

TABLE 23

## State agency R&amp;D intramural personnel, by state, department or agency, headcount, and full-time equivalent: FY 2021

(Number)

State and department or agency	R&D personnel headcount				R&D personnel full-time equivalents			
	Total	Researchers <sup>a</sup>	Technicians	Support staff	Total	Researchers <sup>a</sup>	Technicians	Support staff
United States <sup>b</sup>	9,132	4,854	2,981	1,297	6,387.5	3,532.8	1,949.0	905.7
Alabama	154	105	33	16	85.0	62.3	12.3	10.4
Conservation and Natural Resources, Department of; Wildlife and Freshwater Fisheries Division	11	6	4	1	5.5	3.0	2.0	0.5
Education, Department of	62	62	0	0	25.0	25.0	0.0	0.0
Forensic Sciences, Department of	2	2	0	0	2.0	2.0	0.0	0.0
Geological Survey	37	30	4	3	34.5	29.3	3.3	1.9
Marine Environmental Science Consortium, Dauphin Island Sea Lab	42	5	25	12	18.0	3.0	7.0	8.0
Alaska	74	50	13	11	58.0	41.5	10.0	6.5
Environmental Conservation, Department of	5	1	0	4	0.7	0.5	0.0	0.2
Natural Resources, Department of; Division of Geological and Geophysical Surveys	48	35	8	5	48.0	35.0	8.0	5.0
Railroad Corporation	16	10	5	1	8.0	5.0	2.0	1.0
Transportation and Public Facilities, Department of	5	4	0	1	1.3	1.0	0.0	0.3
Arizona	45	24	14	7	39.4	20.5	12.0	6.9
Game and Fish Department	26	16	8	2	20.4	12.5	6.0	1.9
Juvenile Corrections, Department of	7	4	2	1	7.0	4.0	2.0	1.0
Transportation, Department of	12	4	4	4	12.0	4.0	4.0	4.0
Arkansas	11	7	2	2	3.0	2.6	0.2	0.2
Natural Heritage Commission	2	2	0	0	2.0	2.0	0.0	0.0
Transportation, Department of	9	5	2	2	1.0	0.6	0.2	0.2
California	571	446	13	112	464.6	377.7	6.3	80.6
Air Resources Board	64	49	5	10	62.4	49.0	3.6	9.8
Conservation, Department of	10	8	1	1	2.8	2.7	0.1	0.0
Energy Commission	99	90	0	9	99.0	90.0	0.0	9.0
Environmental Health Hazard Assessment, Office of	123	88	0	35	121.0	87.4	0.0	33.6
Motor Vehicles, Department of	17	14	0	3	15.1	12.1	0.0	3.0
Pesticide Regulation, Department of	95	85	0	10	60.2	55.7	0.0	4.5
Public Health, Department of	10	6	0	4	5.7	2.3	0.0	3.4
Rehabilitation, Department of	3	0	0	3	2.3	0.0	0.0	2.3
Social Services, Department of	5	5	0	0	4.3	4.3	0.0	0.0
State Water Resources Control Board	15	15	0	0	6.1	6.1	0.0	0.0
Toxic Substances Control, Department of	12	12	0	0	3.1	3.1	0.0	0.0
Transportation, Department of	81	64	2	15	80.0	63.5	1.5	15.0
Water Resources, Department of	37	10	5	22	2.6	1.5	1.1	0.0
Colorado	85	67	5	13	65.0	52.3	4.3	8.4
Agriculture, Department of	6	1	0	5	5.2	0.3	0.0	4.9
Natural Resources, Department of	52	42	5	5	35.2	30.4	4.3	0.5
Public Health and Environment, Department of	11	11	0	0	10.6	10.6	0.0	0.0
Public Safety, Department of; Division of Criminal Justice	11	9	0	2	9.0	7.0	0.0	2.0
Transportation, Department of	5	4	0	1	5.0	4.0	0.0	1.0
Connecticut	212	156	40	16	170.4	120.9	36.0	13.5
Agricultural Experiment Station	101	57	32	12	101.0	57.0	32.0	12.0

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	Total	Researchers <sup>a</sup>	Technicians	Support staff	Total	Researchers <sup>a</sup>	Technicians	Support staff
Energy and Environmental Protection, Department of	55	47	8	0	27.0	23.0	4.0	0.0
Mental Health and Addiction Services, Department of	47	46	0	1	38.9	37.9	0.0	1.0
Transportation, Department of	9	6	0	3	3.5	3.0	0.0	0.5
Delaware	18	13	2	3	18.0	13.0	2.0	3.0
Geological Survey	18	13	2	3	18.0	13.0	2.0	3.0
District of Columbia	61	30	18	13	49.5	29.5	7.2	12.8
Forensic Sciences, Department of	11	11	0	0	11.0	11.0	0.0	0.0
Health, Department of	30	15	2	13	30.0	15.5	1.7	12.8
Transportation, Department of	2	1	1	0	1.5	1.0	0.5	0.0
Water and Sewer Authority	18	3	15	0	7.0	2.0	5.0	0.0
Florida	808	609	68	131	722.1	553.9	46.9	121.3
Agriculture and Consumer Services, Department of	13	5	0	8	13.0	5.0	0.0	8.0
Citrus, Department of	2	1	1	0	1.5	0.0	0.5	1.0
Fish and Wildlife Conservation Commission	781	599	60	122	697.9	545.8	40.6	111.5
Transportation, Department of	12	4	7	1	9.7	3.1	5.8	0.8
Georgia	14	5	5	4	7.7	3.0	2.9	1.8
Natural Resources, Department of	5	2	3	0	2.4	1.5	0.9	0.0
Southern States Energy Board	9	3	2	4	5.3	1.5	2.0	1.8
Hawaii	15	7	2	6	5.9	2.3	0.4	3.2
Agriculture, Department of	13	7	2	4	3.9	2.3	0.4	1.2
Business, Economic Development, and Tourism, Department of	2	0	0	2	2.0	0.0	0.0	2.0
Idaho	105	33	68	4	82.0	23.6	56.4	2.0
Fish and Game, Department of	99	30	66	3	76.0	20.6	54.4	1.0
Mint Commission	5	3	2	0	5.0	3.0	2.0	0.0
Transportation Department	1	0	0	1	1.0	0.0	0.0	1.0
Illinois	9	5	2	2	6.4	3.8	1.8	0.8
Transportation, Department of	9	5	2	2	6.4	3.8	1.8	0.8
Indiana	44	22	15	7	15.8	11.5	3.0	1.3
Natural Resources, Department of	16	12	3	1	1.5	1.5	0.0	0.0
Transportation, Department of	28	10	12	6	14.3	10.0	3.0	1.3
Iowa	40	22	18	0	8.3	6.7	1.6	0.0
Human Rights, Criminal and Juvenile Justice Planning, Division of, Department of	4	4	0	0	4.0	4.0	0.0	0.0
Natural Resources, Department of	36	18	18	0	4.3	2.7	1.6	0.0
Kansas	27	16	5	6	21.1	11.1	5.0	5.0
State Board of Regents	2	2	0	0	0.1	0.1	0.0	0.0
Transportation, Department of	18	9	5	4	18.0	9.0	5.0	4.0
Water Office	7	5	0	2	3.0	2.0	0.0	1.0
Kentucky	48	24	20	4	20.4	10.2	8.3	1.9
Fish and Wildlife Resources, Department of	48	24	20	4	20.4	10.2	8.3	1.9
Louisiana	218	124	61	33	85.3	60.9	16.5	7.9
Coastal Protection and Restoration Authority	11	7	0	4	7.5	6.5	0.0	1.0
Transportation and Development, Department of	38	23	12	3	38.0	23.0	12.0	3.0
Wildlife and Fisheries, Department of	169	94	49	26	39.8	31.4	4.5	3.9

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Maine	166	68	47	51	141.3	54.3	44.5	42.5
Agriculture, Conservation and Forestry, Department of	11	7	2	2	10.0	7.0	2.0	1.0
Inland Fisheries and Wildlife, Department of	35	15	15	5	27.0	8.0	16.0	3.0
Marine Resources, Department of	37	25	8	4	27.3	18.8	6.0	2.5
MDI Biological Laboratory, Center for Biomedical Innovation	80	19	21	40	74.0	18.5	19.5	36.0
Transportation, Department of	3	2	1	0	3.0	2.0	1.0	0.0
Maryland	23	16	6	1	18.0	13.0	3.0	2.0
Natural Resources, Department of	16	16	0	0	13.0	13.0	0.0	0.0
Transportation, Department of	7	0	6	1	5.0	0.0	3.0	2.0
Massachusetts	100	44	48	8	18.4	10.3	6.0	2.1
Environmental Protection, Department of	32	12	16	4	6.0	3.0	2.0	1.0
Fish and Game, Department of	63	28	31	4	10.2	5.4	3.7	1.1
Gaming Commission	2	2	0	0	1.5	1.5	0.0	0.0
Mental Health, Department of	1	1	0	0	0.1	0.1	0.0	0.0
Water Resources Authority	2	1	1	0	0.6	0.3	0.3	0.0
Michigan	6	4	1	1	1.6	1.0	0.2	0.4
Environmental, Great Lakes, and Energy, Department of	6	4	1	1	1.6	1.0	0.2	0.4
Minnesota	104	60	23	21	89.0	54.9	16.2	17.9
Agriculture, Department of	23	9	10	4	8.5	3.9	3.2	1.4
Natural Resources, Department of	63	47	10	6	63.0	47.0	10.0	6.0
Transportation, Department of	18	4	3	11	17.5	4.0	3.0	10.5
Mississippi	141	39	90	12	43.0	15.4	22.3	5.3
Environmental Quality, Department of	10	3	0	7	0.4	0.1	0.0	0.3
Marine Resources, Department of	11	4	7	0	3.5	2.0	1.5	0.0
Transportation, Department of	7	2	0	5	7.0	2.0	0.0	5.0
Wildlife, Fisheries, and Parks, Department of	113	30	83	0	32.1	11.3	20.8	0.0
Missouri	228	77	143	8	112.9	59.6	50.9	2.4
Conservation, Department of	228	77	143	8	112.9	59.6	50.9	2.4
Montana	55	24	28	3	11.8	5.2	5.4	1.2
Environmental Quality, Department of	4	2	2	0	1.4	1.0	0.2	0.2
Fish, Wildlife and Parks, Department of	50	21	26	3	9.4	3.2	5.2	1.0
Transportation, Department of	1	1	0	0	1.0	1.0	0.0	0.0
Nebraska	51	17	30	4	35.2	17.5	16.2	1.5
Game and Parks Commission	41	15	22	4	33.5	16.0	16.0	1.5
Transportation, Department of	10	2	8	0	1.7	1.5	0.2	0.0
Nevada	3	1	2	0	1.5	0.5	0.0	1.0
Agriculture, Department of	3	1	2	0	1.5	0.5	0.0	1.0
New Hampshire	16	2	3	11	2.2	2.0	0.1	0.1
Transportation, Department of	16	2	3	11	2.2	2.0	0.1	0.1
New Jersey	48	45	0	3	18.9	16.1	0.0	2.8
Children and Families, Department of	15	15	0	0	2.0	2.0	0.0	0.0
Community Affairs, Department of	2	2	0	0	0.1	0.1	0.0	0.0
Corrections, Department of	3	3	0	0	3.0	3.0	0.0	0.0
Environmental Protection, Department of	20	19	0	1	10.3	10.0	0.0	0.3
Pinelands Commission	5	5	0	0	1.0	0.0	0.0	1.0
State Parole Board, New Jersey	3	1	0	2	2.5	1.0	0.0	1.5

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New Mexico	11	4	4	3	10.7	3.7	4.0	3.0
Cultural Affairs, Department of	1	1	0	0	0.7	0.7	0.0	0.0
Game and Fish, Department of	4	1	2	1	4.0	1.0	2.0	1.0
Transportation, Department of	6	2	2	2	6.0	2.0	2.0	2.0
New York	2,942	1,347	1,184	411	2,335.9	1,028.3	937.1	370.5
Agriculture and Markets, Department of	23	18	5	0	11.7	7.7	4.0	0.0
Energy Research and Development Authority	35	22	0	13	28.5	22.0	0.0	6.5
Environmental Conservation, Department of	60	41	15	4	44.5	33.5	9.0	2.0
Health, Department of	364	232	83	49	265.4	179.3	43.4	42.7
Mental Health, Office of	1,353	578	587	188	998.0	367.0	458.0	173.0
People with Developmental Disabilities, Office of	31	11	14	6	16.0	6.0	7.0	3.0
Power Authority	10	9	0	1	10.0	9.0	0.0	1.0
Roswell Park Comprehensive Cancer Center	986	416	428	142	882.9	383.8	364.8	134.3
State Museum	75	17	52	6	73.9	17.0	50.9	6.0
Transportation, Department of	5	3	0	2	5.0	3.0	0.0	2.0
North Carolina	240	108	100	32	205.9	89.9	90.0	26.0
Agriculture and Consumer Services, Department of	159	62	81	16	159.0	62.0	81.0	16.0
Environmental Quality, Department of	39	18	12	9	23.8	12.3	5.5	6.0
Natural and Cultural Resources, Department of	36	23	7	6	17.1	10.6	3.5	3.0
Transportation, Department of	6	5	0	1	6.0	5.0	0.0	1.0
North Dakota	16	15	1	0	7.7	7.4	0.3	0.0
Historical Society of North Dakota	10	10	0	0	4.9	4.9	0.0	0.0
Transportation, Department of	6	5	1	0	2.8	2.5	0.3	0.0
Ohio	51	20	23	8	33.9	19.9	10.7	3.3
Education, Department of	1	1	0	0	0.1	0.1	0.0	0.0
Mental Health and Addictions Services, Department of	21	13	8	0	21.0	13.0	8.0	0.0
Natural Resources, Department of	29	6	15	8	12.8	6.8	2.7	3.3
Oklahoma	54	36	13	5	20.2	12.1	5.5	2.6
Environmental Quality, Department of	20	20	0	0	1.5	1.5	0.0	0.0
Grand River Dam Authority	9	4	4	1	3.3	2.3	1.0	0.0
Health, Department of	16	7	7	2	7.4	3.3	3.5	0.6
Human Services, Department of	2	0	1	1	1.0	0.0	0.0	1.0
Transportation, Department of	6	4	1	1	6.0	4.0	1.0	1.0
Wildlife Conservation, Department of	1	1	0	0	1.0	1.0	0.0	0.0
Oregon	252	85	142	25	146.5	68.6	67.3	10.6
Fish and Wildlife, Department of	175	42	123	10	92.5	30.5	57.8	4.2
Forestry, Department of	20	5	10	5	8.5	5.0	2.5	1.0
Geology and Mineral Industries, Department of	16	11	2	3	6.4	6.1	0.0	0.3
Human Services, Department of	21	11	7	3	21.0	11.0	7.0	3.0
Transportation, Department of	10	8	0	2	10.0	8.0	0.0	2.0
Water Resources Department	8	8	0	0	8.0	8.0	0.0	0.0
Watershed Enhancement Board	2	0	0	2	0.1	0.0	0.0	0.1
Pennsylvania	202	95	96	11	125.2	44.9	75.9	4.4

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Conservation and Natural Resources, Department of	6	4	1	1	2.8	1.1	0.7	1.0
Environmental Protection, Department of	3	3	0	0	0.2	0.0	0.0	0.2
Fish and Boat Commission	39	33	6	0	2.0	1.3	0.7	0.0
Game Commission	135	47	85	3	118.0	41.0	74.0	3.0
Susquehanna River Basin Commission	19	8	4	7	2.2	1.5	0.5	0.2
Rhode Island	79	59	10	10	57.5	45.0	4.5	8.0
Fish and Wildlife; Environmental Management, Department of	48	36	5	7	31.0	26.0	0.0	5.0
Marine Fisheries; Environmental Management, Department of	26	21	2	3	22.0	17.0	2.0	3.0
Narragansett Bay National Estuarine Research Reserve; Environmental Management, Department of	3	1	2	0	2.5	1.0	1.5	0.0
Water Resources Board	2	1	1	0	2.0	1.0	1.0	0.0
South Carolina	365	190	138	37	286.2	170.2	85.6	30.4
Health and Environmental Control, Department of	14	11	2	1	7.7	7.0	0.6	0.1
Mental Health, Department of	2	1	0	1	2.0	1.0	0.0	1.0
Natural Resources, Department of	311	154	131	26	255.0	149.0	85.0	21.0
Sea Grant Consortium	24	12	5	7	19.0	12.0	0.0	7.0
Transportation, Department of	14	12	0	2	2.5	1.2	0.0	1.3
South Dakota	14	7	0	7	8.5	7.0	0.0	1.5
Soybean Research and Promotion Council	6	0	0	6	0.5	0.0	0.0	0.5
Transportation, Department of	8	7	0	1	8.0	7.0	0.0	1.0
Tennessee	19	15	0	4	16.3	14.3	0.0	2.0
Education, Department of	8	7	0	1	8.0	7.0	0.0	1.0
Environment and Conservation, Department of	11	8	0	3	8.3	7.3	0.0	1.0
Texas	59	40	5	14	36.3	23.7	6.0	6.6
Environmental Quality, Commission on	2	0	0	2	0.5	0.0	0.0	0.5
Parks and Wildlife Department	32	22	5	5	24.3	15.5	5.0	3.8
State Health Services, Department of	25	18	0	7	11.5	8.2	1.0	2.3
Utah	72	49	12	11	40.8	31.8	7.0	2.0
Environmental Quality, Department of	3	3	0	0	0.8	0.8	0.0	0.0
Health, Department of	2	2	0	0	2.0	2.0	0.0	0.0
Natural Resources, Department of	60	40	10	10	31.0	25.0	5.0	1.0
Transportation, Department of	7	4	2	1	7.0	4.0	2.0	1.0
Vermont	9	3	5	1	3.2	2.4	0.7	0.1
Human Services, Agency of	4	1	3	0	1.3	0.7	0.6	0.0
Transportation, Agency of	5	2	2	1	1.9	1.7	0.1	0.1
Virginia	182	103	46	33	131.6	85.5	31.1	15.0
Conservation and Recreation, Department of	33	20	13	0	24.8	15.0	9.8	0.0
Education, Department of	5	3	1	1	2.2	1.6	0.3	0.3
Energy, Department of	18	14	3	1	18.0	14.0	3.0	1.0
Environmental Quality, Department of	3	3	0	0	0.1	0.1	0.0	0.0
Forensic Science, Department of	9	7	2	0	7.0	6.0	1.0	0.0
Forestry, Department of	7	1	6	0	7.0	1.0	6.0	0.0
Innovative Technology, Center for	10	2	0	8	7.2	1.0	0.0	6.2
Institute for Advanced Learning and Research	2	2	0	0	1.0	1.0	0.0	0.0

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Marine Resources Commission	2	1	1	0	2.0	1.0	1.0	0.0
Natural History, Museum of	9	5	3	1	8.5	6.0	2.0	0.5
Social Services, Department of	13	10	3	0	10.0	7.0	3.0	0.0
Transportation, Department of	71	35	14	22	43.8	31.8	5.0	7.0
Washington	629	372	147	110	233.5	143.0	58.0	32.5
Ecology, Department of	40	19	20	1	10.0	5.3	4.2	0.5
Fish and Wildlife, Department of	449	276	87	86	124.3	78.8	32.9	12.6
Health, Department of	14	10	2	2	8.1	5.6	1.1	1.4
Labor and Industries, Department of	28	24	0	4	28.0	24.0	0.0	4.0
Natural Resources, Department of	71	37	25	9	42.1	23.3	12.8	6.0
Transportation, Department of	15	3	7	5	11.0	3.0	3.0	5.0
Tree Fruit Research Commission	12	3	6	3	10.0	3.0	4.0	3.0
West Virginia	122	44	55	23	84.0	44.0	30.0	10.0
Agriculture, Department of	5	2	0	3	2.8	2.0	0.0	0.8
Geological and Economic Survey	34	24	5	5	34.0	24.0	5.0	5.0
Higher Education Policy Commission	3	0	0	3	1.2	0.0	0.0	1.2
Natural Resources, Department of	80	18	50	12	46.0	18.0	25.0	3.0
Wisconsin	92	26	62	4	24.1	18.5	1.6	4.0
Natural Resources, Department of	33	26	7	0	18.9	18.5	0.4	0.0
Transportation, Department of	59	0	55	4	5.2	0.0	1.2	4.0
Wyoming	222	74	113	35	157.8	15.5	135.8	6.5
Corrections, Department of	1	1	0	0	0.5	0.5	0.0	0.0
Energy Authority	3	0	0	3	3.0	0.0	0.0	3.0
Enhanced Oil Recovery Institute	13	7	3	3	5.5	3.0	1.0	1.5
Game and Fish Department	175	54	94	27	128.0	0.0	128.0	0.0
State Geological Survey	20	12	6	2	20.0	12.0	6.0	2.0
Transportation, Department of	10	0	10	0	0.8	0.0	0.8	0.0

<sup>a</sup> Researchers include R&D scientists and engineers and their managers.<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.