

TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
United States <sup>b</sup>	2,471,471,226	119,859,705	410,687,147	428,535,361	1,030,394,740	300,352,569	181,641,704
Alabama	29,812,345	104,373	178,809	6,080,232	2,163,596	2,211,001	19,074,334
Commerce, Department of	3,000,000	0	0	0	2,000,000	0	1,000,000
Conservation and Natural Resources, Department of; Wildlife and Freshwater Fisheries Division	2,300,326	0	0	2,300,326	0	0	0
Economic & Community Affairs, Department of	533,590	104,373	0	92,222	163,596	0	173,399
Education, Department of	13,196,000	0	0	0	0	0	13,196,000
Forensic Sciences, Department of	272,635	0	0	0	0	0	272,635
Geological Survey	2,690,719	0	178,809	2,511,910	0	0	0
Marine Environmental Science Consortium, Dauphin Island Sea Lab	1,175,774	0	0	1,175,774	0	0	0
Supercomputer Authority	4,432,300	0	0	0	0	0	4,432,300
Transportation, Department of	2,211,001	0	0	0	0	2,211,001	0
Alaska	19,671,388	26,000	500,000	9,713,200	866,695	8,565,493	0
Environmental Conservation, Department of	866,695	0	0	0	866,695	0	0
Housing Finance Corporation	500,000	0	500,000	0	0	0	0
Natural Resources, Department of; Division of Geological and Geophysical Surveys	9,086,400	0	0	9,086,400	0	0	0
Railroad Corporation	6,685,193	0	0	0	0	6,685,193	0
Seafood Marketing Institute	26,000	26,000	0	0	0	0	0
Transportation and Public Facilities, Department of	2,507,100	0	0	626,800	0	1,880,300	0
Arizona	15,011,508	1,071,301	0	1,682,113	8,467,153	3,179,987	610,954
Agriculture, Department of	1,167,546	1,071,301	0	96,245	0	0	0
Game and Fish Department	1,585,868	0	0	1,585,868	0	0	0
Health Services, Department of	8,467,153	0	0	0	8,467,153	0	0
Juvenile Corrections, Department of	610,954	0	0	0	0	0	610,954
Transportation, Department of	3,179,987	0	0	0	0	3,179,987	0
Arkansas	9,908,767	6,614,526	50,000	1,143,026	200,000	376,215	1,525,000
Agriculture, Department of	152,420	152,420	0	0	0	0	0
Beef Council	60,406	60,406	0	0	0	0	0
Corn and Grain Sorghum Promotion Board	992,000	992,000	0	0	0	0	0
Economic Development Commission	2,075,000	125,000	50,000	75,000	200,000	100,000	1,525,000
Game and Fish Commission	872,648	0	0	872,648	0	0	0
Midwest Dairy Association, Arkansas Division	9,700	9,700	0	0	0	0	0
Natural Heritage Commission	195,378	0	0	195,378	0	0	0
Rice Research and Promotion Board	2,775,000	2,775,000	0	0	0	0	0
Soybean Promotion Board	2,400,000	2,400,000	0	0	0	0	0

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Transportation, Department of	276,215	0	0	0	0	276,215	0
Wheat Promotion Board	100,000	100,000	0	0	0	0	0
California	523,819,635	6,934,080	267,900,000	46,696,431	142,503,729	47,716,505	12,068,890
Air Resources Board	16,703,318	0	0	16,703,318	0	0	0
Children and Families Commission (First 5 California)	4,493,407	0	0	0	2,039,477	0	2,453,930
Conservation, Department of	1,508,933	0	0	825,000	0	0	683,933
Corrections and Rehabilitation, Department of	1,139,419	0	0	0	0	0	1,139,419
Covered California	3,793,141	0	0	0	3,793,141	0	0
Dairy Council	18,672	0	0	0	18,672	0	0
Delta Stewardship Council	4,093,320	0	0	4,093,320	0	0	0
Energy Commission	230,900,000	0	230,900,000	0	0	0	0
Environmental Health Hazard Assessment, Office of	17,522,940	0	0	0	17,522,940	0	0
Food and Agriculture, Department of	4,686,177	4,686,177	0	0	0	0	0
Forestry and Fire Protection, Department of	5,500,000	0	0	500,000	5,000,000	0	0
Horse Racing Board	695,130	695,130	0	0	0	0	0
Housing and Community Development, Department of	150,000	0	0	0	0	0	150,000
Institute for Regenerative Medicine	95,739,916	0	0	0	95,739,916	0	0
Mental Health Services Oversight and Accountability Commission	2,500,000	0	0	0	2,500,000	0	0
Motor Vehicles, Department of	1,551,423	0	0	0	1,551,423	0	0
Parks And Recreation, Department of	1,500,000	0	0	1,500,000	0	0	0
Pesticide Regulation, Department of	11,642,098	1,552,773	0	1,742,665	8,346,660	0	0
Public Health, Department of	6,089,200	0	0	97,700	5,991,500	0	0
Public Utilities Commission, Executive Division	37,000,000	0	37,000,000	0	0	0	0
Rehabilitation, Department of	2,702,614	0	0	0	0	0	2,702,614
Resources Recycling and Recovery, Department of	155,635	0	0	155,635	0	0	0
Social Services, Department of	3,585,336	0	0	0	0	0	3,585,336
State Coastal Conservancy	835,489	0	0	835,489	0	0	0
State Water Resources Control Board	5,377,799	0	0	5,377,799	0	0	0
Toxic Substances Control, Department of	1,887,600	0	0	1,887,600	0	0	0
Transportation, Department of	47,716,505	0	0	0	0	47,716,505	0
Water Resources, Department of	14,331,563	0	0	12,977,905	0	0	1,353,658
Colorado	38,436,248	2,739,142	2,846,991	11,287,126	9,548,470	3,791,995	8,222,524
Agriculture, Department of	676,649	278,421	0	0	398,228	0	0
Economic Development and International Trade, Office of	21,331,814	2,226,686	2,846,991	419,200	8,943,402	500,000	6,395,535

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## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Higher Education Competitive, Research Authority	1,748,478	0	0	970,000	0	0	778,478
Natural Resources, Department of	7,530,151	0	0	7,513,022	0	17,129	0
Public Health and Environment, Department of	2,591,744	0	0	2,384,904	206,840	0	0
Public Safety, Department of; Division of Criminal Justice	1,040,036	0	0	0	0	0	1,040,036
Transportation, Department of	3,274,866	0	0	0	0	3,274,866	0
Wine Industry Development Board	242,510	234,035	0	0	0	0	8,475
Connecticut	55,050,702	4,142,888	3,627,099	11,706,792	27,271,532	2,408,289	5,894,102
Agricultural Experiment Station	13,302,928	4,142,888	0	4,261,372	4,898,668	0	0
Energy and Environmental Protection, Department of	7,445,420	0	0	7,445,420	0	0	0
Innovation Inc.	23,315,658	0	3,627,099	0	13,794,457	0	5,894,102
Mental Health and Addiction Services, Department of	6,966,358	0	0	0	6,966,358	0	0
Public Health, Department of	20,967	0	0	0	20,967	0	0
Social Services, Department of	1,591,082	0	0	0	1,591,082	0	0
Transportation, Department of	2,408,289	0	0	0	0	2,408,289	0
Delaware	3,338,773	0	46,054	2,125,080	0	1,167,639	0
Geological Survey	1,945,219	0	0	1,867,565	0	77,654	0
Natural Resources and Environmental Control, Department of	257,515	0	0	257,515	0	0	0
Sustainable Energy Utility	46,054	0	46,054	0	0	0	0
Transportation, Department of	1,089,985	0	0	0	0	1,089,985	0
District of Columbia	8,128,666	0	0	1,821,400	5,983,318	289,382	34,566
Energy and Environment, Department of	207,000	0	0	207,000	0	0	0
Forensic Sciences, Department of	75,566	0	0	0	41,000	0	34,566
Health, Department of	5,942,318	0	0	0	5,942,318	0	0
Transportation, Department of	303,782	0	0	14,400	0	289,382	0
Water and Sewer Authority	1,600,000	0	0	1,600,000	0	0	0
Florida	178,360,429	15,279,858	554,984	57,586,211	93,311,821	11,527,555	100,000
Agriculture and Consumer Services, Department of	16,258,186	14,684,149	554,984	253,432	765,621	0	0
Business and Professional Regulation, Department of	100,000	0	0	0	0	0	100,000
Citrus, Department of	999,748	595,709	0	0	404,039	0	0
Environmental Protection, Department of	129,087	0	0	129,087	0	0	0
Fish and Wildlife Conservation Commission	57,203,692	0	0	57,203,692	0	0	0
Health, Department of	92,142,161	0	0	0	92,142,161	0	0
Space Florida	1,300,000	0	0	0	0	1,300,000	0
Transportation, Department of	10,227,555	0	0	0	0	10,227,555	0
Georgia	18,798,826	0	9,067,079	3,132,706	0	6,599,041	0

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## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Natural Resources, Department of	818,245	0	0	818,245	0	0	0
Southern States Energy Board	11,557,770	0	9,067,079	2,314,461	0	176,230	0
Transportation, Department of	6,422,811	0	0	0	0	6,422,811	0
Hawaii	10,315,823	524,528	4,216,265	320,500	37,500	5,013,530	203,500
Agriculture, Department of	484,028	484,028	0	0	0	0	0
Business, Economic Development, and Tourism, Department of	2,538,265	40,500	2,216,265	40,500	37,500	0	203,500
Land and Natural Resources, Department of	280,000	0	0	280,000	0	0	0
Natural Energy Laboratory of Hawaii Authority	2,000,000	0	2,000,000	0	0	0	0
Transportation, Department of	5,013,530	0	0	0	0	5,013,530	0
Idaho	18,210,054	6,008,990	206,624	9,473,386	0	2,144,749	376,305
Agriculture, Department of	336,276	336,276	0	0	0	0	0
Alfalfa and Clover Seed Commission	2,300	2,300	0	0	0	0	0
Barley Commission	210,712	210,712	0	0	0	0	0
Bean Commission	40,640	40,640	0	0	0	0	0
Beef Council	123,053	123,053	0	0	0	0	0
Commerce, Department of	1,020,240	388,300	206,624	0	0	49,011	376,305
Dairy West	2,805,947	2,805,947	0	0	0	0	0
Environmental Quality, Department of	578,257	0	0	578,257	0	0	0
Fish and Game, Department of	8,895,129	0	0	8,895,129	0	0	0
Honey Commission	3,500	3,500	0	0	0	0	0
Mint Commission	14,867	14,867	0	0	0	0	0
Oilseed Commission	65,000	65,000	0	0	0	0	0
Pea and Lentil Commission	103,479	103,479	0	0	0	0	0
Potato Commission	747,788	747,788	0	0	0	0	0
Transportation Department	2,095,738	0	0	0	0	2,095,738	0
Wheat Commission	1,167,128	1,167,128	0	0	0	0	0
Illinois	16,213,542	2,019,400	0	2,000,000	295,040	9,430,989	2,468,113
Children and Family Services, Department of	2,468,113	0	0	0	0	0	2,468,113
Midwest Dairy Association, Illinois Division	19,400	19,400	0	0	0	0	0
Nutrient Research and Education Council	4,000,000	2,000,000	0	2,000,000	0	0	0
Public Health, Department of	295,040	0	0	0	295,040	0	0
Transportation, Department of	9,430,989	0	0	0	0	9,430,989	0
Indiana	10,485,205	500,279	24,787	720,153	300,000	8,261,486	678,500
Economic Development Corporation	1,424,123	100,279	24,787	0	300,000	336,557	662,500
Environmental Management, Department of	16,935	0	0	16,935	0	0	0
Natural Resources, Department of	1,086,728	400,000	0	686,728	0	0	0
St. Joseph River Basin Commission	32,490	0	0	16,490	0	0	16,000

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(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Transportation, Department of Iowa	7,924,929	0	0	0	0	7,924,929	0
Iowa	10,579,028	170,448	0	2,994,029	0	6,942,156	472,395
Beef Industry Council	58,898	58,898	0	0	0	0	0
Human Rights, Criminal and Juvenile Justice Planning, Division of, Department of	472,395	0	0	0	0	0	472,395
Midwest Dairy Association, Iowa Division	111,550	111,550	0	0	0	0	0
Natural Resources, Department of	2,994,029	0	0	2,994,029	0	0	0
Transportation, Department of Kansas	6,942,156	0	0	0	0	6,942,156	0
Kansas	15,002,554	3,548,954	0	7,217,311	0	3,237,535	998,754
Corn Commission	654,979	654,979	0	0	0	0	0
Grain Sorghum Commission	277,300	277,300	0	0	0	0	0
Midwest Dairy Association, Kansas Division	14,550	14,550	0	0	0	0	0
Soybean Commission	1,200,000	1,200,000	0	0	0	0	0
State Board of Regents	998,754	0	0	0	0	0	998,754
Sunflower Commission	20,000	20,000	0	0	0	0	0
Transportation, Department of Water Office	3,237,535	0	0	0	0	3,237,535	0
Water Office	1,011,797	4,125	0	1,007,672	0	0	0
Wheat Commission	1,378,000	1,378,000	0	0	0	0	0
Wildlife and Parks, Department of Kentucky	6,209,639	0	0	6,209,639	0	0	0
Kentucky	29,737,068	517,000	386,000	2,406,089	16,082,555	8,931,685	1,413,739
Behavioral Health, Developmental and Intellectual Disabilities	67,500	0	0	0	67,500	0	0
Economic Development, Cabinet for	3,048,739	0	365,000	0	1,150,000	120,000	1,413,739
Fish and Wildlife Resources, Department of	2,230,154	0	0	2,230,154	0	0	0
Horse Racing Commission	216,983	0	0	0	216,983	0	0
Nature Preserves, Office of Kentucky	175,935	0	0	175,935	0	0	0
Postsecondary Education, Council on	11,086,500	0	0	0	11,086,500	0	0
Public Health, Department for	3,561,572	0	0	0	3,561,572	0	0
Public Service Commission	21,000	0	21,000	0	0	0	0
Soybean Promotion Board	517,000	517,000	0	0	0	0	0
Transportation Cabinet	8,811,685	0	0	0	0	8,811,685	0
Louisiana	32,115,461	274,427	1,936,715	10,483,689	1,160,113	9,185,327	9,075,190
Agriculture and Forestry, Department of	4,946	4,946	0	0	0	0	0
Board of Regents	13,492,921	269,481	1,936,715	1,051,422	1,160,113	0	9,075,190
Coastal Protection and Restoration Authority	3,573,798	0	0	3,573,798	0	0	0
Transportation and Development, Department of	9,185,327	0	0	0	0	9,185,327	0
Wildlife and Fisheries, Department of	5,858,469	0	0	5,858,469	0	0	0
Maine	32,392,463	1,891,592	31,830	7,542,075	12,612,119	1,500,000	8,814,847

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## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Agriculture, Conservation and Forestry, Department of	1,505,860	84,910	31,830	1,389,120	0	0	0
Inland Fisheries and Wildlife, Department of	1,080,841	0	0	1,080,841	0	0	0
Marine Resources, Department of	2,582,000	0	0	2,582,000	0	0	0
MDI Biological Laboratory, Center for Biomedical Innovation	8,048,966	0	0	0	8,048,966	0	0
Technology Institute	17,674,796	1,806,682	0	2,490,114	4,563,153	0	8,814,847
Transportation, Department of	1,500,000	0	0	0	0	1,500,000	0
Maryland	28,212,493	0	0	900,754	25,100,000	2,211,739	0
Health, Department of	13,500,000	0	0	0	13,500,000	0	0
Natural Resources, Department of	900,754	0	0	900,754	0	0	0
Technology Development Corporation	11,600,000	0	0	0	11,600,000	0	0
Transportation, Department of	2,211,739	0	0	0	0	2,211,739	0
Massachusetts	23,307,621	0	5,044,038	2,752,268	6,574,962	3,767,017	5,169,336
Clean Energy Technology Center	5,044,038	0	5,044,038	0	0	0	0
Environmental Protection, Department of	1,771,575	0	0	1,771,575	0	0	0
Fish and Game, Department of	915,233	0	0	915,233	0	0	0
Gaming Commission	1,480,178	0	0	0	1,467,766	0	12,412
Life Sciences Center	556,868	0	0	0	556,868	0	0
Massventures	3,942,167	0	0	0	0	0	3,942,167
Mental Health, Department of	2,579,520	0	0	0	2,579,520	0	0
Public Health, Department of	1,674,277	0	0	0	1,674,277	0	0
Technology Park Corporation	1,176,748	0	0	65,460	296,531	0	814,757
Transportation, Department of	3,767,017	0	0	0	0	3,767,017	0
Water Resources Authority	400,000	0	0	0	0	0	400,000
Michigan	29,718,391	1,216,089	0	1,690,204	20,000,000	6,812,098	0
Agriculture and Rural Development, Department of	1,656,683	1,216,089	0	440,594	0	0	0
Environmental, Great Lakes, and Energy, Department of	1,249,610	0	0	1,249,610	0	0	0
Licensing and Regulatory Affairs	20,000,000	0	0	0	20,000,000	0	0
Transportation, Department of	6,812,098	0	0	0	0	6,812,098	0
Minnesota	22,483,420	4,789,550	0	3,612,375	0	14,081,495	0
Agriculture, Department of	5,408,623	4,576,150	0	832,473	0	0	0
Midwest Dairy Association, Minnesota Division	213,400	213,400	0	0	0	0	0
Natural Resources, Department of	1,855,011	0	0	1,855,011	0	0	0
Pollution Control Agency	9,888	0	0	9,888	0	0	0
Transportation, Department of	14,996,498	0	0	915,003	0	14,081,495	0
Mississippi	11,143,362	1,564,195	0	4,036,645	0	5,542,522	0
Agriculture and Commerce, Department of	152,264	152,264	0	0	0	0	0

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State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Environmental Quality, Department of	1,267,345	0	0	1,267,345	0	0	0
Gulf States Marine Fisheries Commission	1,527,915	1,411,931	0	115,984	0	0	0
Marine Resources, Department of	1,110,829	0	0	1,110,829	0	0	0
Transportation, Department of	5,542,522	0	0	0	0	5,542,522	0
Wildlife, Fisheries, and Parks, Department of	1,542,487	0	0	1,542,487	0	0	0
Missouri	14,009,154	1,185,569	0	10,111,070	592,500	2,120,015	0
Agriculture, Department of	273,268	243,285	0	29,983	0	0	0
Conservation, Department of	9,627,125	0	0	9,627,125	0	0	0
Mental Health, Department of	242,500	0	0	0	242,500	0	0
Natural Resources, Department of	453,962	0	0	453,962	0	0	0
Technology Corporation	654,232	304,232	0	0	350,000	0	0
Transportation, Department of	2,120,015	0	0	0	0	2,120,015	0
Wine and Grape Board	638,052	638,052	0	0	0	0	0
Montana	8,447,295	2,841,089	0	3,873,284	0	1,732,922	0
Agriculture, Department of	2,841,089	2,841,089	0	0	0	0	0
Environmental Quality, Department of	50,304	0	0	50,304	0	0	0
Fish, Wildlife and Parks, Department of	3,806,115	0	0	3,806,115	0	0	0
Natural Resources and Conservation, Department of	16,865	0	0	16,865	0	0	0
Transportation, Department of	1,732,922	0	0	0	0	1,732,922	0
Nebraska	31,337,947	3,234,030	350,000	5,465,378	19,480,431	1,735,953	1,072,155
Agriculture, Department of	797,149	797,149	0	0	0	0	0
Corn Board	1,201,594	1,201,594	0	0	0	0	0
Dry Bean Commission	265,487	265,487	0	0	0	0	0
Economic Development, Department of	3,242,710	704,200	350,000	200,000	916,355	0	1,072,155
Game and Parks Commission	5,125,851	0	0	5,125,851	0	0	0
Grain Sorghum Board	3,000	3,000	0	0	0	0	0
Health and Human Services, Department of	18,564,076	0	0	0	18,564,076	0	0
Midwest Dairy Association, Nebraska Division	29,100	29,100	0	0	0	0	0
Natural Resources, Department of	50,000	0	0	50,000	0	0	0
Transportation, Department of	1,825,480	0	0	89,527	0	1,735,953	0
Wheat Board	233,500	233,500	0	0	0	0	0
Nevada	4,222,929	237,064	0	439,233	0	1,588,437	1,958,195
Agriculture, Department of	237,064	237,064	0	0	0	0	0
Economic Development, Governor's office of	1,958,195	0	0	0	0	0	1,958,195
Transportation, Department of	2,027,670	0	0	439,233	0	1,588,437	0
New Hampshire	8,675,207	160,563	15,000	593,070	0	605,207	7,301,367
Agriculture, Markets and Food, Department of	175,563	160,563	15,000	0	0	0	0

TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Business and Economic Affairs, Department of	7,275,000	0	0	0	0	0	7,275,000
Environmental Services, Department of	505,937	0	0	505,937	0	0	0
Transportation, Department of	718,707	0	0	87,133	0	605,207	26,367
New Jersey	12,864,404	0	0	2,940,457	1,352,305	5,440,354	3,131,288
Children and Families, Department of	250,627	0	0	0	0	0	250,627
Community Affairs, Department of	5,000	0	0	0	0	0	5,000
Corrections, Department of	309,449	0	0	0	0	0	309,449
Environmental Protection, Department of	3,398,000	0	0	2,364,000	1,034,000	0	0
Health, Department of	318,305	0	0	0	318,305	0	0
Pinelands Commission	576,457	0	0	576,457	0	0	0
Secretary of Higher Education, Office of	2,500,000	0	0	0	0	0	2,500,000
State Parole Board, New Jersey	66,212	0	0	0	0	0	66,212
Transit, New Jersey	61,804	0	0	0	0	61,804	0
Transportation, Department of	5,378,550	0	0	0	0	5,378,550	0
New Mexico	3,054,817	0	79,323	1,550,674	0	1,316,767	108,053
Cultural Affairs, Department of	108,053	0	0	0	0	0	108,053
Game and Fish, Department of	1,000,000	0	0	1,000,000	0	0	0
Transportation, Department of	1,586,466	0	79,323	190,376	0	1,316,767	0
Western State Air Resources Council	360,298	0	0	360,298	0	0	0
New York	417,246,309	8,731,413	60,426,855	31,482,716	289,740,653	11,189,625	15,675,047
Agriculture and Markets, Department of	7,194,600	6,994,600	0	200,000	0	0	0
Economic Development, Department of	27,738,133	798,457	5,933,712	860,963	4,910,217	0	15,234,784
Energy Research and Development Authority	58,220,185	0	42,007,561	5,172,200	5,050,368	5,990,056	0
Environmental Conservation, Department of	11,777,525	0	0	11,777,525	0	0	0
Health, Department of	65,094,944	324,923	0	1,949,535	62,820,486	0	0
Mental Health, Office of	151,456,861	0	0	0	151,456,861	0	0
People with Developmental Disabilities, Office of	1,614,170	0	0	0	1,564,170	0	50,000
Power Authority	14,544,465	214,125	12,485,582	1,224,866	70,900	158,729	390,263
Roswell Park Comprehensive Cancer Center	63,867,651	0	0	0	63,867,651	0	0
State Museum	10,297,627	0	0	10,297,627	0	0	0
Thoroughbred Breeding and Development Fund Corp.	399,308	399,308	0	0	0	0	0
Transportation, Department of	5,040,840	0	0	0	0	5,040,840	0
North Carolina	36,870,713	14,123,005	1,574,989	5,733,496	3,665,704	10,882,065	891,454
Agriculture and Consumer Services, Department of	15,422,911	13,922,911	1,500,000	0	0	0	0
Biotechnology Center	2,693,795	0	0	0	2,693,795	0	0



TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Environmental Quality, Department of	3,275,158	0	0	2,778,080	0	0	497,078
Natural and Cultural Resources, Department of	1,951,431	0	0	1,951,431	0	0	0
Science Technology & Innovation, Office of	1,500,000	145,830	74,989	0	971,909	0	307,272
Transportation, Department of	11,886,050	0	0	1,003,985	0	10,882,065	0
Wine and Grape Growers Council	141,368	54,264	0	0	0	0	87,104
North Dakota	35,139,613	3,177,142	24,409,679	918,049	5,182,820	1,204,774	247,149
Agriculture, Department of	5,360,395	177,575	0	0	5,182,820	0	0
Dry Pea and Lentil Commission	253,958	253,958	0	0	0	0	0
Game and Fish, Department of	900,314	0	0	900,314	0	0	0
Historical Society of North Dakota	247,149	0	0	0	0	0	247,149
Industrial Commission	24,409,679	0	24,409,679	0	0	0	0
Midwest Dairy Association, North Dakota Division	4,850	4,850	0	0	0	0	0
Soybean Council	1,420,538	1,402,803	0	17,735	0	0	0
Transportation, Department of	1,204,774	0	0	0	0	1,204,774	0
Wheat Commission	1,337,956	1,337,956	0	0	0	0	0
Ohio	55,336,431	0	8,291,260	31,774,578	2,141,824	6,276,848	6,851,921
Development, Department of	43,878,812	0	8,263,705	28,912,062	81,824	0	6,621,221
Education, Department of	230,700	0	0	0	0	0	230,700
Mental Health and Addictions Services, Department of	2,060,000	0	0	0	2,060,000	0	0
Natural Resources, Department of	2,565,498	0	27,555	2,537,943	0	0	0
Rail Development Commission	79,156	0	0	0	0	79,156	0
Transportation, Department of	6,197,692	0	0	0	0	6,197,692	0
Water Development Authority	324,573	0	0	324,573	0	0	0
Oklahoma	55,989,692	1,329,150	550,284	2,291,905	17,077,727	4,963,501	29,777,125
Advancement of Science and Technology, Center for the	34,830,643	996,785	550,284	0	3,801,749	271,239	29,210,586
Agriculture, Food, and Forestry, Department of	327,515	327,515	0	0	0	0	0
Environmental Quality, Department of	217,645	0	0	217,645	0	0	0
Grand River Dam Authority	525,000	0	0	525,000	0	0	0
Health, Department of	1,344,978	0	0	0	1,344,978	0	0
Human Services, Department of	566,539	0	0	0	0	0	566,539
Midwest Dairy Association, Oklahoma Division	4,850	4,850	0	0	0	0	0
Tobacco Settlement Endowment Trust	11,931,000	0	0	0	11,931,000	0	0
Transportation, Department of	4,692,262	0	0	0	0	4,692,262	0
Wildlife Conservation, Department of	1,549,260	0	0	1,549,260	0	0	0
Oregon	37,419,218	205,647	2,400,000	17,198,988	5,127,824	3,638,363	8,848,396
Agriculture, Department of	205,647	205,647	0	0	0	0	0

TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Business Oregon	14,300,000	0	2,400,000	0	4,800,000	0	7,100,000
Fish and Wildlife, Department of	12,566,339	0	0	12,566,339	0	0	0
Forestry, Department of	700,000	0	0	700,000	0	0	0
Geology and Mineral Industries, Department of	1,210,168	0	0	1,210,168	0	0	0
Human Services, Department of	2,185,495	0	0	109,275	327,824	0	1,748,396
Transportation, Department of	3,638,363	0	0	0	0	3,638,363	0
Water Resources Department	1,551,042	0	0	1,551,042	0	0	0
Watershed Enhancement Board	1,062,164	0	0	1,062,164	0	0	0
Pennsylvania	93,621,093	2,601,164	1,009,207	10,393,255	72,166,914	5,576,553	1,874,000
Agriculture, Department of	2,461,164	2,461,164	0	0	0	0	0
Community and Economic Development, Department of	21,500,000	140,000	900,000	210,000	17,166,000	1,210,000	1,874,000
Conservation and Natural Resources, Department of	309,471	0	0	309,471	0	0	0
Environmental Protection, Department of	1,931,821	0	109,207	1,822,614	0	0	0
Fish and Boat Commission	259,114	0	0	259,114	0	0	0
Game Commission	7,513,056	0	0	7,513,056	0	0	0
Health, Department of	55,000,914	0	0	0	55,000,914	0	0
Susquehanna River Basin Commission	279,000	0	0	279,000	0	0	0
Transportation, Department of	4,366,553	0	0	0	0	4,366,553	0
Rhode Island	10,226,630	53,000	0	9,014,506	411,325	185,472	562,327
Commerce Corporation	1,127,624	53,000	0	3,000	411,325	97,972	562,327
Fish and Wildlife; Environmental Management, Department of	5,238,690	0	0	5,238,690	0	0	0
Marine Fisheries; Environmental Management, Department of	3,601,968	0	0	3,601,968	0	0	0
Narragansett Bay National Estuarine Research Reserve; Environmental Management, Department of	67,378	0	0	67,378	0	0	0
Transportation, Department of	87,500	0	0	0	0	87,500	0
Water Resources Board	103,470	0	0	103,470	0	0	0
South Carolina	44,557,581	1,839,876	474,350	27,217,435	10,768,594	2,646,350	1,610,976
Agriculture, Department of	1,119,867	1,051,746	50,000	0	0	0	18,121
Disabilities and Special Needs, Department of	9,437,880	0	0	0	9,437,880	0	0
Health and Environmental Control, Department of	1,314,349	644,045	0	0	670,304	0	0
Mental Health, Department of	53,424	0	0	0	53,424	0	0
Natural Resources, Department of	24,893,262	0	0	24,893,262	0	0	0
Public Service Authority	424,350	0	424,350	0	0	0	0
Research Authority	2,339,441	75,000	0	65,000	606,986	0	1,592,455
Sea Grant Consortium	2,328,658	69,085	0	2,259,173	0	0	400

TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Transportation, Department of	2,646,350	0	0	0	0	2,646,350	0
South Dakota	3,193,289	2,013,292	1,968	0	0	1,178,029	0
Corn Utilization Council	150,006	150,006	0	0	0	0	0
Midwest Dairy Association, South Dakota Division	63,050	63,050	0	0	0	0	0
Nutrient Research and Education Council	871,090	871,090	0	0	0	0	0
Oilseeds Council	278,954	278,954	0	0	0	0	0
Pulse Crop Council	4,063	4,063	0	0	0	0	0
Science and Technology Authority	1,968	0	1,968	0	0	0	0
Soybean Research and Promotion Council	342,368	342,368	0	0	0	0	0
Transportation, Department of	1,178,029	0	0	0	0	1,178,029	0
Weed and Pest Control Commission	43,411	43,411	0	0	0	0	0
Wheat Commission	260,350	260,350	0	0	0	0	0
Tennessee	10,287,206	0	0	233,025	0	6,683,667	3,370,514
Education, Department of	3,368,383	0	0	0	0	0	3,368,383
Environment and Conservation, Department of	235,156	0	0	233,025	0	0	2,131
Transportation, Department of	6,683,667	0	0	0	0	6,683,667	0
Texas	255,731,862	932,510	0	11,309,543	222,983,844	20,505,965	0
Agriculture, Department of	932,510	932,510	0	0	0	0	0
Alzheimer's Research and Care Consortium (TARCC)	4,615,313	0	0	0	4,615,313	0	0
Cancer Prevention and Research Institute	216,766,526	0	0	0	216,766,526	0	0
Environmental Quality, Commission on	1,922,455	0	0	1,922,455	0	0	0
Parks and Wildlife Department	6,215,323	0	0	6,215,323	0	0	0
State Health Services, Department of	1,602,005	0	0	0	1,602,005	0	0
Transportation, Department of	20,505,965	0	0	0	0	20,505,965	0
Water Development Board	3,171,765	0	0	3,171,765	0	0	0
Utah	8,316,189	0	0	4,995,663	5,350	3,315,176	0
Environmental Quality, Department of	780,433	0	0	780,433	0	0	0
Health, Department of	5,350	0	0	0	5,350	0	0
Natural Resources, Department of	4,215,230	0	0	4,215,230	0	0	0
Transportation, Department of	3,315,176	0	0	0	0	3,315,176	0
Vermont	1,535,157	0	0	274,477	163,373	1,097,307	0
Agriculture, Food, and Markets, Agency of	274,477	0	0	274,477	0	0	0
Human Services, Agency of	163,373	0	0	0	163,373	0	0
Transportation, Agency of	1,097,307	0	0	0	0	1,097,307	0
Virginia	44,913,546	3,118,841	409,898	8,065,546	4,132,097	18,505,828	10,681,336
Aging and Rehabilitative Services, Department of	128,788	0	0	0	128,788	0	0

TABLE 21

## State agency expenditures for R&amp;D, by state, department or agency, and function of R&amp;D: FY 2021

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Agriculture and Consumer Services, Department of	2,821,841	2,821,841	0	0	0	0	0
Commonwealth Health Research Board	1,566,854	0	0	0	1,566,854	0	0
Conservation and Recreation, Department of	467,900	0	0	467,900	0	0	0
Education, Department of	2,495,435	0	0	0	0	0	2,495,435
Energy, Department of	1,530,387	0	0	1,530,387	0	0	0
Environmental Quality, Department of	366,645	0	0	366,645	0	0	0
Forensic Science, Department of	1,337,377	0	0	0	0	0	1,337,377
Forestry, Department of	701,053	0	0	701,053	0	0	0
Foundation for Healthy Youth	787,149	0	0	0	787,149	0	0
Innovative Technology, Center for	11,596,571	240,000	409,898	686,308	1,649,306	2,562,535	6,048,524
Institute for Advanced Learning and Research	57,000	57,000	0	0	0	0	0
Marine Resources Commission	1,847,815	0	0	1,847,815	0	0	0
Natural History, Museum of	900,582	0	0	900,582	0	0	0
Social Services, Department of	800,000	0	0	0	0	0	800,000
Transportation, Department of	15,943,293	0	0	0	0	15,943,293	0
Wildlife Resources, Department of	1,564,856	0	0	1,564,856	0	0	0
Washington	56,690,210	11,882,329	11,573,426	20,929,359	1,367,538	7,528,900	3,408,658
Agriculture, Department of	3,498,238	3,498,238	0	0	0	0	0
Alfalfa Seed Commission	34,000	34,000	0	0	0	0	0
Commerce, Department of	11,485,246	0	11,485,246	0	0	0	0
Cranberry Commission	16,000	16,000	0	0	0	0	0
Ecology, Department of	1,398,475	0	0	1,398,475	0	0	0
Fish and Wildlife, Department of	11,181,950	0	0	11,181,950	0	0	0
Fruit Commission	134,538	0	0	0	134,538	0	0
Grain Commission	1,860,504	1,860,504	0	0	0	0	0
Health, Department of	1,233,000	0	0	0	1,233,000	0	0
Hop Commission	272,988	272,988	0	0	0	0	0
Labor and Industries, Department of	3,408,658	0	0	0	0	0	3,408,658
Mint Commission	27,171	27,171	0	0	0	0	0
Natural Resources, Department of	7,587,114	0	88,180	7,498,934	0	0	0
Oilseeds Commission	46,152	46,152	0	0	0	0	0
Pesticide Registration, Commission on	357,969	357,969	0	0	0	0	0
Potato Commission	837,892	837,892	0	0	0	0	0
Puget Sound Partnership	850,000	0	0	850,000	0	0	0
Pulse Crops Commission	238,186	238,186	0	0	0	0	0
Red Raspberry Commission	220,248	220,248	0	0	0	0	0
Seed Potato Commission	25,639	25,639	0	0	0	0	0
Transportation, Department of	7,528,900	0	0	0	0	7,528,900	0

TABLE 21

**State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2021**

(Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other <sup>a</sup>
Tree Fruit Research Commission	4,096,282	4,096,282	0	0	0	0	0
Turfgrass Seed Commission	107,060	107,060	0	0	0	0	0
Wine Commission	244,000	244,000	0	0	0	0	0
West Virginia	9,013,091	166,685	872,617	3,183,300	293,814	2,257,746	2,238,929
Agriculture, Department of	166,685	166,685	0	0	0	0	0
Geological and Economic Survey	1,611,208	0	579,494	299,971	0	0	731,743
Higher Education Policy Commission	2,924,776	0	293,123	830,653	293,814	0	1,507,186
Natural Resources, Department of	2,052,676	0	0	2,052,676	0	0	0
Transportation, Department of	2,257,746	0	0	0	0	2,257,746	0
Wisconsin	15,239,075	1,558,082	0	6,879,700	1,000,000	2,176,168	3,625,125
Agriculture, Trade and Consumer Protection, Department of	1,558,082	1,558,082	0	0	0	0	0
Economic Development Corporation	4,625,125	0	0	0	1,000,000	0	3,625,125
Natural Resources, Department of	6,879,700	0	0	6,879,700	0	0	0
Transportation, Department of	2,176,168	0	0	0	0	2,176,168	0
Wyoming	7,278,796	531,634	1,631,016	2,542,859	261,500	1,105,147	1,206,640
Agriculture, Department of	531,634	531,634	0	0	0	0	0
Business Council	1,544,835	0	0	199,975	199,860	0	1,145,000
Corrections, Department of	123,280	0	0	0	61,640	0	61,640
Energy Authority	413,533	0	413,533	0	0	0	0
Enhanced Oil Recovery Institute	1,126,393	0	1,126,393	0	0	0	0
Game and Fish Department	1,968,341	0	0	1,968,341	0	0	0
State Geological Survey	182,179	0	91,090	91,089	0	0	0
Transportation, Department of	1,105,147	0	0	0	0	1,105,147	0
Water Development Office	283,454	0	0	283,454	0	0	0

<sup>a</sup> Other functions include, but are not limited to, corrections, criminal justice, education, forensic science, labor, public safety, and social services.<sup>b</sup> U.S. total reflects all 50 states and the District of Columbia.**Source(s):**

National Center for Science and Engineering Statistics, Survey of State Government Research and Development, FY 2021.