TABLE 5

Federal obligations for research and experimental development, by agency and type of R&D: FY 2021
(Dollars in thousands)

Agency	Total R&D		Applied research	Experimental development		
		Basic research		Total	Advanced technology	Major systems
All agencies	190,151,487	42,494,145	43,750,114	103,907,229	9,240,810	51,730,686
Departments						
Department of Agriculture	2,897,678	1,299,030	1,361,790	236,858	na	na
Agricultural Marketing Service	13,327	0	6,663	6,663	na	na
Agricultural Research Service	1,510,403	755,202	604,161	151,040	na	na
Animal and Plant Health Inspection Service	41,980	21,101	0	20,880	na	na
Economic Research Service	85,476	0	85,476	0	na	na
Forest Service	286,416	79,155	154,223	53,038	na	na
National Agricultural Statistics Service	9,488	0	5,151	4,337	na	na
National Institute of Food and Agriculture	937,440	432,329	505,111	0	na	na
Natural Resources Conservation Service	13,148	11,244	1,004	900	na	na
Department of Commerce	1,812,956	277,665	1,228,287	307,003	na	na
Census Bureau	108,681	0	55,936	52,744	na	na
National Institute of Standards and						
Technology	885,352	277,665	506,747	100,940	na	na
National Oceanic and Atmospheric Administration	812,044	0	658,725	153,319	na	na
National Telecommunications and Information Administration	6,879	0	6,879	0	na	na
Department of Defense	70,706,915	2,834,851	6,900,567	60,971,497	9,240,810	51,730,686
Defense Advanced Research Projects Agency	3,605,914	509,680	1,335,666	1,760,568	1,576,059	184,509
Defense Health Agency	2,851,858	17,921	114,779	2,719,158	1,530,781	1,188,377
Department of the Air Force	12,390,080	703,068	1,683,718	10,003,295	1,055,245	8,948,050
Department of the Army	11,921,185	541,892	1,372,202	10,007,091	1,841,577	8,165,514
Department of the Navy	16,733,677	630,694	1,023,460	15,079,522	871,188	14,208,334
Space Force	5,341,594	98,285	0	5,243,308	0	5,243,308
Other defense agencies	17,862,607	333,311	1,370,742	16,158,554	2,365,960	13,792,594
Department of Education	363,657	29,730	232,600	101,327	na	na
Department of Energy	13,453,006	5,500,144	5,276,862	2,676,001	na	na
Advanced Research Projects Agency—Energy	314,725	0	157,363	157,363	na	na
Electricity Delivery and Energy Reliability	128,701	12,542	49,592	66,567	na	na
Energy Efficiency and Renewable Energy	2,113,529	0	1,394,973	718,556	na	na
Environmental Management	30,007	0	9,902	20,105	na	na
Fossil Energy	691,073	1,701	689,372	0	na	na
National Nuclear Security Administration	4,212,968	122,721	2,485,060	1,605,187	na	na
Defense Programs	2,703,374	0	2,328,172	375,201	na	na
Naval Nuclear Propulsion Program	1,140,270	0	0	1,140,270	na	na
Office of Defense Nuclear Nonproliferation	369,324	122,721	156,888	89,715	na	na
Nuclear Energy	454,678	0	346,454	108,224	na	na
Office of Cybersecurity, Energy Security, and	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, -			
Emergency Response	1,731	1,731	0	0	na	na
Office of Science	5,505,595	5,361,449	144,146	0	na	na
Department of Health and Human Services	76,651,162	21,508,382	21,209,856	33,932,925	na	na
Administration for Children and Families	4,590	0	4,590	0	na	na
Administration for Community Living	106,908	0	106,908	0	na	na
Agency for Healthcare Research and Quality	338,000	0	308,145	29,855	na	na
Agency for Toxic Substances and Disease Registry	10,935	0	10,935	0	na	na
Biomedical Advanced Research and Development Authority	33,881,017	0	0	33,881,017	na	na

TABLE 5

Federal obligations for research and experimental development, by agency and type of R&D: FY 2021
(Dollars in thousands)

Agency	Total R&D	Basic research	Applied research	Experimental development		
				Total	Advanced technology	Major systems
Centers for Disease Control and Prevention	695,608	89,306	592,250	14,053	na	na
Centers for Medicare and Medicaid Services	420,703	420,703	0	0	na	na
Food and Drug Administration	589,144	0	589,144	0	na	na
Health Resources and Services Administration	40,920	3,399	29,521	8,000	na	na
National Institutes of Health	40,545,951	20,994,974	19,550,976	0	na	na
Office of the Secretary of Health and Human Services	17,386	0	17,386	0	na	na
Office of the Assistant Secretary for Planning and Evaluation	17,386	0	17,386	0	na	na
Department of Homeland Security	529,184	50,791	187,372	291,022	na	na
Coast Guard	10,276	0	2,995	7,281	na	na
Countering Weapons of Mass Destruction Office	32,353	6,025	15,266	11,062	na	na
Cybersecurity and Infrastructure Security Agency	12,530	0	9,032	3,498	na	na
Science and Technology Directorate	444,031	44,766	159,079	240,186	na	na
Secret Service	994	0	0	994	na	na
Transportation Security Administration	29,000	0	1,000	28,000	na	na
Department of the Interior	902,479	86,089	668,110	148,280	na	na
Bureau of Indian Affairs	5,000	0	5,000	0	na	na
Bureau of Land Management	10,310	237	9,143	930	na	na
Bureau of Ocean Energy Management	76,782	0	62,582	14,200	na	na
Bureau of Reclamation	38,000	0	18,000	20,000	na	na
Bureau of Safety and Environmental Enforcement	20,686	1,530	18,918	238	na	na
Fish and Wildlife Service	32,650	0	32,650	0	na	na
Geological Survey	690,697	84,322	494,595	111,780	na	na
National Park Service	28,354	0	27,222	1,132	na	na
Department of Justice	85,066	8,401	70,562	6,102	na	na
Bureau of Prisons	*	0	*	*	na	na
Federal Bureau of Investigation	3,698	0	3,698	0	na	na
Office of Justice Programs	81,360	8,401	66,863	6,096	na	na
Department of Labor	3,493	0	3,493	0	na	na
Employee Benefits Security Administration	1,301	0	1,301	0	na	na
Occupational Safety and Health Administration	2,192	0	2,192	0	na	na
Department of State	64,000	4,000	40,000	20,000	na	na
Department of Transportation	1,108,204	2,072	820,890	285,241	na	na
Federal Aviation Administration	507,105	0	266,866	240,240	na	na
Federal Highway Administration	410,089	0	373,484	36,605	na	na
Federal Motor Carrier Safety Administration	12,812	893	11,451	468	na	na
Federal Railroad Administration	42,215	0	35,039	7,177	na	na
Federal Transit Administration	42,797	0	42,045	752	na	na
National Highway Traffic Safety Administration	65,559	0	65,559	0	na	na
Office of the Secretary of Transportation	11,714	0	11,714	0	na	na
Pipeline and Hazardous Materials Safety Administration	15,912	1,179	14,733	0	na	na
Department of the Treasury	54,092	5,264	41,289	7,539	na	na
Bureau of Engraving and Printing	53,918	5,264	41,271	7,384	na	na

TABLE 5
Federal obligations for research and experimental development, by agency and type of R&D: FY 2021 (Dollars in thousands)

Agency	Total R&D	Basic research	Applied research	Experimental development		
				Total	Advanced technology	Major systems
Mint	174	0	*	155	na	na
Department of Veterans Affairs	1,698,441	624,980	936,176	137,285	na	na
Other agencies						
Administrative Office of the U.S. Courts	4,362	0	4,362	0	na	na
Agency for Global Media	4,597	0	4,597	0	na	na
Agency for International Development	81,698	0	51,211	30,487	na	na
Appalachian Regional Commission	650	0	650	0	na	na
Consumer Product Safety Commission	391	0	391	0	na	na
Environmental Protection Agency	520,328	0	403,334	116,994	na	na
Federal Trade Commission	8,094	0	8,094	0	na	na
Library of Congress	2,727	0	550	2,177	na	na
National Aeronautics and Space Administration	11,752,520	4,429,290	2,697,919	4,625,310	na	na
National Science Foundation	6,705,056	5,770,954	934,101	0	na	na
Nuclear Regulatory Commission	80,133	0	76,714	3,418	na	na
Patient-Centered Outcomes Research Trust Fund	460,331	0	460,331	0	na	na
Postal Service	15,435	0	15,435	0	na	na
Smithsonian Institution	62,500	62,500	0	0	na	na
Social Security Administration	105,392	0	105,392	0	na	na
Tennessee Valley Authority	16,942	0	9,179	7,763	na	na

^{* =} amount greater than \$0 but less than \$50,000.

na = not applicable; data were not collected at this level of detail for this agency or subagency.

Note(s):

Because of rounding, detail may not add to total. Only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. FY 2021 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). See technical table A-2 for additional notes associated with the agencies listed in this table.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2021-22.