sciences Laboratory	21,670	0	0	0	21,670	0	0	0	0	0	0			
Climate Program Office	36,844	0	0	0	36,844	0	0	0	0	0	0			
Earth System Research Laboratories	2,995	0	0	0	2,995	0	0	0	0	0	0			
Geophysical Fluid Dynamics Laboratory	26,840	0	0	0	26,840	0	0	0	0	0	0			
Global Monitoring Laboratory	18,811	0	0	0	18,811	0	0	0	0	0	0			
Global Ocean Monitoring and Observing Program	16,745	0	0	0	16,745	0	0	0	0	0	0			
Global Systems Laboratory	15,959	0	0	0	15,959	0	0	0	0	0	0			
Great Lakes Environmental Research Laboratory	12,660	0	0	0	12,660	0	0	0	0	0	0			
National Sea Grant College Program	21,562	0	0	0	21,562	0	0	0	0	0	0			
National Severe Storms Laboratory	26,747	0	0	0	26,747	0	0	0	0	0	0			
Ocean Acidification Program	1,475	0	0	0	1,475	0	0	0	0	0	0			
Office of Ocean Exploration and Research	24,242	0	0	0	24,242	0	0	0	0	0	0			
Office of Research Transition and Application	7,988	0	0	0	7,988	0	0	0	0	0	0			
Pacific Marine Environment Laboratory	26,030	0	0	0	26,030	0	0	0	0	0	0			
Physical Sciences Laboratory	19,840	0	0	0	19,840	0	0	0	0	0	0			
Weather Program Office	23,007	0	0	0	23,007	0	0	0	0	0	0			
Office of Marine and Aviation Operations	25,577	0	0	0	25,577	0	0	0	0	0	0			
Marine and Aviation Operations Center	5,424	0	0	0	5,424	0	0	0	0	0	0			
National Oceanic and Atmospheric Administration Corps	20,152	0	0	0	20,152	0	0	0	0	0	0			
National Telecommunications and Information Administration	7,310	i	0	i	0	i	0	i	0	i	7,310	i	0	i
Institute for Telecommunication Sciences	7,310	i	0	i	0	i	0	i	0	i	7,310	i	0	i
Department of Defense	20,864,136	60,907	822,741	1,303,782	123,579	211,133	916,826	12,928	40,323	14,851,963	2,519,955	i		



TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field										
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields	
Naval Medical Research Unit - San Antonio	11,803	0	11,803	0	0	0	0	0	0	0	0	0
Naval Medical Research Unit - South	9,466	0	9,466	0	0	0	0	0	0	0	0	0
Naval Submarine Medical Research Laboratory	8,990	0	4,834	0	0	0	0	4,156	0	0	0	0
Marine Corps	287,952	0	9,062	41,773	5,578	10,428	37,921	629	8	166,215	16,337	0
Naval Air Warfare Center Aircraft Division	857,385	0	0	187,009	0	0	0	0	0	492,770	177,606	0
Naval Air Warfare Center Weapon Division	777,721	0	0	169,633	0	0	0	0	0	446,984	161,104	0
Naval Facilities Engineering and Expeditionary Warfare Center	57,092	0	0	0	0	0	0	0	0	57,092	0	0
Naval Information Warfare Systems Command	565,094	0	5,083	177,337	11,100	45,237	17,016	3,284	133	251,027	54,877	0
Naval Information Warfare Center Atlantic	145,315	0	0	37,753	0	34,498	770	276	0	51,093	20,925	0
Naval Information Warfare Center Pacific	419,779	0	5,083	139,584	11,100	10,739	16,245	3,008	133	199,934	33,952	0
Naval Observatory	29,941	0	942	4,343	580	1,084	3,943	65	1	17,283	1,699	0
Naval Oceanographic Office	29,941	0	942	4,343	580	1,084	3,943	65	1	17,283	1,699	0
Naval Sea Systems Command Warfare Centers	2,180,415	0	3,442	258,162	0	123,454	125,784	0	0	1,669,572	0	0
Naval Surface Warfare Center	1,842,591	0	740	199,719	0	110,955	118,352	0	0	1,412,826	0	0
Naval Undersea Warfare Center	337,824	0	2,703	58,444	0	12,499	7,432	0	0	256,746	0	0
Office of Naval Research	868,240	0	25,926	53,233	79,127	0	470,630	0	0	207,539	31,785	0
Naval Research Laboratory	868,240	0	25,926	53,233	79,127	0	470,630	0	0	207,539	31,785	0
Missile Defense Agency	420,524	0	0	0	0	0	0	0	0	420,524	0	0
Space Force	2,413,651	0	0	1,611	0	0	0	0	0	2,396,896	15,145	0
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	27,003	0	0	0	0	0	0	0	0	27,003	0	0
Commercial Satellite Communications (SATCOM)	20,205	0	0	0	0	0	0	0	0	20,205	0	0
Counter Communications System	5,895	0	0	0	0	0	0	0	0	5,895	0	0
Electro-Optical/ Infrared Weather Systems	1,862	0	0	0	0	0	0	0	0	0	1,862	0
Evolved Strategic SATCOM	108,519	0	0	0	0	0	0	0	0	108,519	0	0
Global Positioning Systems III Follow-on	138,971	0	0	0	0	0	0	0	0	138,971	0	0
Ground Based Optical Sensor System	45,388	0	0	0	0	0	0	0	0	45,388	0	0
Joint Execution and Tasking System for Space	2,087	0	0	1,611	0	0	0	0	0	0	477	0
National Security Space Launch	91,491	0	0	0	0	0	0	0	0	91,491	0	0
NAVSTAR Global Positioning System (User Equipment)	290,005	0	0	0	0	0	0	0	0	290,005	0	0
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	334,688	0	0	0	0	0	0	0	0	334,688	0	0

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Next-Generation Overhead Persistent Infrared Block 0 Polar	343,144	0	0	0	0	0	0	0	0	343,144	0
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	311,140	0	0	0	0	0	0	0	0	311,140	0
Next-Generation Overhead Persistent Infrared Integration	23,796	0	0	0	0	0	0	0	0	23,718	78
Next-Generation Overhead Persistent Infrared Space Mod Initiative	56,529	0	0	0	0	0	0	0	0	56,529	0
Polar MILSATCOM Enhanced Polar System Recapitalization	50,402	0	0	0	0	0	0	0	0	50,402	0
Protected Tactical Enterprise Service	51,780	0	0	0	0	0	0	0	0	51,780	0
Protected Tactical Service	185,948	0	0	0	0	0	0	0	0	185,948	0
Rocket System Launch Program	21,481	0	0	0	0	0	0	0	0	21,481	0
Space Control Technology	31,361	0	0	0	0	0	0	0	0	31,361	0
Space Rapid Capabilities Office	83,186	0	0	0	0	0	0	0	0	83,186	0
Space Situation Awareness Systems	100,674	0	0	0	0	0	0	0	0	100,674	0
Space Situational Awareness Environmental Monitoring	364	0	0	0	0	0	0	0	0	0	364
Space Systems Prototype Transitions Assault Breaker II	49,909	0	0	0	0	0	0	0	0	49,909	0
Space Test and Training Range Development	742	0	0	0	0	0	0	0	0	742	0
Space Test Program	24,717	0	0	0	0	0	0	0	0	24,717	0
Weather System Follow-On	12,364	0	0	0	0	0	0	0	0	0	12,364
Department of Energy	100,005	0	0	0	9,500	0	15,901	0	0	74,604	0
National Energy Technology Laboratory	100,005	0	0	0	9,500	0	15,901	0	0	74,604	0
Department of Health and Human Services	3,359,936	62,977	3,191,761	32,837	0	5,023	9,488	2,044	11,497	40,616	3,693
Centers for Disease Control and Prevention	145,593	0	111,714	236	0	270	3,867	917	1,353	26,681	555
National Center for Emerging and Zoonotic Infectious Diseases	3,094	0	3,094	0	0	0	0	0	0	0	0
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	28,238	0	28,231	0	0	0	0	0	0	0	7
National Center for Immunization and Respiratory Diseases	44,783	0	44,783	0	0	0	0	0	0	0	0
National Center on Birth Defects and Developmental Disabilities	243	0	0	0	0	0	0	0	0	0	243
National Institute for Occupational Safety and Health	69,235	0	35,606	236	0	270	3,867	917	1,353	26,681	305
Food and Drug Administration	458,410	62,977	374,465	3,673	0	4,753	0	0	1,370	8,035	3,137
Center for Biologics Evaluation and Research	66,565	0	66,565	0	0	0	0	0	0	0	0
Center for Devices and Radiological Health	7,913	0	3,913	0	0	0	0	0	0	4,000	0
Center for Drug Evaluation and Research	73,608	0	73,608	0	0	0	0	0	0	0	0
Center for Food Safety and Applied Nutrition	95,059	38,023	52,282	0	0	4,753	0	0	0	0	0



TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Center for Tobacco Products	93,521	0	93,521	0	0	0	0	0	0	0	0
Center for Veterinary Medicine	20,184	20,184	0	0	0	0	0	0	0	0	0
National Center for Toxicological Research	88,645	3,019	73,710	3,673	0	0	0	0	1,070	4,035	3,137
Office of Regulatory Affairs	3,000	1,750	950	0	0	0	0	0	300	0	0
Oncology Center of Excellence	9,915	0	9,915	0	0	0	0	0	0	0	0
National Institutes of Health	2,755,933	0	2,705,582	28,928	0	0	5,621	1,128	8,774	5,900	0
Clinical Center	618,605	0	618,605	0	0	0	0	0	0	0	0
Eunice Kennedy Shriver National Institute of Child Health and Human Development	221,061	0	197,687	14,599	0	0	0	0	8,774	0	0
National Cancer Institute	104,607	0	98,987	0	0	0	5,621	0	0	0	0
National Center for Advancing Translational Sciences	150,884	0	150,884	0	0	0	0	0	0	0	0
National Center for Complementary and Integrative Health	15,500	0	15,500	0	0	0	0	0	0	0	0
National Eye Institute	105,189	0	105,189	0	0	0	0	0	0	0	0
National Heart, Lung, and Blood Institute	173,071	0	173,071	0	0	0	0	0	0	0	0
National Human Genome Research Institute	133,478	0	119,614	13,864	0	0	0	0	0	0	0
National Institute of Allergy and Infectious Diseases	425,092	0	425,092	0	0	0	0	0	0	0	0
National Institute of Arthritis and Musculoskeletal and Skin Diseases	57,611	0	57,611	0	0	0	0	0	0	0	0
National Institute of Biomedical Imaging and Bioengineering	5,900	0	0	0	0	0	0	0	0	5,900	0
National Institute of Dental and Craniofacial Research	70,666	0	70,666	0	0	0	0	0	0	0	0
National Institute of Diabetes and Digestive and Kidney Diseases	142,684	0	142,684	0	0	0	0	0	0	0	0
National Institute of Environmental Health Sciences	124,012	0	124,012	0	0	0	0	0	0	0	0
National Institute of Mental Health	1,128	0	0	0	0	0	0	1,128	0	0	0
National Institute of Neurological Disorders and Stroke	217,704	0	217,704	0	0	0	0	0	0	0	0
National Institute of Nursing Research	3,923	0	3,459	464	0	0	0	0	0	0	0
National Institute on Aging	4,299	0	4,299	0	0	0	0	0	0	0	0
National Institute on Alcohol Abuse and Alcoholism	48,509	0	48,509	0	0	0	0	0	0	0	0
National Institute on Deafness and Other Communication Disorders	29,974	0	29,974	0	0	0	0	0	0	0	0
National Institute on Drug Abuse	66,351	0	66,351	0	0	0	0	0	0	0	0
National Institute on Minority Health and Health Disparities	9,919	0	9,919	0	0	0	0	0	0	0	0
National Library of Medicine	25,766	0	25,766	0	0	0	0	0	0	0	0
Department of Homeland Security	39,016	1,550	0	1,044	0	3,500	6,390	800	0	25,732	0

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Coast Guard	17,500	0	0	0	0	3,500	2,000	800	0	11,200	0
Acquisition Directorate, Research and Development Center	17,500	0	0	0	0	3,500	2,000	800	0	11,200	0
Cybersecurity and Infrastructure Security Agency	1,216 i	0 i	0 i	1,044 i	0 i	0 i	0 i	0 i	0 i	172 i	0 i
Science and Technology Directorate	20,300	1,550	0	0	0	0	4,390	0	0	14,360	0
Office of National Laboratories	20,300	1,550	0	0	0	0	4,390	0	0	14,360	0
Chemical Security Analysis Center	4,390	0	0	0	0	0	4,390	0	0	0	0
National Urban Security Technology Laboratory	3,480	0	0	0	0	0	0	0	0	3,480	0
Plum Island Animal Disease Center	1,550	1,550	0	0	0	0	0	0	0	0	0
Transportation Security Laboratory	10,880	0	0	0	0	0	0	0	0	10,880	0
Department of the Interior	1,170,882	32,743	387,357	2,420	711,847	0	1,695	0	20,671	13,424	725
Bureau of Land Management	301	0	301	0	0	0	0	0	0	0	0
Bureau of Ocean Energy Management	36,016	0	0	2,411	19,810	0	1,695	0	11,375	0	725
Bureau of Reclamation	16,124	2,700	0	0	0	0	0	0	0	13,424	0
Fish and Wildlife Service	24,000	24,000	0	0	0	0	0	0	0	0	0
Geological Survey	1,079,102	0	387,056	9	692,036	0	0	0	0	0	0
Core Science Systems Mission Area	126,178	0	0	9	126,169	0	0	0	0	0	0
Ecosystems Mission Area	387,056	0	387,056	0	0	0	0	0	0	0	0
Energy and Minerals Mission Area	88,126	0	0	0	88,126	0	0	0	0	0	0
Natural Hazards Mission Area	156,535	0	0	0	156,535	0	0	0	0	0	0
Water Resources Mission Area	321,206	0	0	0	321,206	0	0	0	0	0	0
National Park Service	15,339	6,043	0	0	0	0	0	0	9,296	0	0
Department of Transportation	129,610	0	16,319	5,250	10,527	4,409	0	7,852	134	75,029	10,090
Federal Aviation Administration	74,873	0	16,319	5,250	10,527	4,409	0	7,852	134	20,292	10,090
Office of Aerospace Medicine	16,319	0	16,319	0	0	0	0	0	0	0	0
Office of NextGen	58,554	0	0	5,250	10,527	4,409	0	7,852	134	20,292	10,090
Federal Highway Administration	31,961	0	0	0	0	0	0	0	0	31,961	0
Intelligence Transportation Systems Joint Program Office	15,026	0	0	0	0	0	0	0	0	15,026	0
Office of Administrations	11,000	0	0	0	0	0	0	0	0	11,000	0
Office of Operations	1,999	0	0	0	0	0	0	0	0	1,999	0
Office of Planning	653	0	0	0	0	0	0	0	0	653	0
Office of Research, Development, and Technology	3,283	0	0	0	0	0	0	0	0	3,283	0







TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Boise Medical Center	2,749	0	2,749	0	0	0	0	0	0	0	0
Portland Health Care System	48,302	0	48,302	0	0	0	0	0	0	0	0
Puget Sound Health Care, Seattle Medical Center	60,019	0	60,019	0	0	0	0	0	0	0	0
VISN 21: Sierra Pacific Network	148,509	0	148,509	0	0	0	0	0	0	0	0
Central California Health Care System	409	0	409	0	0	0	0	0	0	0	0
Northern California Health Care System	7,744	0	7,744	0	0	0	0	0	0	0	0
Pacific Islands Health Care System	2,180	0	2,180	0	0	0	0	0	0	0	0
Palo Alto Health Care System	74,320	0	74,320	0	0	0	0	0	0	0	0
San Francisco Health Care System	62,638	0	62,638	0	0	0	0	0	0	0	0
Sierra Nevada Health Care System	577	0	577	0	0	0	0	0	0	0	0
Southern Nevada Health Care System	640	0	640	0	0	0	0	0	0	0	0
VISN 22: Desert Pacific Health Care Network	136,105	0	136,105	0	0	0	0	0	0	0	0
Greater Los Angeles, West Los Angeles Medical Center	31,993	0	31,993	0	0	0	0	0	0	0	0
Loma Linda Health Care System	5,570	0	5,570	0	0	0	0	0	0	0	0
Long Beach Health Care System	8,534	0	8,534	0	0	0	0	0	0	0	0
New Mexico Health Care System	26,569	0	26,569	0	0	0	0	0	0	0	0
Phoenix Health Care System	3,448	0	3,448	0	0	0	0	0	0	0	0
San Diego Health Care System	55,386	0	55,386	0	0	0	0	0	0	0	0
Southern Arizona Health Care System	4,606	0	4,606	0	0	0	0	0	0	0	0
VISN 23: Midwest Health Care Network	37,877	0	37,877	0	0	0	0	0	0	0	0
Fargo Health Care System	144	0	144	0	0	0	0	0	0	0	0
Minneapolis Health Care System	26,578	0	26,578	0	0	0	0	0	0	0	0
Nebraska-Western Iowa Health Care System	10,283	0	10,283	0	0	0	0	0	0	0	0
Sioux Falls Health Care System	823	0	823	0	0	0	0	0	0	0	0
St. Cloud Health Care	49	0	49	0	0	0	0	0	0	0	0
Other agencies	4,245,202	42,490	252,010	4,005	380,360	2,224	1,169,259	0	23,719	2,300,595	70,541
Environmental Protection Agency	292,399	32,897	82,616	4,005	120,517	2,224	6,982	0	1,689	41,469	0
Center for Computational Toxicology and Exposure	54,685	6,152	15,452	749	22,539	416	1,306	0	316	7,755	0
Center for Environmental Measurement and Modeling	84,799	9,541	23,957	1,162	34,953	645	2,025	0	490	12,027	0
Center for Environmental Solutions and Emergency Response	52,849	5,946	14,933	724	21,782	402	1,262	0	305	7,495	0
Center for Public Health and Environmental Assessment	82,802	9,316	23,396	1,134	34,128	630	1,977	0	478	11,743	0

TABLE 5

## Federal facility R&amp;D expenditures, by R&amp;D field: FY 2022

(Thousands of dollars)

Agency or facility	All R&D expenditures	R&D field									
		Agricultural sciences and natural resources and conservation	Biological, biomedical, and health sciences	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Other fields
Office of Science Advisor, Policy, and Engagement	17,264	1,942	4,878	236	7,116	131	412	0	100	2,448	0
Federal Trade Commission	1,492	0	0	0	0	0	0	0	1,492	0	0
Library of Congress	2,902	0	0	0	0	0	2,469	0	0	0	433
Digital Services Directorate	433	0	0	0	0	0	0	0	0	0	433
Preservation Directorate	2,469	0	0	0	0	0	2,469	0	0	0	0
National Aeronautics and Space Administration (NASA)	3,764,686	0	119,014	0	239,927	0	1,125,584	0	0	2,220,749	59,412
Ames Research Center	276,848	0	26,492	0	1,378	0	62,028	0	0	186,949	0
Armstrong (Dryden) Flight Research Center	28,301	0	0	0	2,294	0	83	0	0	25,924	0
Glenn Research Center	240,357	0	3,434	0	372	0	29,913	0	0	206,630	9
Goddard Space Flight Center	1,067,753	0	3	0	124,492	0	650,875	0	0	292,383	0
Johnson Space Center	799,127	0	75,674	0	3,823	0	72,110	0	0	588,951	58,569
Kennedy Space Center	178,778	0	8,266	0	10,974	0	94,338	0	0	65,175	25
Langley Research Center	240,270	0	3,506	0	12,422	0	25,122	0	0	198,633	587
Marshall Space Flight Center	691,175	0	288	0	3,860	0	123,741	0	0	563,065	221
NASA Headquarters	233,119	0	1,352	0	80,311	0	67,360	0	0	84,097	0
Stennis Space Center	8,957	0	0	0	0	0	13	0	0	8,944	0
Smithsonian Institution	183,723	9,592	50,380	0	19,915	0	34,224	0	20,537	38,377	10,697
Archives of American Art	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
Center for Astrophysics	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
Smithsonian Astrophysical Observatory	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
National Museum of Natural History	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
Smithsonian Conservation Biology Institute	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
Smithsonian Environmental Research Center	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783
Smithsonian Tropical Research Institute	30,620	1,599	8,397	0	3,319	0	5,704	0	3,423	6,396	1,783

i = more than 50% of the estimate is imputed, including cases where there is only one facility listed and its data are imputed.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command includes both the headquarters and listed subfacilities totals.

## Source(s):

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.









**TABLE 6**  
**Federal facility R&D personnel (headcount), by job category: FY 2022**  
 (Number)

Agency or facility	All job categories				Federal employees and military personnel				Contractors				All other R&D personnel			
	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff
Combat Capabilities Development Command (DEVCOM)																
Armaments Center	2,281	251	1,634	396	1,910	210	1,368	332	371	41	266	64	0	0	0	0
Army Research Laboratory	1,504	1,075	132	297	1,503	1,074	132	297	0	0	0	0	1	1	0	0
Aviation and Missile Center	2,856	2,450	97	309	2,856	2,450	97	309	0	0	0	0	0	0	0	0
Chemical Biological Center	356	157	136	63	240	117	85	38	101	33	43	25	15	7	8	0
Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance Center	3,709	3,086	182	441	1,683	1,404	81	198	2,026	1,682	101	243	0	0	0	0
Data and Analysis Center	28	28	0	0	25	25	0	0	3	3	0	0	0	0	0	0
DEVCOM Headquarters	81	0	0	81	81	0	0	81	0	0	0	0	0	0	0	0
Ground Vehicle Systems Center	2,215	NA	NA	NA	1,777	NA	NA	NA	438	NA	NA	NA	0	0	0	0
Soldier Center	692	435	59	198	688	431	59	198	0	0	0	0	4	4	0	0
Space and Missile Defense Command	650	582	1	67	183	135	1	47	467	447	0	20	0	0	0	0
Department of the Navy																
Bureau of Medicine and Surgery																
Naval Medical Research Command <sup>a</sup>	327	66	106	155	140	41	17	82	187	25	89	73	0	0	0	0
Naval Health Research Center	367	131	153	83	74	31	2	41	293	100	151	42	0	0	0	0
Naval Medical Research Unit - Dayton	167	52	74	41	58	22	8	28	73	18	42	13	36	12	24	0
Naval Medical Research Unit - INDO PACIFIC	22	9	0	13	22	9	0	13	0	0	0	0	0	0	0	0
Naval Medical Research Unit - San Antonio	106	46	19	41	47	18	5	24	53	23	14	16	6	5	0	1
Naval Medical Research Unit - South	261	25	121	115	192	18	94	80	69	7	27	35	0	0	0	0
Naval Submarine Medical Research Laboratory	74	23	16	35	42	13	2	27	32	10	14	8	0	0	0	0
Marine Corps	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naval Air Warfare Center Aircraft Division	11,743	8,731	1,414	1,598	7,088	5,113	557	1,418	4,655	3,618	857	180	0	0	0	0
Naval Air Warfare Center Weapon Division	4,391	2,950	829	612	4,112	2,742	773	597	279	208	56	15	0	0	0	0
Naval Facilities Engineering and Expeditionary Warfare Center	943	297	44	602	916	270	44	602	27	27	0	0	0	0	0	0
Naval Information Warfare Systems Command																
Naval Information Warfare Center Atlantic	1,669	299	1,239	131	1,606	293	1,187	126	63	6	52	5	0	0	0	0
Naval Information Warfare Center Pacific	4,141	1,999	109	2,033	2,441	1,999	109	333	1,700	0	0	1,700	0	0	0	0
Naval Observatory	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naval Oceanographic Office	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naval Sea Systems Command Warfare Centers																
Naval Surface Warfare Center	12,413	12,413	0	0	12,413	12,413	0	0	0	0	0	0	0	0	0	0
Naval Undersea Warfare Center	3,195	3,195	0	0	3,195	3,195	0	0	0	0	0	0	0	0	0	0
Office of Naval Research																
Naval Research Laboratory	4,902	1,732	1,756	1,414	2,091	1,732	72	287	2,356	0	1,684	672	455	0	0	455
Missile Defense Agency	11,146	0	5,291	5,855	3,021	0	2,468	553	8,111	0	2,809	5,302	14	0	14	0

**TABLE 6**  
**Federal facility R&D personnel (headcount), by job category: FY 2022**  
 (Number)

Agency or facility	All job categories				Federal employees and military personnel				Contractors				All other R&D personnel			
	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff
Space Force																
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	14	6	8	0	14	6	8	0	0	0	0	0	0	0	0	0
Commercial Satellite Communications (SATCOM)	12	6	6	0	12	6	6	0	0	0	0	0	0	0	0	0
Counter Communications System	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Electro-Optical/ Infrared Weather Systems	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Evolved Strategic SATCOM	36	16	20	0	36	16	20	0	0	0	0	0	0	0	0	0
Global Positioning Systems III Follow-on	10	3	7	0	10	3	7	0	0	0	0	0	0	0	0	0
Ground Based Optical Sensor System	22	0	17	5	11	0	9	2	11	0	8	3	0	0	0	0
Joint Execution and Tasking System for Space	7	0	3	4	2	0	1	1	5	0	2	3	0	0	0	0
National Security Space Launch	18	11	6	1	18	11	6	1	0	0	0	0	0	0	0	0
NAVSTAR Global Positioning System (User Equipment)	28	21	5	2	28	21	5	2	0	0	0	0	0	0	0	0
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Block 0 Polar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Integration	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Space Mod Initiative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polar MILSATCOM Enhanced Polar System Recapitalization	10	7	3	0	10	7	3	0	0	0	0	0	0	0	0	0
Protected Tactical Enterprise Service	12	7	5	0	12	7	5	0	0	0	0	0	0	0	0	0
Protected Tactical Service	19	12	7	0	19	12	7	0	0	0	0	0	0	0	0	0
Rocket System Launch Program	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Control Technology	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Rapid Capabilities Office	195	195	0	0	63	63	0	0	132	132	0	0	0	0	0	0
Space Situation Awareness Systems	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Situational Awareness Environmental Monitoring	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Systems Prototype Transitions Assault Breaker II	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Test and Training Range Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Space Test Program	36	0	29	7	36	0	29	7	0	0	0	0	0	0	0	0
Weather System Follow-On	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Department of Energy																
National Energy Technology Laboratory	523	448	15	60	155	130	0	25	365	315	15	35	3	3	0	0
Department of Health and Human Services																
Centers for Disease Control and Prevention																
National Center for Emerging and Zoonotic Infectious Diseases	598	228	262	108	435	213	154	68	115	8	70	37	48	7	38	3
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	205	50	83	72	146	50	60	36	10	0	10	0	49	0	13	36
National Center for Immunization and Respiratory Diseases	208	67	125	16	139	42	86	11	52	20	27	5	17	5	12	0

**TABLE 6**  
**Federal facility R&D personnel (headcount), by job category: FY 2022**  
 (Number)

Agency or facility	All job categories				Federal employees and military personnel				Contractors				All other R&D personnel			
	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff
National Center on Birth Defects and Developmental Disabilities	9	6	1	2	9	6	1	2	0	0	0	0	0	0	0	0
National Institute for Occupational Safety and Health	602	351	190	61	514	333	141	40	38	11	19	8	50	7	30	13
Food and Drug Administration																
Center for Biologics Evaluation and Research	398	260	112	26	322	260	36	26	11	0	11	0	65	0	65	0
Center for Devices and Radiological Health	260	130	100	30	160	130	0	30	0	0	0	0	100	0	100	0
Center for Drug Evaluation and Research	1,528	1,290	132	106	1,498	1,273	125	100	30	17	7	6	0	0	0	0
Center for Food Safety and Applied Nutrition	260	210	40	10	210	170	30	10	50	40	10	0	0	0	0	0
Center for Tobacco Products	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Center for Veterinary Medicine	79	71	0	8	78	70	0	8	1	1	0	0	0	0	0	0
National Center for Toxicological Research	309	149	126	34	243	149	60	34	66	0	66	0	0	0	0	0
Office of Regulatory Affairs	70	70	0	0	60	60	0	0	10	10	0	0	0	0	0	0
Oncology Center of Excellence	15	11	0	4	13	9	0	4	2	2	0	0	0	0	0	0
National Institutes of Health																
Clinical Center	3,683	30	3,512	141	2,156	30	1,999	127	705	0	691	14	822	0	822	0
Eunice Kennedy Shriver National Institute of Child Health and Human Development	728	72	533	123	292	72	143	77	107	0	61	46	329	0	329	0
National Cancer Institute	366	23	289	54	5	5	0	0	361	18	289	54	0	0	0	0
National Center for Advancing Translational Sciences	232	86	138	8	95	33	59	3	84	0	79	5	53	53	0	0
National Center for Complementary and Integrative Health	44	7	7	30	13	7	4	2	3	0	3	0	28	0	0	28
National Eye Institute	491	81	322	88	192	75	107	10	158	6	74	78	141	0	141	0
National Heart, Lung, and Blood Institute	823	823	0	0	452	452	0	0	199	199	0	0	172	172	0	0
National Human Genome Research Institute	607	43	513	51	254	43	181	30	90	0	69	21	263	0	263	0
National Institute of Allergy and Infectious Diseases	1,927	654	1,115	158	871	388	388	95	512	1	448	63	544	265	279	0
National Institute of Arthritis and Musculoskeletal and Skin Diseases	273	135	105	33	134	87	22	25	37	5	24	8	102	43	59	0
National Institute of Biomedical Imaging and Bioengineering	52	30	4	18	34	30	0	4	4	0	4	0	14	0	0	14
National Institute of Dental and Craniofacial Research	115	75	15	25	115	75	15	25	0	0	0	0	0	0	0	0
National Institute of Diabetes and Digestive and Kidney Diseases	962	660	182	120	502	278	139	85	89	13	41	35	371	369	2	0
National Institute of Environmental Health Sciences	842	503	214	125	472	206	161	105	100	27	53	20	270	270	0	0
National Institute of Mental Health	168	52	95	21	58	38	14	6	59	0	44	15	51	14	37	0
National Institute of Neurological Disorders and Stroke	1,248	473	491	284	335	99	158	78	318	0	124	194	595	374	209	12
National Institute of Nursing Research	26	3	0	23	26	3	0	23	0	0	0	0	0	0	0	0
National Institute on Aging	81	81	0	0	31	31	0	0	50	50	0	0	0	0	0	0
National Institute on Alcohol Abuse and Alcoholism	289	138	120	31	84	49	25	10	38	7	10	21	167	82	85	0
National Institute on Deafness and Other Communication Disorders	147	94	33	20	67	37	13	17	36	13	20	3	44	44	0	0
National Institute on Drug Abuse	438	27	340	71	123	27	65	31	114	0	74	40	201	0	201	0
National Institute on Minority Health and Health Disparities	76	74	0	2	13	12	0	1	18	17	0	1	45	45	0	0





**TABLE 6**  
**Federal facility R&D personnel (headcount), by job category: FY 2022**  
 (Number)

Agency or facility	All job categories				Federal employees and military personnel				Contractors				All other R&D personnel			
	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff
Salisbury Health Care, W.G. (Bill) Hefner Salisbury Medical Center	17	6	10	1	17	6	10	1	0	0	0	0	0	0	0	0
VISN 7: Southeast Network																
Atlanta Medical Center	84	59	20	5	84	59	20	5	0	0	0	0	0	0	0	0
Augusta Health Care, Charlie Norwood Medical Center	20	11	5	4	20	11	5	4	0	0	0	0	0	0	0	0
Birmingham Medical Center	26	14	5	7	26	14	5	7	0	0	0	0	0	0	0	0
Charleston Health Care, Ralph H. Johnson Medical Center	103	69	24	10	103	69	24	10	0	0	0	0	0	0	0	0
Columbia South Carolina Health Care, William Jennings Bryan Dorn Medical Center	10	5	0	5	10	5	0	5	0	0	0	0	0	0	0	0
Tuscaloosa Medical Center	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VISN 8: Sunshine Health Care Network																
Bay Pines Health Care System	9	4	3	2	9	4	3	2	0	0	0	0	0	0	0	0
Caribbean Health Care System	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miami Health Care System	50	32	11	7	50	32	11	7	0	0	0	0	0	0	0	0
North Florida/ South Georgia Health Care System	64	39	12	13	64	39	12	13	0	0	0	0	0	0	0	0
Orlando Medical Center	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tampa Health Care, James A. Haley Veterans' Hospital	75	55	10	10	75	55	10	10	0	0	0	0	0	0	0	0
VISN 9: MidSouth Health Care Network																
Lexington Medical Center (Troy Bowling Campus)	15	9	2	4	15	9	2	4	0	0	0	0	0	0	0	0
Louisville Health Care, Robley Rex Medical Center	12	7	2	3	12	7	2	3	0	0	0	0	0	0	0	0
Memphis Medical Center	25	11	12	2	25	11	12	2	0	0	0	0	0	0	0	0
Mountain Home Health Care, James H. Quillen Medical Center	9	4	1	4	9	4	1	4	0	0	0	0	0	0	0	0
Tennessee Valley Health Care, Nashville Medical Center	50	29	10	11	50	29	10	11	0	0	0	0	0	0	0	0
VISN 10: Health Care System																
Ann Arbor Health Care System	143	107	19	17	143	107	19	17	0	0	0	0	0	0	0	0
Battle Creek Medical Center	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cincinnati Medical Center	25	16	2	7	25	16	2	7	0	0	0	0	0	0	0	0
Dayton Medical Center	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detroit Health Care, John D. Dingell Medical Center	16	9	2	5	16	9	2	5	0	0	0	0	0	0	0	0
Indiana Health Care, Richard L. Roudebush Medical Center	83	50	5	28	83	50	5	28	0	0	0	0	0	0	0	0
Northeast Ohio Health Care, Louis Stokes Cleveland Medical Center	139	48	74	17	139	48	74	17	0	0	0	0	0	0	0	0
VISN 12: Great Lakes Health Care System																
Chicago Health Care, Jesse Brown Medical Center	41	30	9	2	41	30	9	2	0	0	0	0	0	0	0	0
Hines Health Care, Edward Hines Junior Hospital	137	99	24	14	137	99	24	14	0	0	0	0	0	0	0	0
Madison Health Care, William S. Middleton Memorial Veterans' Hospital	38	17	12	9	38	17	12	9	0	0	0	0	0	0	0	0
Milwaukee Health Care, Clement J. Zablocki Medical Center	20	6	8	6	20	6	8	6	0	0	0	0	0	0	0	0
VISN 15: Heartland Health Care Network																







TABLE 6

**Federal facility R&D personnel (headcount), by job category: FY 2022**

(Number)

Agency or facility	All job categories				Federal employees and military personnel				Contractors				All other R&D personnel			
	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff	All	Researchers	R&D technicians	R&D support staff
Smithsonian Conservation Biology Institute	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Environmental Research Center	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Smithsonian Tropical Research Institute	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = not available; facility did not provide data.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command is for the headquarters only.**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

TABLE 7

## Federal facility R&amp;D federal FTE personnel, by R&amp;D function: FY 2022

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
All agencies				
Department of Agriculture				
Agricultural Research Service				
Midwest Area	911.0	NA	NA	NA
Northeast Area	1,007.0	NA	NA	NA
Pacific West Area	1,100.0	NA	NA	NA
Plains Area	1,208.0	NA	NA	NA
Southeast Area	1,389.0	NA	NA	NA
Animal and Plant Health Inspection Service				
Forest Pest Methods Laboratory	48.0	16.0	27.0	5.0
Insect Management and Molecular Diagnostics Laboratory	19.0	9.0	9.0	1.0
National Veterinary Services Laboratories/ Center for Veterinary Biologics	92.3	23.7	48.8	19.8
National Wildlife Research Center	130.0	39.0	54.0	37.0
Plant Pathogen Confirmatory Diagnostics Laboratory	21.5	19.5	1.0	1.0
Treatment and Inspection Methods Laboratory	11.0	8.0	2.0	1.0
Economic Research Service	NA	NA	NA	NA
Forest Service				
Forest Products Laboratory	122.0	48.5	36.5	37.0
International Institute of Tropical Forestry	25.0	15.0	6.0	4.0
Northern Research Station	322.0	105.0	168.5	48.5
Pacific Northwest Research Station	194.0	89.0	53.0	52.0
Pacific Southwest Research Station	103.0	55.0	35.0	13.0
Rocky Mountain Research Station	394.0	260.0	68.0	66.0
Southern Research Station	248.0	196.0	38.0	14.0
Washington Office Research and Development	6.0	6.0	0.0	0.0
National Agricultural Statistics Service	49.4	27.4	21.0	1.0
Natural Resources Conservation Service				
Plant Materials Center	69.8	42.0	24.9	2.9
Soil Science Research Branch	5.0	5.0	0.0	0.0
Department of Commerce				
Census Bureau	411.0	410.0	1.0	0.0
National Institute of Standards and Technology	2,107.0	1,732.0	118.0	257.0
National Oceanic and Atmospheric Administration				
Mission Support				
Office of the Chief Administrative Officer	0.0	0.0	0.0	0.0
Office of the Chief Information Officer	0.1	0.1	0.0	0.0
National Environmental Satellite, Data, and Information Service				
Center for Satellite Applications and Research	108.0	108.0	0.0	0.0
National Centers for Environmental Information	5.1	5.1	0.0	0.0
National Marine Fisheries Service				
Alaska Fisheries Science Center	38.0	38.0	0.0	0.0
Alaska Regional Office	6.9	6.9	0.0	0.0
Greater Atlantic Region Fisheries Office	4.8	4.8	0.0	0.0
Northeast Fisheries Science Center	14.2	14.2	0.0	0.0
Northwest Fisheries Science Center	14.3	14.3	0.0	0.0
Office of Habitat Conservation	10.4	10.4	0.0	0.0
Office of Protected Resources	1.3	1.3	0.0	0.0
Office of Science and Technology	8.7	8.7	0.0	0.0
Office of Sustainable Fisheries	0.1	0.1	0.0	0.0

TABLE 7

**Federal facility R&D federal FTE personnel, by R&D function: FY 2022**

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Pacific Island Fisheries Science Center	11.7	11.7	0.0	0.0
Pacific Islands Regional Office	5.5	5.5	0.0	0.0
Southeast Fisheries Science Center	19.5	19.5	0.0	0.0
Southeast Regional Office	3.9	3.9	0.0	0.0
Southwest Fisheries Science Center	21.8	21.8	0.0	0.0
West Coast Region	18.6	18.6	0.0	0.0
National Ocean Service				
Center for Operational Oceanographic Products and Services	7.8	7.8	0.0	0.0
Integrated Ocean Observing System	0.0	0.0	0.0	0.0
National Centers for Coastal Ocean Science	170.0	170.0	0.0	0.0
National Geodetic Survey	38.1	38.1	0.0	0.0
Office for Coastal Management	0.0	0.0	0.0	0.0
Office of Response and Restoration	5.8	5.8	0.0	0.0
Office of the Coast Survey	18.0	18.0	0.0	0.0
National Weather Service				
National Centers for Environmental Prediction	10.5	10.5	0.0	0.0
Office of Science and Technology Integration	0.0	0.0	0.0	0.0
Office of Water Prediction	19.4	19.4	0.0	0.0
Oceanic and Atmospheric Research				
Air Resources Laboratory	31.4	31.4	0.0	0.0
Atlantic Oceanographic and Meteorological Laboratory	89.5	89.5	0.0	0.0
Chemical Sciences Laboratory	56.3	56.3	0.0	0.0
Climate Program Office	48.2	48.2	0.0	0.0
Earth System Research Laboratories	8.3	8.3	0.0	0.0
Geophysical Fluid Dynamics Laboratory	103.8	103.8	0.0	0.0
Global Monitoring Laboratory	47.0	47.0	0.0	0.0
Global Ocean Monitoring and Observing Program	10.1	10.1	0.0	0.0
Global Systems Laboratory	62.7	62.7	0.0	0.0
Great Lakes Environmental Research Laboratory	50.3	50.3	0.0	0.0
National Sea Grant College Program	24.8	24.8	0.0	0.0
National Severe Storms Laboratory	61.9	61.9	0.0	0.0
Ocean Acidification Program	6.6	6.6	0.0	0.0
Office of Ocean Exploration and Research	30.9	30.9	0.0	0.0
Office of Research Transition and Application	6.4	6.4	0.0	0.0
Pacific Marine Environment Laboratory	74.9	74.9	0.0	0.0
Physical Sciences Laboratory	65.6	65.6	0.0	0.0
Weather Program Office	22.5	22.5	0.0	0.0
Office of Marine and Aviation Operations				
Marine and Aviation Operations Center	6.5	6.5	0.0	0.0
National Oceanic and Atmospheric Administration Corps	123.3	123.3	0.0	0.0
National Telecommunications and Information Administration				
Institute for Telecommunication Sciences	NA	NA	NA	NA
Department of Defense				
Defense Information Systems Agency	201.0	66.0	103.0	32.0
Department of the Air Force				
Materiel Command				
Air Force Civil Engineer Center	NA	NA	NA	NA
Air Force Life Cycle Management Center	NA	NA	NA	NA
Air Force Nuclear Weapons Center	NA	NA	NA	NA

TABLE 7

## Federal facility R&amp;D federal FTE personnel, by R&amp;D function: FY 2022

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Air Force Research Laboratory	NA	NA	NA	NA
Air Force Test Center	NA	NA	NA	NA
Department of the Army				
Army Cyber Command	NA	NA	NA	NA
Army Engineer Research and Development Center	1,811.0	1,403.0	177.0	231.0
Army Medical Research and Development Command	NA	NA	NA	NA
Army Research Institute for the Behavioral and Social Sciences	NA	NA	NA	NA
Combat Capabilities Development Command (DEVCOM)				
Armaments Center	1,909.4	209.7	1,368.0	331.7
Army Research Laboratory	NA	NA	NA	NA
Aviation and Missile Center	NA	NA	NA	NA
Chemical Biological Center	240.0	117.0	85.0	38.0
Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance Center	1,683.0	1,404.0	81.0	198.0
Data and Analysis Center	25.0	25.0	0.0	0.0
DEVCOM Headquarters	81.0	0.0	0.0	81.0
Ground Vehicle Systems Center	NA	NA	NA	NA
Soldier Center	688.0	431.0	59.0	198.0
Space and Missile Defense Command	183.0	135.0	1.0	47.0
Department of the Navy				
Bureau of Medicine and Surgery				
Naval Medical Research Command <sup>a</sup>	140.0	41.0	17.0	82.0
Naval Health Research Center	74.0	31.0	2.0	41.0
Naval Medical Research Unit - Dayton	58.0	22.0	8.0	28.0
Naval Medical Research Unit - INDO PACIFIC	22.0	9.0	0.0	13.0
Naval Medical Research Unit - San Antonio	47.0	18.0	5.0	24.0
Naval Medical Research Unit - South	188.9	18.0	93.3	77.6
Naval Submarine Medical Research Laboratory	35.8	12.5	2.0	21.3
Marine Corps	NA	NA	NA	NA
Naval Air Warfare Center Aircraft Division	6,340.9	4,496.8	489.4	1,354.7
Naval Air Warfare Center Weapon Division	3,943.3	2,599.3	747.0	597.0
Naval Facilities Engineering and Expeditionary Warfare Center	916.0	270.0	44.0	602.0
Naval Information Warfare Systems Command				
Naval Information Warfare Center Atlantic	562.0	101.0	416.0	45.0
Naval Information Warfare Center Pacific	1,155.0	1,027.0	34.0	94.0
Naval Observatory	NA	NA	NA	NA
Naval Oceanographic Office	NA	NA	NA	NA
Naval Sea Systems Command Warfare Centers				
Naval Surface Warfare Center	9,670.0	9,670.0	0.0	0.0
Naval Undersea Warfare Center	1,277.3	1,277.3	0.0	0.0
Office of Naval Research				
Naval Research Laboratory	1,486.8	1,379.1	52.7	55.0
Missile Defense Agency	3,007.5	0.0	2,467.0	540.5
Space Force				
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	14.0	6.0	8.0	0.0
Commercial Satellite Communications (SATCOM)	12.0	6.0	6.0	0.0
Counter Communications System	NA	NA	NA	NA
Electro-Optical/ Infrared Weather Systems	NA	NA	NA	NA

TABLE 7

## Federal facility R&amp;D federal FTE personnel, by R&amp;D function: FY 2022

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Evolved Strategic SATCOM	36.0	16.0	20.0	0.0
Global Positioning Systems III Follow-on	10.0	3.0	7.0	0.0
Ground Based Optical Sensor System	11.0	0.0	9.0	2.0
Joint Execution and Tasking System for Space	2.0	0.0	1.0	1.0
National Security Space Launch	18.0	11.0	6.0	1.0
NAVSTAR Global Positioning System (User Equipment)	28.0	21.0	5.0	2.0
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Block 0 Polar	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Integration	NA	NA	NA	NA
Next-Generation Overhead Persistent Infrared Space Mod Initiative	NA	NA	NA	NA
Polar MILSATCOM Enhanced Polar System Recapitalization	10.0	7.0	3.0	0.0
Protected Tactical Enterprise Service	12.0	7.0	5.0	0.0
Protected Tactical Service	19.0	12.0	7.0	0.0
Rocket System Launch Program	NA	NA	NA	NA
Space Control Technology	NA	NA	NA	NA
Space Rapid Capabilities Office	63.0	63.0	0.0	0.0
Space Situation Awareness Systems	NA	NA	NA	NA
Space Situational Awareness Environmental Monitoring	NA	NA	NA	NA
Space Systems Prototype Transitions Assault Breaker II	NA	NA	NA	NA
Space Test and Training Range Development	NA	NA	NA	NA
Space Test Program	36.0	0.0	29.0	7.0
Weather System Follow-On	NA	NA	NA	NA
Department of Energy				
National Energy Technology Laboratory	149.2	129.2	0.0	20.0
Department of Health and Human Services				
Centers for Disease Control and Prevention				
National Center for Emerging and Zoonotic Infectious Diseases	435.0	213.0	154.0	68.0
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	113.1	39.6	54.5	19.0
National Center for Immunization and Respiratory Diseases	139.0	42.0	86.0	11.0
National Center on Birth Defects and Developmental Disabilities	7.9	6.0	0.3	1.6
National Institute for Occupational Safety and Health	359.6	232.8	101.6	25.2
Food and Drug Administration				
Center for Biologics Evaluation and Research	175.2	136.0	23.6	15.6
Center for Devices and Radiological Health	160.0	130.0	0.0	30.0
Center for Drug Evaluation and Research	246.2	209.2	20.6	16.4
Center for Food Safety and Applied Nutrition	210.0	170.0	30.0	10.0
Center for Tobacco Products	NA	NA	NA	NA
Center for Veterinary Medicine	48.0	43.1	0.0	4.9
National Center for Toxicological Research	243.0	149.0	60.0	34.0
Office of Regulatory Affairs	60.0	60.0	0.0	0.0
Oncology Center of Excellence	5.3	3.5	0.0	1.8
National Institutes of Health				
Clinical Center	1,815.6	29.6	1,677.2	108.8
Eunice Kennedy Shriver National Institute of Child Health and Human Development	277.0	72.0	143.0	62.0
National Cancer Institute	NA	NA	NA	NA
National Center for Advancing Translational Sciences	95.0	33.0	59.0	3.0

TABLE 7

**Federal facility R&D federal FTE personnel, by R&D function: FY 2022**

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
National Center for Complementary and Integrative Health	12.0	6.0	4.0	2.0
National Eye Institute	177.9	69.5	99.1	9.3
National Heart, Lung, and Blood Institute	452.0	452.0	0.0	0.0
National Human Genome Research Institute	254.0	43.0	181.0	30.0
National Institute of Allergy and Infectious Diseases	871.0	388.0	388.0	95.0
National Institute of Arthritis and Musculoskeletal and Skin Diseases	122.0	77.9	20.1	24.0
National Institute of Biomedical Imaging and Bioengineering	NA	NA	NA	NA
National Institute of Dental and Craniofacial Research	115.0	75.0	15.0	25.0
National Institute of Diabetes and Digestive and Kidney Diseases	502.0	278.0	139.0	85.0
National Institute of Environmental Health Sciences	410.7	184.3	149.9	76.5
National Institute of Mental Health	12.1	3.7	6.9	1.5
National Institute of Neurological Disorders and Stroke	312.0	92.0	147.0	73.0
National Institute of Nursing Research	22.0	3.0	0.0	19.0
National Institute on Aging	9.3	9.3	0.0	0.0
National Institute on Alcohol Abuse and Alcoholism	84.0	49.0	25.0	10.0
National Institute on Deafness and Other Communication Disorders	58.4	31.6	11.3	15.5
National Institute on Drug Abuse	123.0	27.0	65.0	31.0
National Institute on Minority Health and Health Disparities	13.0	12.0	0.0	1.0
National Library of Medicine	63.0	63.0	0.0	0.0
Department of Homeland Security				
Coast Guard				
Acquisition Directorate, Research and Development Center	82.0	64.0	2.0	16.0
Cybersecurity and Infrastructure Security Agency	NA	NA	NA	NA
Science and Technology Directorate				
Office of National Laboratories				
Chemical Security Analysis Center	NA	NA	NA	NA
National Urban Security Technology Laboratory	NA	NA	NA	NA
Plum Island Animal Disease Center	NA	NA	NA	NA
Transportation Security Laboratory	NA	NA	NA	NA
Department of the Interior				
Bureau of Land Management	0.4	0.3	0.1	0.0
Bureau of Ocean Energy Management	212.4	212.4	0.0	0.0
Bureau of Reclamation	156.0	102.0	36.0	18.0
Fish and Wildlife Service	NA	NA	NA	NA
Geological Survey				
Core Science Systems Mission Area	517.0	409.0	14.0	94.0
Ecosystems Mission Area	1,813.0	1,231.0	249.0	333.0
Energy and Minerals Mission Area	416.0	332.0	10.0	74.0
Natural Hazards Mission Area	746.0	542.0	35.0	169.0
Water Resources Mission Area	2,491.0	1,377.0	38.0	1,076.0
National Park Service	55.0	13.0	42.0	0.0
Department of Transportation				
Federal Aviation Administration				
Office of Aerospace Medicine	73.0	44.0	18.0	11.0
Office of NextGen	200.0	150.0	30.0	20.0
Federal Highway Administration				
Intelligence Transportation Systems Joint Program Office	NA	NA	NA	NA
Office of Administrations	NA	NA	NA	NA
Office of Operations	NA	NA	NA	NA



TABLE 7

**Federal facility R&D federal FTE personnel, by R&D function: FY 2022**

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Office of Planning	NA	NA	NA	NA
Office of Research, Development, and Technology	NA	NA	NA	NA
National Highway Traffic Safety Administration				
Office of Vehicle Safety Research				
Vehicle Research and Test Center	22.0	22.0	0.0	0.0
Office of the Assistant Secretary for Research and Technology				
John A. Volpe National Transportation Systems Center	NA	NA	NA	NA
Department of Veterans Affairs				
Office of Research and Development Central Office	126.0	0.0	0.0	126.0
Veterans Integrated Services Network (VISN) 1: New England Health Care System				
Bedford Health Care System	NA	NA	NA	NA
Boston Health Care System, Jamaica Plain Campus	NA	NA	NA	NA
Central Western Massachusetts Health Care	NA	NA	NA	NA
Connecticut Health Care System, West Haven Medical Center	NA	NA	NA	NA
Manchester Medical Center	NA	NA	NA	NA
Providence Medical Center	NA	NA	NA	NA
Togus Maine Health Care System	NA	NA	NA	NA
White River Junction Medical Center	NA	NA	NA	NA
VISN 2: New York/ New Jersey Veterans Health Care Network				
Bronx Health Care, James J. Peters Medical Center	NA	NA	NA	NA
New Jersey Health Care	NA	NA	NA	NA
New York Harbor Health Care	NA	NA	NA	NA
Northport Medical Center	NA	NA	NA	NA
Western New York Health Care, Buffalo Medical Center	NA	NA	NA	NA
VISN 4: Health Care				
Coatesville Medical Center	NA	NA	NA	NA
Philadelphia Health Care, Corporal Michael J. Crescenz Medical Center	NA	NA	NA	NA
Pittsburgh Medical Center-University Drive	NA	NA	NA	NA
Wilkes-Barre Medical Center	NA	NA	NA	NA
VISN 5: Capitol Health Care Network				
Huntington Health Care, Hershel (Woody) Williams Medical Center	NA	NA	NA	NA
Maryland Health Care, Baltimore Medical Center	NA	NA	NA	NA
Washington DC Health Care, Washington Medical Center	NA	NA	NA	NA
VISN 6: Mid-Atlantic Health Care Network				
Asheville Health Care, Charles George Medical Center	NA	NA	NA	NA
Durham Medical Center	NA	NA	NA	NA
Hampton Medical Center	NA	NA	NA	NA
Richmond Health Care, Hunter Holmes McGuire Hospital	NA	NA	NA	NA
Salem Medical Center	NA	NA	NA	NA
Salisbury Health Care, W.G. (Bill) Hefner Salisbury Medical Center	NA	NA	NA	NA
VISN 7: Southeast Network				
Atlanta Medical Center	80.0	55.0	20.0	5.0
Augusta Health Care, Charlie Norwood Medical Center	NA	NA	NA	NA
Birmingham Medical Center	NA	NA	NA	NA
Charleston Health Care, Ralph H. Johnson Medical Center	NA	NA	NA	NA
Columbia South Carolina Health Care, William Jennings Bryan Dorn Medical Center	NA	NA	NA	NA
Tuscaloosa Medical Center	NA	NA	NA	NA
VISN 8: Sunshine Health Care Network				

TABLE 7

## Federal facility R&amp;D federal FTE personnel, by R&amp;D function: FY 2022

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Bay Pines Health Care System	NA	NA	NA	NA
Caribbean Health Care System	NA	NA	NA	NA
Miami Health Care System	NA	NA	NA	NA
North Florida/ South Georgia Health Care System	NA	NA	NA	NA
Orlando Medical Center	NA	NA	NA	NA
Tampa Health Care, James A. Haley Veterans' Hospital	NA	NA	NA	NA
VISN 9: MidSouth Health Care Network				
Lexington Medical Center (Troy Bowling Campus)	NA	NA	NA	NA
Louisville Health Care, Robley Rex Medical Center	NA	NA	NA	NA
Memphis Medical Center	NA	NA	NA	NA
Mountain Home Health Care, James H. Quillen Medical Center	NA	NA	NA	NA
Tennessee Valley Health Care, Nashville Medical Center	NA	NA	NA	NA
VISN 10: Health Care System				
Ann Arbor Health Care System	NA	NA	NA	NA
Battle Creek Medical Center	NA	NA	NA	NA
Cincinnati Medical Center	NA	NA	NA	NA
Dayton Medical Center	NA	NA	NA	NA
Detroit Health Care, John D. Dingell Medical Center	NA	NA	NA	NA
Indiana Health Care, Richard L. Roudebush Medical Center	NA	NA	NA	NA
Northeast Ohio Health Care, Louis Stokes Cleveland Medical Center	NA	NA	NA	NA
VISN 12: Great Lakes Health Care System				
Chicago Health Care, Jesse Brown Medical Center	NA	NA	NA	NA
Hines Health Care, Edward Hines Junior Hospital	NA	NA	NA	NA
Madison Health Care, William S. Middleton Memorial Veterans' Hospital	NA	NA	NA	NA
Milwaukee Health Care, Clement J. Zablocki Medical Center	NA	NA	NA	NA
VISN 15: Heartland Health Care Network				
Kansas City Medical Center	NA	NA	NA	NA
St. Louis Health Care, John J. Cochran Veterans Hospital	NA	NA	NA	NA
VISN 16: South Central Health Care Network				
Central Arkansas Health Care, Eugene J. Towbin Health Care Center	NA	NA	NA	NA
Houston Health Care, Michael E. DeBakey Medical Center	NA	NA	NA	NA
Jackson Health Care, G.V. (Sonny) Montgomery Medical Center	NA	NA	NA	NA
Shreveport Health Care, Overton Brooks Medical Center	NA	NA	NA	NA
Southeast Louisiana Health Care System	NA	NA	NA	NA
VISN 17: Heart of Texas Health Care Network				
Central Texas Health Care	NA	NA	NA	NA
North Texas, Dallas Medical Center	NA	NA	NA	NA
South Texas Health Care	NA	NA	NA	NA
VISN 19: Rocky Mountain Network				
Eastern Colorado, Rocky Mountain Regional Medical Center	NA	NA	NA	NA
Eastern Oklahoma, Jack C. Montgomery Medical Center	NA	NA	NA	NA
Oklahoma City Medical Center	NA	NA	NA	NA
Salt Lake City Health Care	NA	NA	NA	NA
VISN 20: Northwest Network				
Boise Medical Center	NA	NA	NA	NA
Portland Health Care System	NA	NA	NA	NA
Puget Sound Health Care, Seattle Medical Center	NA	NA	NA	NA
VISN 21: Sierra Pacific Network				
Central California Health Care System	NA	NA	NA	NA

TABLE 7

## Federal facility R&amp;D federal FTE personnel, by R&amp;D function: FY 2022

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Northern California Health Care System	NA	NA	NA	NA
Pacific Islands Health Care System	NA	NA	NA	NA
Palo Alto Health Care System	NA	NA	NA	NA
San Francisco Health Care System	NA	NA	NA	NA
Sierra Nevada Health Care System	NA	NA	NA	NA
Southern Nevada Health Care System	NA	NA	NA	NA
VISN 22: Desert Pacific Health Care Network				
Greater Los Angeles, West Los Angeles Medical Center	NA	NA	NA	NA
Loma Linda Health Care System	NA	NA	NA	NA
Long Beach Health Care System	NA	NA	NA	NA
New Mexico Health Care System	NA	NA	NA	NA
Phoenix Health Care System	NA	NA	NA	NA
San Diego Health Care System	NA	NA	NA	NA
Southern Arizona Health Care System	NA	NA	NA	NA
VISN 23: Midwest Health Care Network				
Fargo Health Care System	NA	NA	NA	NA
Minneapolis Health Care System	NA	NA	NA	NA
Nebraska-Western Iowa Health Care System	NA	NA	NA	NA
Sioux Falls Health Care System	NA	NA	NA	NA
St. Cloud Health Care	NA	NA	NA	NA
Other agencies				
Environmental Protection Agency				
Center for Computational Toxicology and Exposure	218.0	113.0	82.0	23.0
Center for Environmental Measurement and Modeling	353.0	237.0	88.0	28.0
Center for Environmental Solutions and Emergency Response	262.0	176.0	62.0	24.0
Center for Public Health and Environmental Assessment	373.0	263.0	81.0	29.0
Office of Science Advisor, Policy, and Engagement	86.0	6.0	5.0	75.0
Federal Trade Commission	NA	NA	NA	NA
Library of Congress				
Digital Services Directorate	1.4	1.0	0.0	0.4
Preservation Directorate	15.0	11.0	3.0	1.0
National Aeronautics and Space Administration (NASA)				
Ames Research Center	NA	NA	NA	NA
Armstrong (Dryden) Flight Research Center	NA	NA	NA	NA
Glenn Research Center	NA	NA	NA	NA
Goddard Space Flight Center	NA	NA	NA	NA
Johnson Space Center	NA	NA	NA	NA
Kennedy Space Center	NA	NA	NA	NA
Langley Research Center	NA	NA	NA	NA
Marshall Space Flight Center	NA	NA	NA	NA
NASA Headquarters	NA	NA	NA	NA
Stennis Space Center	NA	NA	NA	NA
Smithsonian Institution				
Archives of American Art	NA	NA	NA	NA
Center for Astrophysics				
Smithsonian Astrophysical Observatory	NA	NA	NA	NA
National Museum of Natural History	NA	NA	NA	NA
Smithsonian Conservation Biology Institute	NA	NA	NA	NA
Smithsonian Environmental Research Center	NA	NA	NA	NA

TABLE 7

**Federal facility R&D federal FTE personnel, by R&D function: FY 2022**

(Number)

Agency or facility	All R&D FTEs	R&D function		
		Researchers	R&D technicians	R&D support staff
Smithsonian Tropical Research Institute	NA	NA	NA	NA

FTE= full-time equivalent; NA = not available; facility did not provide data.

<sup>a</sup> Naval Medical Research Command headquarters and its subfacilities responded separately to the survey. Data displayed for the Naval Medical Research Command is for the headquarters only.

**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

## Technical Notes

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### Survey Overview (FY 2022 Survey Cycle)

*Purpose.* The Federal Facilities Research and Development (FFRD) Survey collects information on research and experimental development (R&D) expenditures, funding, and personnel for all federally owned and operated facilities in the United States. This new survey is the unique source of federal performer-reported data on R&D expenditures and R&D personnel. In conjunction with performer-reported data for the remaining sectors of the economy, FFRD Survey data can be used to estimate total national R&D performance and other critical statistics that are increasingly important in the analysis of global R&D competitiveness.

*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 disclosure review number is NCSES-DRN24-064.

*Survey contractor.* ICF.

*Survey sponsor.* The FFRD Survey is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation.

### Key Survey Information

*Frequency.* Annual.

*Initial survey year.* A pilot survey that collected FY 2021 data was conducted from September 2022 through December 2022, and then a full implementation of the survey to collect FY 2022 data was conducted from September 2023 through March 2024.

*Reference period.* FY 2022.

*Response unit.* Establishment.

*Sample or census.* Census.

*Population size.* The population consists of 470 research-performing federal facilities within 39 federal agencies.

*Sample size.* Not applicable; the survey is a census of all known eligible federal facilities that conduct R&D.

### Survey Design

*Target population.* The population for the FY 2022 FFRD Survey consisted of federally owned and operated facilities in the United States that performed R&D in FY 2022, excluding facilities of the Central Intelligence Agency (due to the classified nature of their work); federally funded research and development centers (surveyed separately in the Federally Funded Research and Development Centers R&D Survey); and University Affiliated Research Centers or facilities associated with universities, both of which may be surveyed as part of the Higher Education Research and Development Survey.

*Sampling frame.* The facilities for the FY 2022 FFRD Survey were identified from the list of federal agencies with R&D obligations based on the Survey of Federal Funds for R&D and the Federal Laboratory Consortium list of laboratories. A facility is defined as a unit within an agency that is responsible for performing R&D, generally with its own distinct budget and leadership. Since each agency has a different organizational structure, this unit of measurement may be a division, branch, center, lab, or other entity and may span multiple locations. Because of this, the total number of reporting units for the FY 2022 FFRD Survey is 320, which represents the 470 research-performing federal facilities.

*Sample design.* Not applicable.

## Data Collection and Processing Methods

*Data collection.* Data collection began with an e-mail to each agency to verify the reporting units and to identify the name, phone number, and e-mail address of each facility-level respondent. [Table A-1](#) displays a list of facilities within each agency and notes which are reporting units for the FY 2022 FFRD Survey. When the reporting units are totaled, there are 320 total units across 39 agencies. There were 12 agency-level responses and 288 responses at a level lower than the agency-level for a total of 299 responses. The response total is one less than the number of units because for the Center for Veterinary Biologics is included with the National Veterinary Services Laboratories for this survey cycle only.

Respondents could choose to submit a questionnaire downloaded from the Web or sent via e-mail (i.e., PDF or Excel format) or use a Web-based data collection system to respond to the survey. Questionnaires were carefully examined for completeness upon receipt. Respondents were sent personalized e-mail messages asking them to provide any necessary revisions before the final processing and tabulation of data. These e-mail messages included a link to the FFRD Survey Web-based collection system, allowing respondents to view and correct their data online. Respondents were also offered the opportunity to explain their data or provide corrections via e-mail, through PDF, or through Excel and have their data updated by survey staff.

Data collection began on 2023 September 12, and the requested due date for data submissions was 2023 December 31. Data collection was extended until most surveyed agencies provided at least partial data with the last completed survey response verified in March 2024.

*Mode.* Respondents could choose to submit a questionnaire via the Web-based data collection system or through fillable PDFs or Excel files that were then imported to the Web-based data collection system. All edit and trend checks were accomplished through the Web-based system. Fifty-six facilities submitted data using the fillable PDF, 194 facilities submitted using an Excel version of the survey, and 49 submitted using the Web-based data collection system.

*Response rates.* By the survey's closing date in March 2024, forms had been received from 299 facilities out of an eligible population of 319, a response rate of 93.7%. [Table A-2](#) displays a detailed breakdown of response rates by the Department of Defense (DOD) and non-DOD agencies, and [table A-3](#) displays a breakdown of response rates for each survey question. Questions 4, 7, 8, 9, and 10 had much lower response rates for non-DOD agencies than for DOD agencies. Question 4 was a yes or no question on whether the facility's FY 2022 R&D was funded through public-private partnerships. Questions 7 and 8 asked facilities to report how much funding was provided by type of agreement and type of organization. Questions 9 and 10 asked facilities to report headcounts for R&D personnel by function and job category (Question 9) and federal full-time equivalents (FTEs) by function (Question 10). Due to low item response rates for the questions on funding to others and R&D personnel counts, limited data are available. Data on R&D funding to others are not included in the data tables for this cycle. R&D personnel counts ([table 6](#) and [table 7](#)) are only displayed for the facilities that provided these data; no imputed or aggregate estimates are provided for FY 2022.

*Data editing.* Data inconsistencies or blank fields in the FFRD Survey were flagged automatically by the Web-based data collection system so that respondents could not submit their final data until all required fields were completed without errors. Respondents were contacted and asked to resolve possible self-reporting issues themselves. Questionnaires were carefully examined by survey staff upon receipt. Reviews focused on unexplained missing data, expenditures that significantly differed from the Federal Funds for R&D Survey intramural obligations, expenditures for performing research and funding research that matched, and other data anomalies. If additional explanations or data revisions were needed, respondents were sent personalized e-mail messages asking them to provide any necessary revisions before the final processing and tabulation of data. For any follow-up questions that went unanswered, NCSSES was consulted before the data were either accepted without changes or adjusted based on information from other questions or previous contacts with the respondent.

Some agencies provided data outside of survey forms and provided partial data that the survey team added to the database with their approval:

- National Aeronautics and Space Administration (NASA) reported R&D in the survey instrument but then followed up with a report with guidance to update their responses. NASA also provided a report with total civilian FTEs by space center.
- The Federal Highway Administration provided total R&D in the survey but followed up with reports of R&D intramural obligations, which provided the distribution of R&D type and by federal and nonfederal sources.
- The Department of Veterans Affairs provided responses for direct R&D expenditures within the survey form but provided external information for the associated indirect costs (Veterans Equitable Resource Allocation) by facility, which were added proportionally to the type of R&D for each facility.

Responses to Questions 7 and 8 (R&D funding organizations and types and sources) were used to perform a data review of responses to questions in Section 1 (R&D expenditures), and some data edits were made as a result of responses to Questions 7 and 8.

*Imputation.* Instances of missing data occurred when a facility did not respond to the survey (i.e., unit nonresponse) or when a facility responded but did not answer certain survey questions (i.e., item nonresponse). After removing ineligible facilities, 319 total records remained, with 299 responses and 20 unit nonresponses. Among responding facilities, total R&D expenditures was completely observed (from Questions 1, 2, or 5 totals). The pattern of missing data showed that 37% of responding facilities had complete data. Another 26% were missing only FTE items. Sixteen percent of responding facilities had data for FTE, but were missing personnel headcount data, and 15% were missing both headcount and FTE data. Multivariate imputation by chained equations (MICE) was used to simultaneously impute missing values for all non-personnel (headcount and FTE) variables. The imputation model for total R&D expenditures was based on a linear regression model with the total R&D obligations from the Federal Funds for R&D Survey as a predictor for each facility. The model included separate intercepts and slopes for DOD and non-DOD facilities. When facility-level obligations were not available from the Federal Funds for R&D Survey, facilities responding to the FFRD Survey were aggregated to the level of reporting for the Federal Funds for R&D Survey, referred to below as reporting level found in the Federal Funds for R&D Survey. The imputed amounts were then assigned equally to the FFRD Survey facilities within the same reporting level found in the Federal Funds for R&D Survey. These imputed records display as equal amounts in the tables. This occurs for two Army, two Navy, and six Smithsonian records.

Total R&D expenditures was then allocated to the subcategories as follows:

- Type of R&D was imputed for nonresponding facilities based on (1) the percent distribution of R&D expenditures by R&D type based on responding facilities aggregated within the same reporting level found in the Federal Funds for R&D Survey, (2) the percent distribution of R&D type expenditures based on responding facilities aggregated to the agency level, (3) the percent distribution of obligations by R&D type as reported in the Federal Funds for R&D Survey at the reporting level found in the Federal Funds for R&D Survey, and (4) the percent distribution of obligations by R&D type as reported in the Federal Funds for R&D Survey aggregated to the agency level. For DOD reporting units, when some facilities within the agency responded (partial agency response), total research, development, testing, and evaluation (RDT&E) and operational system development for nonresponding DOD facilities were imputed based on a ratio adjustment using the ratio of RDT&E to R&D at the agency level and applying it to the imputed R&D total for the facility. When no facilities in the agency responded, the ratio adjustment was based on the Federal Funds for R&D Survey ratio at the agency level. All imputed R&D amounts were assigned as federal R&D within each type.
- Source of R&D funding was imputed as federal, based on 98% of the reported total expenditures coming from federal sources (99% of basic research, 97% of applied research, 99% of experimental development, and 93% of operational system development). The federal source of funding was imputed to the agency where the facility resides, based on 99% of the federal sources originating in the parent agency of the facility.

- Field of R&D was imputed for nonresponding facilities based on (1) the percent distribution of R&D field expenditures based on responding facilities aggregated within the same reporting level found in the Federal Funds for R&D Survey, (2) the percent distribution of R&D field expenditures based on responding facilities aggregated to the agency level, (3) the percent distribution of obligations by R&D field reported in the Federal Funds for R&D Survey at the reporting level found in the Federal Funds for R&D Survey, and (4) the percent distribution of obligations by R&D field reported in the Federal Funds for R&D Survey aggregated to the agency level.

*Weighting.* Survey data were not weighted.

## Survey Quality Measures

*Sampling error.* Because the FY 2022 survey was distributed to all eligible agencies performing R&D, there was no sampling error.

*Coverage error.* Under the total survey error framework, coverage error describes the difference between reporting units and units in the target population that the frame was developed to reach. The subset of agencies is based on those reporting non-zero intramural R&D obligations on the Federal Funds for R&D Survey. There is a small risk of coverage bias if an agency had federal R&D expenditures but did not have reported obligations.

*Nonresponse error.* Nonresponse error refers to the differences in key estimates between units (i.e., facilities) in the frame that were selected for data collection and those that responded. Of the 319 eligible reporting units, 299 responded for a response rate of 93.7%. For unit nonresponse, multiple follow-ups were conducted with nonresponding facilities, and multiple contact and data collection modes were used (i.e., phone and e-mail) to mitigate nonresponse error. The imputations include predictions of unit nonrespondents to reduce the risk of nonresponse bias in the final estimates.

The item response rate ranged from 98.2% to 100% for the DOD agencies and from 50.0% to 100% for the non-DOD agencies. For item nonresponse, facilities were encouraged to report estimates of expenditures when actual dollar amounts could not be provided. This approach reduces item nonresponse error risk but may introduce measurement error. Imputation was conducted to help mitigate item nonresponse error.

*Measurement error.* The FFRD Survey contained various ways for respondents to explain their answers. This included comment boxes for every question with instructions to provide additional information about how they calculated their response and any assumptions they made. Respondents were also prompted to enter comments if they indicated any data was unavailable. Additionally, every question requiring detailed reporting of expenditures or personnel also included a checkbox to allow the respondent to indicate if they were providing estimates. Finally, there were open-ended questions at the end of the survey where respondents could provide additional feedback on their experience completing the survey, specifically, if they found any questions difficult to answer and why. The largest risk of measurement error is likely respondents' interpretation of the definition of R&D activities and variations in record-keeping procedures used by respondents to answer the survey questions. In addition, other known measurement problems are known to exist in the data, as shown below.

- *R&D expenditures.* The survey included a question asking respondents to confirm if they were reporting expenditures or obligations. Not all facilities were able to report expenditure data and instead reported obligations. Twelve facilities confirmed they reported obligations as they were unable to provide expenditure data, and six facilities never confirmed if they provided expenditures or obligations.
- *Type of R&D.* Some facilities said that these amounts were difficult to report because either they could not determine how best to allocate expenditures among the three categories or because they did not track information in that way.



- *Federal and military salaries.* Due to conversations with a few facilities during data collection, the study team discovered early in data collection that R&D employee salaries, especially military personnel salaries, were not always considered when calculating R&D expenditures, due to being in different budget categories. Therefore, the study team attempted to confirm with all respondents following submission if both federal civilian and military salaries were included in total R&D expenditures. Eight respondents said this information was not included. DOD facilities often noted that although civilian salaries were automatically included in R&D budgets, military salaries were in a different account and needed to be manually included, which some were not able to do during this first year of data collection.

## Definitions

*Facility.* A unit within an agency that is responsible for performing R&D, generally with its own distinct budget and leadership. This may be a division, branch, center, lab, or other entity. The staff who work within the facility, and the facility itself, may be located in more than one physical location.

*Fields of R&D.* A list of the 56 fields of R&D reported on can be found on the survey questionnaire. In the data tables, the fields are grouped into 10 major areas: agricultural sciences and natural resources and conservation; biological, biomedical, and health sciences; computer and information sciences; geosciences, atmospheric sciences and ocean sciences; mathematics and statistics; physical sciences; psychology; social sciences; engineering; and other fields.

*Fiscal year.* The federal government's financial year: FY 2022 began 2021 October 1 and ended 2022 September 30.

*Full-time equivalents (FTEs).* Calculated as the total working effort spent on research during a specific period divided by the total effort representing a full-time schedule within the same period. FTE R&D personnel are federal employees and military personnel only.

*Public-private partnerships.* Those in which the government and private companies share R&D costs.

*Research and development (R&D).* R&D is creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of humankind, culture, and society—and to devise new applications of available knowledge. R&D has five major features:

- *Novel.* Advances current knowledge or creates new knowledge
- *Creative.* Focuses on original concepts and hypotheses
- *Uncertain.* Outcomes are not completely determined at the outset of a project
- *Systematic.* Projects are planned and budgeted
- *Transferable or reproducible.* Methodology and results are transferable to or reproducible in other situations and locations

R&D covers three activities: basic research, applied research, and experimental development.

*Research, development, testing, and evaluation (RDT&E).* Exclusive to DOD, this consists of all the activities described above for R&D conduct plus operational system development (Budget Activity 7)—preproduction development of nonexperimental work on a product or system before it goes into full production, including activities such as tooling and development of production facilities.

*R&D expenditures.* Money the facility spent in FY 2022 for R&D projects, also referred to as outlays. Expenditures include labor costs for R&D projects; noncapital purchases of materials, supplies, equipment, and services to support R&D performance; and general administration costs in support of R&D activities.

*Sources of R&D funding/type of organization:*

- *U.S. federal government.* Any agency of the U.S. government. Federal funds that were passed through from another institution were included.
- *State and local government.* Any state, county, municipality, or other local government entity in the United States, not including funds from state and local universities and colleges or agricultural experiment stations.
- *Business.* Domestic or foreign for-profit businesses or industrial firms.
- *Nonprofit organizations.* Domestic or foreign nonprofit foundations and organizations, except universities and colleges.
- *Higher education.* Domestic higher education institutions, military service academies, and consortia.
- *All other organizations.* Sources not reported in other categories, such as funds from foreign governments.

*Type of R&D:*

- *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 in order 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. Like research, experimental development will result in gaining additional knowledge.

Experimental development includes the following:

- The production of materials, devices, and systems or methods, including the design, construction, and testing of experimental prototypes.
- Technology demonstrations, in cases where a system or component is being demonstrated at scale for the first time, and additional refinements to the design (feedback R&D) following the demonstration. However, not all activities that are identified as “technology demonstrations” are R&D.

Experimental development does not include the following:

- User demonstrations where the cost and benefits of a system are being validated for a specific use case. This includes low-rate initial production activities.
- Preproduction development, which is defined as nonexperimental work on a product or system before it goes into full production, including activities such as tooling and development of production facilities. Activities and programs of this type should generally be reported as investments in other major equipment.

*R&D personnel.* All employees who work on R&D or provide direct support to R&D, such as researchers, R&D managers, technicians, support staff, and others assigned to R&D groups or projects. Personnel may include federal employees, military personnel (civilian and enlisted), contractors, consultants, or volunteers.

- R&D personnel include all R&D personnel, whether full time or part time, temporary or permanent. Employees may perform scientific and technical work for an R&D project (e.g., designing experiments, building prototypes), plan and manage R&D projects, or provide direct support for administration of the financial and personnel aspects of R&D.

- R&D personnel does not include employees who provide only indirect support to R&D, such as services provided by personnel in central finance, computing, printing, maintenance, security, or similar departments in your agency that provide services to R&D and non-R&D projects.

*Types of R&D personnel:*

- *Researchers.* Professionals engaged in the conception or creation of new knowledge, products, processes, methods, and systems and also in the management of the projects concerned. Includes R&D managers in this category.
- *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.* 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.

## Technical Tables

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Table	Title
A-1	List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022
A-2	Survey response rate: FY 2022
A-3	Survey question item response rates: FY 2022

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Department of Agriculture	No	
Agricultural Research Service	No	
Midwest Area	Yes	Yes
Avian Disease and Oncology Laboratory	No	
Biological Control of Insects Research Laboratory	No	
Cereal Crops Research Unit	No	
Cereal Disease Laboratory	No	
Corn Insects and Crop Genetics Research	No	
Crop Production and Pest Control Research	No	
Cropping Systems and Water Quality Research Unit	No	
Dairy Forage Research Center	No	
Food Animal Environmental System Research	No	
Global Change and Photosynthesis Research	No	
Livestock Behavior Research	No	
National Animal Disease Center	No	
National Center for Agricultural Utilization Research	No	
National Laboratory for Agriculture and the Environment	No	
National Soil Erosion Research	No	
National Soybean Research Center	No	
North Central Soil Conservation Research Laboratory	No	
Plant Genetics Research	No	
Plant Introduction Research	No	
Plant Science Research Unit	No	
Seacrest Arboretum	No	
Soil and Water Management Research	No	
Sugarbeet and Bean Research	No	
Vegetable Crops Research Unit	No	
Northeast Area	Yes	Yes
Beltsville Agricultural Research Center	No	
Beltsville Human Nutrition Research Center	No	
Beneficial Insects Introduction Research Unit	No	
Cool and Cold Water Aquaculture Research	No	
Eastern Regional Research Center	No	
Food Systems Research Unit	No	
George Washington Carver Center	No	
Grape Genetics Research Unit	No	
Innovative Fruit Production, Improvement, and Protection	No	
Jamie L. Whitten Building	No	
Jean Mayer Human Nutrition Research Center on Aging	No	
National Arboretum	No	
National Cold Water Marine Aquaculture Center	No	
New England Plant, Soil, and Water Research Laboratory	No	
Northeast Area Headquarters	No	
Pasture System and Watershed Management Research	No	
Plum Island Animal Disease Center	No	
Residue Chemistry and Predictive Microbiology Research	No	
Robert W. Holley Center for Agriculture and Health	No	
Sustainable Biofuels and Co-products Research	No	
The Foreign Disease-Weed Science Research	No	
Pacific West Area	Yes	Yes
Aberdeen Research and Extension Center	No	

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Animal Disease Research Unit	No	
Arid Land Agricultural Research Center	No	
Carl Hayden Bee Research Center	No	
Columbia Plateau Conservation Research Center	No	
Crop Improvement and Protection Research Unit	No	
Crops Pathology and Genetics Research Unit	No	
Daniel K. Inouye Pacific Basin Agricultural Research Center	No	
Forage and Range Research Unit	No	
Grain Legume Genetics Physiology Research Unit	No	
Great Basin Rangelands Research Unit	No	
Horticultural Crops Disease and Pest Management Research Unit	No	
National Clonal Germplasm Repository	No	
National Clonal Germplasm Repository - Tree Fruit and Nut Crops and Grapes	No	
National Clonal Germplasm Repository for Citrus	No	
National Forage Seed Production Research Center	No	
Northwest Irrigation and Soils Research Unit	No	
Northwest Sustainable Agroecosystems Research Unit	No	
Northwest Watershed Research Center	No	
Physiology and Pathology of Tree Fruits Research Unit	No	
Plant Germplasm Introduction and Testing Research Unit	No	
Poisonous Plant Research Unit	No	
Pollinating Insect-Biology, Management, and Systematics Research Unit	No	
Range and Meadow Forage Management Research Unit	No	
Salinity Laboratory	No	
San Joaquin Valley Agricultural Sciences Center	No	
Sheep Experiment Station	No	
Southwest Watershed Research Center	No	
Temperate Tree Fruit and Vegetable Research Unit	No	
Western Human Nutrition Research Center	No	
Western Regional Research Center	No	
Wheat Health, Genetics, and Quality Research Unit	No	
Plains Area	Yes	Yes
Agroecosystem Management Research Unit	No	
Center For Agriculture Resources Research	No	
Center for Grain and Animal Health Research	No	
Central Great Plains Resources Management Research Unit	No	
Children's Nutrition Research Center	No	
Conservation and Production Research Laboratory	No	
Cropping Systems Research Laboratory	No	
Edward T. Schafer Agricultural Research Center	No	
Fort Keough	No	
Grand Forks Human Nutrition Research Center	No	
Grassland Soil and Water Research Laboratory	No	
Grazinglands Research Laboratory	No	
Knipling-Bushland Livestock Insects Research Laboratory	No	
North Central Agricultural Research Laboratory	No	
Northern Great Plains Research Laboratory	No	
Northern Plains Agricultural Research Laboratory	No	
Oklahoma Agricultural Experiment Station	No	
Range Management Research Unit	No	
Reproduction Research	No	

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Roman L. Hruska Meat Animal Research Center	No	
Southern Plains Agricultural Research Center	No	
Southern Plains Range Research Station	No	
Southwestern Cotton Ginning Research Laboratory	No	
Wheat, Sorghum, and Forage Research Unit	No	
Southeast Area	Yes	Yes
Aquatic Animal Health Research Unit	No	
Arkansas Children's Nutrition Center	No	
Center for Medical, Agricultural, and Veterinary Entomology	No	
Coastal Plain Soil, Water, and Plant Conservation Research	No	
Coastal Research and Education Center	No	
Dale Bumpers National Rice Research Center	No	
Dale Bumpers Small Farms Research Center	No	
Delta Water Management Research Unit	No	
Food Science, Market Quality, and Handling Research Unit	No	
Genetics and Sustainable Agriculture Research Unit	No	
Harry K. Dupree Stuttgart National Aquaculture Research Center	No	
Honey Bee Breeding, Genetics, and Physiology Research Unit	No	
Horticultural Research Laboratory	No	
Invasive Plant Research Laboratory	No	
National Peanut Research Laboratory	No	
National Poultry Research Center	No	
National Sedimentation Laboratory	No	
Plant Genetic Resources Conservation Unit	No	
Plant Science Research Unit	No	
Pollinator Health in Southern Crop Ecosystems Research Unit	No	
Poultry Production and Product Safety Research Unit	No	
Poultry Research Unit	No	
Soil Dynamics Research Unit	No	
Southeast Area Headquarters	No	
Southeast Regional Biomass Research Center	No	
Southeastern Fruit and Tree Nut Research Laboratory	No	
Southern Regional Research Center	No	
Soybean and Nitrogen Fixation Research	No	
Subtropical Horticulture Research Station	No	
Sugarcane Field Station	No	
Sugarcane Research Unit	No	
Thad Cochran Research Center	No	
Tropical Agriculture Research Station	No	
Animal and Plant Health Inspection Service	No	
Science and Technology	No	
Center for Veterinary Biologics <sup>a</sup>	Yes	Yes
Forest Pest Methods Laboratory	Yes	Yes
Insect Management and Molecular Diagnostics Laboratory	Yes	Yes
National Veterinary Services Laboratories <sup>a</sup>	Yes	Yes
National Wildlife Research Center	Yes	Yes
Plant Pathogen Confirmatory Diagnostics Laboratory	Yes	Yes
Treatment and Inspection Methods Laboratory	Yes	Yes
Economic Research Service	Yes	Yes
Forest Service	No	
Forest Products Laboratory	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
International Institute of Tropical Forestry	Yes	Yes
Northern Research Station	Yes	Yes
Pacific Northwest Research Station	Yes	Yes
Pacific Southwest Research Station	Yes	Yes
Rocky Mountain Research Station	Yes	Yes
Southern Research Station	Yes	Yes
Washington Office Research and Development	Yes	Yes
National Agricultural Statistics Service	Yes	Yes
Natural Resources Conservation Service	No	
Plant Materials Center	Yes	Yes
Soil Science Research Branch	Yes	Yes
Department of Commerce	No	
Census Bureau	Yes	Yes
Center for Behavioral Science Methods	No	
Center for Statistical Research and Methodology	No	
National Institute of Standards and Technology	Yes	Yes
Center for Neutron Research	No	
Communications Technology Laboratory	No	
Engineering Laboratory	No	
Information Technology Laboratory	No	
Material Measurement Laboratory	No	
Physical Measurement Laboratory	No	
National Oceanic and Atmospheric Administration	No	
Mission Support	No	
Office of the Chief Administrative Officer	Yes	Yes
Office of the Chief Information Officer	Yes	Yes
National Environmental Satellite, Data, and Information Service	No	
Center for Satellite Applications and Research	Yes	Yes
National Centers for Environmental Information	Yes	Yes
National Marine Fisheries Service	No	
Alaska Fisheries Science Center	Yes	Yes
Alaska Regional Office	Yes	Yes
Greater Atlantic Region Fisheries Office	Yes	Yes
Northeast Fisheries Science Center	Yes	Yes
Northwest Fisheries Science Center	Yes	Yes
Office of Habitat Conservation	Yes	Yes
Office of Protected Resources	Yes	Yes
Office of Science and Technology	Yes	Yes
Office of Sustainable Fisheries	Yes	Yes
Pacific Island Fisheries Science Center	Yes	Yes
Pacific Islands Regional Office	Yes	Yes
Southeast Fisheries Science Center	Yes	Yes
Southeast Regional Office	Yes	Yes
Southwest Fisheries Science Center	Yes	Yes
West Coast Region	Yes	Yes
National Ocean Service	No	
Center for Operational Oceanographic Products and Services	Yes	Yes
Integrated Ocean Observing System	Yes	Yes
National Centers for Coastal Ocean Science	Yes	Yes
National Geodetic Survey	Yes	Yes
Office for Coastal Management	Yes	Yes



TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Office of Response and Restoration	Yes	Yes
Office of the Coast Survey	Yes	Yes
National Weather Service	No	
National Centers for Environmental Prediction	Yes	Yes
Aviation Weather Center	No	
Central Operations	No	
Climate Prediction Center	No	
Environmental Modeling Center	No	
National Hurricane Center	No	
Ocean Prediction Center	No	
Space Weather Prediction Center	No	
Storm Prediction Center	No	
Weather Prediction Center	No	
Office of Science and Technology Integration	Yes	Yes
Meteorological Development Laboratory	No	
Office of Water Prediction	Yes	Yes
Oceanic and Atmospheric Research	No	
Air Resources Laboratory	Yes	Yes
Atlantic Oceanographic and Meteorological Laboratory	Yes	Yes
Chemical Sciences Laboratory	Yes	Yes
Climate Program Office	Yes	Yes
Earth System Research Laboratories	Yes	Yes
Geophysical Fluid Dynamics Laboratory	Yes	Yes
Global Monitoring Laboratory	Yes	Yes
Global Ocean Monitoring and Observing Program	Yes	Yes
Global Systems Laboratory	Yes	Yes
Great Lakes Environmental Research Laboratory	Yes	Yes
National Sea Grant College Program	Yes	Yes
National Severe Storms Laboratory	Yes	Yes
Ocean Acidification Program	Yes	Yes
Office of Ocean Exploration and Research	Yes	Yes
Office of Research Transition and Application	Yes	Yes
Pacific Marine Environment Laboratory	Yes	Yes
Physical Sciences Laboratory	Yes	Yes
Weather Program Office	Yes	Yes
Office of Marine and Aviation Operations	No	
Marine and Aviation Operations Center	Yes	Yes
National Oceanic and Atmospheric Administration Corps	Yes	Yes
National Telecommunications and Information Administration	No	
Institute for Telecommunication Sciences	Yes	No
Department of Defense	No	
Defense Information Systems Agency	Yes	Yes
Defense Information Systems Agency - Maryland	No	
Joint Interoperability Test Center	No	
Department of the Air Force	No	
Materiel Command	No	
Air Force Civil Engineer Center	Yes	No
Air Force Life Cycle Management Center	Yes	No
Air Force Nuclear Weapons Center	Yes	No
Air Force Research Laboratory	Yes	No
Directed Energy Directorate	No	

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Information Directorate	No	
Materials and Manufacturing Directorate	No	
Munitions Directorate	No	
Sensors Directorate	No	
Space Vehicles Directorate	No	
Air Force Test Center	Yes	No
Department of the Army	No	
Army Cyber Command	Yes	No
Army Medical Research and Development Command	Yes	Yes
Walter Reed Institute of Research	No	
Army Research Institute for the Behavioral and Social Sciences	Yes	No
Combat Capabilities Development Command (DEVCOM)	No	
Armaments Center	Yes	Yes
Army Research Laboratory	Yes	Yes
Aviation and Missile Center	Yes	Yes
Chemical Biological Center	Yes	Yes
Command, Control, Communications, Cyber, Intelligence, Surveillance, and Reconnaissance Center	Yes	Yes
Data and Analysis Center	Yes	Yes
DEVCOM Headquarters	Yes	Yes
Ground Vehicle Systems Center	Yes	Yes
Soldier Center	Yes	Yes
Corps of Engineers	No	
Army Engineer Research and Development Center	Yes	Yes
Space and Missile Defense Command	Yes	Yes
Department of the Navy	No	
Bureau of Medicine and Surgery	No	
Naval Medical Research Command	Yes	Yes
Naval Health Research Center	Yes	Yes
Naval Medical Research Unit - Dayton	Yes	Yes
Naval Medical Research Unit - INDO PACIFIC	Yes	Yes
Naval Medical Research Unit - San Antonio	Yes	Yes
Naval Medical Research Unit - South	Yes	Yes
Naval Submarine Medical Research Laboratory	Yes	Yes
Marine Corps	Yes	No
Naval Air Warfare Center Aircraft Division	Yes	Yes
Naval Air Warfare Center Weapon Division	Yes	Yes
Naval Facilities Engineering and Expeditionary Warfare Center	Yes	Yes
Naval Information Warfare Systems Command	No	
Naval Information Warfare Center Atlantic	Yes	Yes
Naval Information Warfare Center Pacific	Yes	Yes
Naval Observatory	Yes	No
Naval Oceanographic Office	Yes	No
Naval Sea Systems Command Warfare Centers	No	
Naval Surface Warfare Center	Yes	Yes
Naval Undersea Warfare Center	Yes	Yes
Office of Naval Research	No	
Naval Research Laboratory	Yes	Yes
Missile Defense Agency	Yes	Yes
Space Force	No	
Advanced Extremely High Frequency Military Satellite Communications (MILSATCOM) Space Modernization Initiative	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Commercial Satellite Communications (SATCOM)	Yes	Yes
Counter Communications System	Yes	Yes
Electro-Optical/ Infra-Red Weather Systems	Yes	Yes
Evolved Strategic SATCOM	Yes	Yes
Global Positioning Systems III Follow-on	Yes	Yes
Ground Based Optical Sensor System	Yes	Yes
Joint Execution and Tasking System for Space	Yes	Yes
National Security Space Launch	Yes	Yes
NAVSTAR Global Positioning System (User Equipment)	Yes	Yes
Next-Generation Overhead Persistent Infrared Block 0 Geosynchronous	Yes	Yes
Next-Generation Overhead Persistent Infrared Block 0 Polar	Yes	Yes
Next-Generation Overhead Persistent Infrared Ground (aka Future Operationally Resilient Ground Evolution)	Yes	Yes
Next-Generation Overhead Persistent Infrared Integration	Yes	Yes
Next-Generation Overhead Persistent Infrared Space Mod Initiative	Yes	Yes
Polar MILSATCOM Enhanced Polar System Recapitalization	Yes	Yes
Protected Tactical Enterprise Service	Yes	Yes
Protected Tactical Service	Yes	Yes
Rocket System Launch Program	Yes	Yes
Space Control Technology	Yes	Yes
Space Rapid Capabilities Office	Yes	Yes
Space Situation Awareness Systems	Yes	Yes
Space Situational Awareness Environmental Monitoring	Yes	Yes
Space Systems Prototype Transitions Assault Breaker II	Yes	Yes
Space Test and Training Range Development	Yes	Yes
Space Test Program	Yes	Yes
Weather System Follow-On	Yes	Yes
Department of Energy	No	
Science and Energy	No	
Office of Fossil Energy	No	
National Energy Technology Laboratory	Yes	Yes
Department of Health and Human Services	No	
Centers for Disease Control and Prevention	No	
National Center for Emerging and Zoonotic Infectious Diseases	Yes	Yes
National Center for HIV, Viral Hepatitis, STD, and Tuberculosis Prevention	Yes	Yes
National Center for Immunization and Respiratory Diseases	Yes	Yes
National Center on Birth Defects and Developmental Disabilities	Yes	Yes
National Institute for Occupational Safety and Health	Yes	Yes
Food and Drug Administration	No	
Center for Biologics Evaluation and Research	Yes	Yes
Center for Devices and Radiological Health	Yes	Yes
Center for Drug Evaluation and Research	Yes	Yes
Center for Food Safety and Applied Nutrition	Yes	Yes
Center for Tobacco Products	Yes	Yes
Center for Veterinary Medicine	Yes	Yes
Office of Regulatory Affairs	Yes	Yes
Office of Regulatory Science	No	
Office of Food and Feed Laboratory Operations	No	
Office of Medical Products, Tobacco, and Specialty Laboratory Operations	No	
Office of the Chief Scientist	No	
National Center for Toxicological Research	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Oncology Center of Excellence	Yes	Yes
National Institutes of Health	No	
Clinical Center	Yes	Yes
Eunice Kennedy Shriver National Institute of Child Health and Human Development	Yes	Yes
National Cancer Institute	Yes	Yes
National Center for Advancing Translational Sciences	Yes	Yes
National Center for Complementary and Integrative Health	Yes	Yes
National Eye Institute	Yes	Yes
National Heart, Lung, and Blood Institute	Yes	Yes
National Human Genome Research Institute	Yes	Yes
National Institute of Allergy and Infectious Diseases	Yes	Yes
National Institute of Arthritis and Musculoskeletal and Skin Diseases	Yes	Yes
National Institute of Biomedical Imaging and Bioengineering	Yes	Yes
National Institute of Dental and Craniofacial Research	Yes	Yes
National Institute of Diabetes and Digestive and Kidney Diseases	Yes	Yes
National Institute of Environmental Health Sciences	Yes	Yes
National Institute of Mental Health	Yes	Yes
National Institute of Neurological Disorders and Stroke	Yes	Yes
National Institute of Nursing Research	Yes	Yes
National Institute on Aging	Yes	Yes
National Institute on Alcohol Abuse and Alcoholism	Yes	Yes
National Institute on Deafness and Other Communication Disorders	Yes	Yes
National Institute on Drug Abuse	Yes	Yes
National Institute on Minority Health and Health Disparities	Yes	Yes
National Library of Medicine	Yes	Yes
Department of Homeland Security	No	
Coast Guard	No	
Acquisition Directorate	No	
Acquisition Directorate, Research and Development Center	Yes	Yes
Cybersecurity and Infrastructure Security Agency	Yes	No
Science and Technology Directorate	No	
Office of National Laboratories	No	
Chemical Security Analysis Center	Yes	Yes
National Urban Security Technology Laboratory	Yes	Yes
Plum Island Animal Disease Center	Yes	Yes
Transportation Security Laboratory	Yes	Yes
Department of the Interior	No	
Bureau of Land Management	Yes	Yes
Bureau of Ocean Energy Management	Yes	Yes
Bureau of Reclamation	Yes	Yes
Fish and Wildlife Service	Yes	Yes
Geological Survey	No	
Core Science Systems Mission Area	Yes	Yes
Ecosystems Mission Area	Yes	Yes
Energy and Minerals Mission Area	Yes	Yes
Natural Hazards Mission Area	Yes	Yes
Water Resources Mission Area	Yes	Yes
National Park Service	Yes	Yes
Department of Transportation	No	
Federal Aviation Administration	No	
Office of Aerospace Medicine	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Civil Aerospace Medical Institute	No	
Office of NextGen	Yes	Yes
William J. Hughes Technical Center	No	
Federal Highway Administration	No	
Intelligence Transportation Systems Joint Program Office	Yes	Yes
Office of Administrations	Yes	Yes
Office of Operations	Yes	Yes
Office of Planning	Yes	Yes
Office of Research, Development, and Technology	Yes	Yes
Turner-Fairbank Highway Research Center	No	
National Highway Traffic Safety Administration	No	
Office of Vehicle Safety Research	No	
Vehicle Research and Test Center	Yes	Yes
Office of the Assistant Secretary for Research and Technology	No	
John A. Volpe National Transportation Systems Center	Yes	No
Department of Veterans Affairs	No	
Office of Research and Development Central Office	Yes	Yes
Veterans Integrated Services Network (VISN) 1: New England Health Care System	No	
Bedford Health Care System	Yes	Yes
Boston Health Care System, Jamaica Plain Campus	Yes	Yes
Central Western Massachusetts Health Care	Yes	Yes
Connecticut Health Care System, West Haven Medical Center	Yes	Yes
Manchester Medical Center	Yes	Yes
Providence Medical Center	Yes	Yes
Togus Maine Health Care System	Yes	Yes
White River Junction Medical Center	Yes	Yes
VISN 2: New York/ New Jersey Veterans Health Care Network	No	
Bronx Health Care, James J. Peters Medical Center	Yes	Yes
New Jersey Health Care	Yes	Yes
New York Harbor Health Care	Yes	Yes
Northport Medical Center	Yes	Yes
Western New York Health Care, Buffalo Medical Center	Yes	Yes
VISN 4: Health Care	No	
Coatesville Medical Center	Yes	Yes
Philadelphia Health Care, Corporal Michael J. Crescenzo Medical Center	Yes	Yes
Pittsburgh Medical Center-University Drive	Yes	Yes
Wilkes-Barre Medical Center	Yes	Yes
VISN 5: Capitol Health Care Network	No	
Huntington Health Care, Hershel (Woody) Williams Medical Center	Yes	Yes
Maryland Health Care, Baltimore Medical Center	Yes	Yes
Washington DC Health Care, Washington Medical Center	Yes	Yes
VISN 6: Mid-Atlantic Health Care Network	No	
Asheville Health Care, Charles George Medical Center	Yes	Yes
Durham Medical Center	Yes	Yes
Hampton Medical Center	Yes	Yes
Richmond Health Care, Hunter Holmes McGuire Hospital	Yes	Yes
Salem Medical Center	Yes	Yes
Salisbury Health Care, W.G. (Bill) Hefner Salisbury Medical Center	Yes	Yes
VISN 7: Southeast Network	No	
Atlanta Medical Center	Yes	Yes
Augusta Health Care, Charlie Norwood Medical Center	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Birmingham Medical Center	Yes	Yes
Charleston Health Care, Ralph H. Johnson Medical Center	Yes	Yes
Columbia South Carolina Health Care, William Jennings Bryan Dorn Medical Center	Yes	Yes
Tuscaloosa Medical Center	Yes	Yes
VISN 8: Sunshine Health Care Network	No	
Bay Pines Health Care System	Yes	Yes
Caribbean Health Care System	Yes	Yes
Miami Health Care System	Yes	Yes
North Florida/ South Georgia Health Care System	Yes	Yes
Orlando Medical Center	Yes	Yes
Tampa Health Care, James A. Haley Veterans' Hospital	Yes	Yes
VISN 9: MidSouth Health Care Network	No	
Lexington Medical Center (Troy Bowling Campus)	Yes	Yes
Louisville Health Care, Robley Rex Medical Center	Yes	Yes
Memphis Medical Center	Yes	Yes
Mountain Home Health Care, James H. Quillen Medical Center	Yes	Yes
Tennessee Valley Health Care, Nashville Medical Center	Yes	Yes
VISN 10: Health Care System	No	
Ann Arbor Health Care System	Yes	Yes
Battle Creek Medical Center	Yes	Yes
Cincinnati Medical Center	Yes	Yes
Dayton Medical Center	Yes	Yes
Detroit Health Care, John D. Dingell Medical Center	Yes	Yes
Indiana Health Care, Richard L. Roudebush Medical Center	Yes	Yes
Northeast Ohio Health Care, Louis Stokes Cleveland Medical Center	Yes	Yes
VISN 12: Great Lakes Health Care System	No	
Chicago Health Care, Jesse Brown Medical Center	Yes	Yes
Hines Health Care, Edward Hines Junior Hospital	Yes	Yes
Madison Health Care, William S. Middleton Memorial Veterans' Hospital	Yes	Yes
Milwaukee Health Care, Clement J. Zablocki Medical Center	Yes	Yes
VISN 15: Heartland Health Care Network	No	
Kansas City Medical Center	Yes	Yes
St. Louis Health Care, John J. Cochran Veterans Hospital	Yes	Yes
VISN 16: South Central Health Care Network	No	
Central Arkansas Health Care, Eugene J. Towbin Health Care Center	Yes	Yes
Houston Health Care, Michael E. DeBakey Medical Center	Yes	Yes
Jackson Health Care, G.V. (Sonny) Montgomery Medical Center	Yes	Yes
Shreveport Health Care, Overton Brooks Medical Center	Yes	Yes
Southeast Louisiana Health Care System	Yes	Yes
VISN 17: Heart of Texas Health Care Network	No	
Central Texas Health Care	Yes	Yes
North Texas, Dallas Medical Center	Yes	Yes
South Texas Health Care	Yes	Yes
VISN 19: Rocky Mountain Network	No	
Eastern Colorado, Rocky Mountain Regional Medical Center	Yes	Yes
Eastern Oklahoma, Jack C. Montgomery Medical Center	Yes	Yes
Oklahoma City Medical Center	Yes	Yes
Salt Lake City Health Care	Yes	Yes
VISN 20: Northwest Network	No	
Boise Medical Center	Yes	Yes
Portland Health Care System	Yes	Yes

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Puget Sound Health Care, Seattle Medical Center	Yes	Yes
VISN 21: Sierra Pacific Network	No	
Central California Health Care System	Yes	Yes
Northern California Health Care System	Yes	Yes
Pacific Islands Health Care System	Yes	Yes
Palo Alto Health Care System	Yes	Yes
San Francisco Health Care System	Yes	Yes
Sierra Nevada Health Care System	Yes	Yes
Southern Nevada Health Care System	Yes	Yes
VISN 22: Desert Pacific Health Care Network	No	
Greater Los Angeles, West Los Angeles Medical Center	Yes	Yes
Loma Linda Health Care System	Yes	Yes
Long Beach Health Care System	Yes	Yes
New Mexico Health Care System	Yes	Yes
Phoenix Health Care System	Yes	Yes
San Diego Health Care System	Yes	Yes
Southern Arizona Health Care System	Yes	Yes
VISN 23: Midwest Health Care Network	No	
Fargo Health Care System	Yes	Yes
Minneapolis Health Care System	Yes	Yes
Nebraska-Western Iowa Health Care System	Yes	Yes
Sioux Falls Health Care System	Yes	Yes
St. Cloud Health Care	Yes	Yes
Other Agencies	No	
Environmental Protection Agency	No	
Office of Research and Development	No	
Center for Computational Toxicology and Exposure	Yes	Yes
Center for Environmental Measurement and Modeling	Yes	Yes
Center for Environmental Solutions and Emergency Response	Yes	Yes
Center for Public Health and Environmental Assessment	Yes	Yes
Office of Science Advisor, Policy, and Engagement	Yes	Yes
Federal Trade Commission	Yes	No
Library of Congress	No	
Digital Services Directorate	Yes	Yes
Preservation Directorate	Yes	Yes
National Aeronautics and Space Administration (NASA)	No	
Ames Research Center	Yes	Yes
Armstrong (Dryden) Flight Research Center	Yes	Yes
Glenn Research Center	Yes	Yes
Goddard Space Flight Center	Yes	Yes
Johnson Space Center	Yes	Yes
Kennedy Space Center	Yes	Yes
Langley Research Center	Yes	Yes
Marshall Space Flight Center	Yes	Yes
NASA Headquarters	Yes	Yes
Stennis Space Center	Yes	Yes
Smithsonian Institution	No	
Archives of American Art	Yes	No
New York Research Center	No	
Washington Headquarters and Research Center	No	
Center for Astrophysics	No	

TABLE A-1

**List of agencies, reporting units, underlying facilities for those reporting units, and survey response status: FY 2022**

(Text)

Agency or facility	Reporting unit	Responded to survey
Smithsonian Astrophysical Observatory	Yes	No
Fred Lawrence Whipple Observatory	No	
National Museum of Natural History	Yes	No
Smithsonian Conservation Biology Institute	Yes	No
Smithsonian Environmental Research Center	Yes	No
Smithsonian Tropical Research Institute	Yes	No

<sup>a</sup> The FY 2022 response for the Center for Veterinary Biologics is included with the National Veterinary Services Laboratories, but both facilities are listed separately in this table.

**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.



TABLE A-2

**Survey response rate: FY 2022**

(Number)

Agency	Response rate (percent)	Total reporting units	Facility eligibility <sup>a</sup>			
			Eligible respondent	Eligible nonrespondent	Unknown eligibility	Not eligible
All agencies	93.7	383	299	20	0	64
DOD agencies	84.8	93	56	10	0	27
Non-DOD agencies	96.0	290	243	10	0	37

DOD = Department of Defense.

<sup>a</sup> Facility eligibility is based upon whether a federal facility has R&D expenditures. Facilities determined to have R&D expenditures are eligible. Facilities where R&D expenditures are not determined have unknown eligibility. Facilities determined to have no R&D expenditures are not eligible.

**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

TABLE A-3

**Survey question item response rates: FY 2022**

(Percent)

Question	Response rate		
	All agencies	DOD agencies	Non-DOD agencies
Question 1	100.0	100.0	100.0
Question 2	100.0	100.0	100.0
Question 3	96.6	100.0	95.9
Question 4	77.9	98.2	73.3
Question 5	100.0	100.0	100.0
Question 6	95.0	100.0	93.8
Question 7	63.8	100.0	50.8
Question 8	63.3	100.0	50.0
Question 9	65.2	75.0	63.0
Question 10	56.2	67.9	53.5

DOD = Department of Defense.

**Source(s):**

National Center for Science and Engineering Statistics, Federal Facilities Research and Development Survey, FY 2022.

## Acknowledgments and Suggested Citation

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