



Survey of State Government Research and Development: FYs 2010 and 2011

Detailed Statistical Tables | NSF 14-311 | May 2014

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General Notes

These tables present the results of the National Science Foundation (NSF) FY 2010 and FY 2011 Survey of State Government Research and Development, conducted for NSF by the U.S. Census Bureau. The Census Bureau employed a methodology similar to that used to collect data from state and local governments on other censuses and surveys.

The survey was distributed to more than 400 departments, agencies, commissions, public authorities, and other state-run entities within the 50 states, the District of Columbia, and Puerto Rico that were considered likely to conduct or fund R&D activities. Respondents that did not have qualifying R&D activity were not required to complete the questionnaire beyond a screening question. All 50 states, the District of Columbia, and Puerto Rico participated in the survey. These states distributed the survey to 472 agencies, 470 of which responded.¹ Of those responding, 256 agencies reported conducting or funding R&D in FY 2010 and FY 2011. Respondents were requested to provide statistics on their total R&D expenditures and amounts for internal and external performers, the amount devoted to basic research activities, the amount for which the federal government was an original source of funds, and the amount of money allocated to particular fields of study. An additional question was asked about the amount of expenditures for the construction and acquisition of R&D facilities.

Note

1. The District of Columbia and Puerto Rico are referred to as states and treated as state equivalents throughout this report.

Data Tables

Table **State agency expenditures for R&D and R&D plant: FY 2010 and FY 2011**
by state

- 1 all state government expenditures and gross domestic product
- 2 by performer

State agency expenditures for R&D, by state

- 3 FYs 2006–11
- by source of funds
- 4 all performers: FY 2010 and FY 2011
- 5 internal performers: FY 2010 and FY 2011
- 6 internal performers: FYs 2006–11
- 7 for basic research and basic research share: FY 2010 and FY 2011
- 8 by type of R&D: FY 2010 and FY 2011
- 9 from federal sources: FYs 2006–11

State agency expenditures for R&D, by state and department or agency

- 10 total and R&D plant, by performer: FY 2010
- 11 total and R&D plant, by performer: FY 2011
- by source of funds
- 12 all performers: FY 2010
- 13 all performers: FY 2011
- 14 internal performers: FY 2010
- 15 internal performers: FY 2011
- 16 by performer: FY 2010
- 17 by performer: FY 2011
- 18 by type of R&D: FY 2010
- 19 by type of R&D: FY 2011

TABLE 1. State government expenditures, state agency expenditures for R&D and R&D plant, and gross domestic product, by state: FYs 2010–11
(Thousands of dollars)

State	All state government expenditures		State R&D expenditures ^a		State R&D plant expenditures		Gross domestic product	
	2010	2011	2010	2011	2010	2011	2010	2011
United States ^b	1,957,269,940	2,017,966,292	1,261,367	1,403,816	107,343	109,125	12,894,874,000	13,106,778,000
Alabama	27,699,687	28,061,237	15,114	19,684	0	940	153,839,000	155,390,000
Alaska	10,998,837	11,320,127	9,275	11,349	0	0	43,472,000	44,232,000
Arizona	33,015,591	32,875,412	17,682	18,627	0	239	221,016,000	224,787,000
Arkansas	18,005,386	18,861,507	14,446	14,705	0	0	92,075,000	92,684,000
California	257,380,859	282,524,665	154,217	149,811	0	9,920	1,672,473,000	1,692,301,000
Colorado	26,996,775	28,413,134	20,828	18,142	880	0	230,976,000	234,929,000
Connecticut	27,456,676	28,094,106	40,066	39,192	0	0	197,613,000	197,452,000
Delaware	7,826,826	7,936,467	2,390	2,610	0	0	55,496,000	56,004,000
District of Columbia	13,682,043	13,641,290	696	1,221	0	0	89,968,000	91,442,000
Florida	81,831,697	84,633,065	120,849	150,764	0	0	650,291,000	656,346,000
Georgia	44,482,207	44,750,297	8,924	11,691	0	0	358,843,000	366,342,000
Hawaii	11,208,830	11,475,771	14,233	13,104	20	20	59,673,000	60,899,000
Idaho	8,514,075	8,733,485	9,060	9,366	0	0	50,734,000	50,759,000
Illinois	75,269,664	74,655,351	16,554	17,207	0	0	571,228,000	583,055,000
Indiana	35,474,194	35,261,522	8,445	6,983	0	0	241,927,000	247,222,000
Iowa	19,108,896	19,937,080	12,950	36,992	0	0	124,011,000	126,792,000
Kansas	16,583,949	16,686,643	6,509	6,636	0	0	113,324,000	116,907,000
Kentucky	29,097,531	29,369,940	20,410	20,499	3,500	0	141,977,000	144,779,000
Louisiana	33,615,486	33,396,449	9,165	9,204	0	0	200,944,000	195,640,000
Maine	9,024,322	9,099,085	8,847	9,919	0	3,000	45,564,000	45,763,000
Maryland	37,487,628	37,672,576	22,825	20,085	0	0	264,321,000	268,418,000
Massachusetts	51,802,490	52,550,586	4,884	4,879	26	224	340,159,000	345,961,000
Michigan	63,917,651	63,108,508	9,469	9,803	0	0	329,812,000	341,194,000
Minnesota	37,904,398	38,488,350	12,213	11,653	2,520	1,814	240,418,000	244,305,000
Mississippi	20,022,652	20,157,417	7,168	7,421	0	0	85,363,000	84,402,000
Missouri	30,781,944	30,646,880	13,330	13,659	0	0	216,681,000	217,401,000
Montana	7,052,380	7,105,366	7,544	6,474	0	0	31,918,000	32,683,000
Nebraska	9,480,245	9,356,473	4,233	4,062	0	0	80,638,000	82,172,000
Nevada	12,934,509	13,203,265	1,378	1,869	0	0	109,610,000	111,574,000
New Hampshire	7,705,787	7,638,166	1,804	1,921	0	0	55,242,000	56,443,000
New Jersey	67,776,049	67,114,331	27,940	17,069	3,000	0	431,409,000	432,415,000
New Mexico	17,996,040	17,865,171	1,423	1,822	0	0	70,785,000	70,529,000
New York	174,754,082	184,009,243	167,232	182,736	0	0	1,013,251,000	1,024,985,000
North Carolina	52,189,891	53,088,745	27,342	29,612	37	347	380,693,000	382,655,000
North Dakota	5,134,130	5,515,725	6,353	8,072	0	500	31,618,000	34,092,000
Ohio	76,690,552	79,201,570	125,121	159,322	0	0	413,991,000	425,913,000
Oklahoma	22,639,978	22,377,598	21,226	20,305	153	494	132,917,000	135,454,000
Oregon	26,978,154	27,336,568	18,014	20,001	0	0	174,165,000	180,326,000
Pennsylvania	87,285,286	90,791,525	76,948	71,098	6,039	5,495	493,530,000	502,769,000
Rhode Island	8,211,203	8,270,898	1,461	1,948	0	0	43,153,000	43,168,000
South Carolina	29,036,789	29,352,302	36,536	47,795	4,092	12	143,407,000	146,669,000
South Dakota	4,429,196	4,498,447	3,763	3,629	0	0	34,371,000	35,898,000
Tennessee	29,675,372	30,841,226	1,064	3,607	0	0	227,360,000	232,891,000
Texas	119,871,583	125,939,778	35,164	47,372	0	0	1,116,268,000	1,156,013,000
Utah	16,267,432	16,682,581	30,812	34,419	87,065	85,964	105,199,000	108,106,000
Vermont	5,745,943	5,853,842	1,665	1,712	0	0	23,341,000	23,639,000
Virginia	43,297,502	45,549,347	17,495	17,242	0	0	377,466,000	381,493,000
Washington	46,237,740	45,999,749	24,526	24,500	0	0	307,685,000	313,783,000
West Virginia	12,343,051	13,000,033	23,868	35,475	10	157	53,575,000	54,597,000

TABLE 1. State government expenditures, state agency expenditures for R&D and R&D plant, and gross domestic product, by state: FYs 2010–11
(Thousands of dollars)

State	All state government expenditures		State R&D expenditures ^a		State R&D plant expenditures		Gross domestic product	
	2010	2011	2010	2011	2010	2011	2010	2011
Wisconsin	38,589,815	39,349,832	12,436	21,129	0	0	219,080,000	221,874,000
Wyoming	5,756,937	5,673,561	5,471	5,419	0	0	32,004,000	31,231,000
Puerto Rico ^c	9,640,361	9,075,469	551	538	0	0	64,294,600	65,567,000

^a State R&D expenditures do not include R&D plant expenditures.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D; U.S. Census Bureau, Governments Division, 2010 Annual Survey of State Government Finances (December 2011); U.S. Census Bureau, Governments Division, 2011 Annual Survey of State and Local Government Finances (October 2012); Bureau of Economic Analysis, Gross Domestic Product by State (June 2012); Bureau of Economic Analysis, Gross Domestic Product by State (June 2013); Commonwealth of Puerto Rico Consolidated Annual Financial Report Fiscal Year Ended June 30, 2010, p. 52; and Commonwealth of Puerto Rico Consolidated Annual Financial Report Fiscal Year Ended June 30, 2010, p. 58, for Puerto Rico expenditures data. Puerto Rico GDP: Informe Economico Al Gobernador Puerto Rico (Economic Report to the Governor) 2012: Statistical Appendix, p. A-4.

TABLE 2. State agency expenditures for R&D and R&D plant, by state and performer: FYs 2010–11
(Dollars)

State	All R&D expenditures ^a		Internal performers ^b		External performers ^c								R&D plant	
					Total		Academic institutions		Companies and individuals ^d		Other ^e			
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
United States ^f	1,261,366,529	1,403,816,235	416,096,832	461,506,205	845,269,697	942,310,030	457,528,157	477,128,278	310,794,926	388,053,537	76,946,614	77,128,215	107,342,868	109,124,517
Alabama	15,113,917	19,684,063	9,749,394	14,250,319	5,364,523	5,433,744	5,273,041	5,308,849	0	0	91,482	124,895	0	940,000
Alaska	9,274,800	11,349,400	7,885,200	9,004,800	1,389,600	2,344,600	1,271,000	2,318,600	93,600	0	25,000	26,000	0	0
Arizona	17,682,315	18,626,577	7,545,171	7,410,362	10,137,144	11,216,215	4,636,405	5,978,122	5,493,477	5,201,363	7,262	36,730	0	239,200
Arkansas	14,446,084	14,705,327	5,406,407	6,077,854	9,039,677	8,627,473	8,513,702	7,796,498	525,975	830,975	0	0	0	0
California	154,216,981	149,810,643	30,126,000	38,369,776	124,090,981	111,440,867	61,104,883	60,203,594	58,915,308	49,374,471	4,070,790	1,862,802	0	9,920,000
Colorado	20,828,274	18,141,931	7,108,498	6,942,978	13,719,776	11,198,953	6,718,767	5,514,834	2,689,910	1,611,154	4,311,099	4,072,965	880,000	0
Connecticut	40,065,786	39,192,091	22,561,170	23,573,706	17,504,616	15,618,385	9,659,913	9,144,483	6,732,521	5,349,642	1,112,182	1,124,260	0	0
Delaware	2,389,720	2,609,902	1,968,736	2,049,018	420,984	560,884	409,984	499,964	0	0	11,000	60,920	0	0
District of Columbia	696,198	1,221,108	189,691	220,886	506,507	1,000,222	506,507	807,731	0	192,491	0	0	0	0
Florida	120,848,726	150,764,438	50,546,200	48,327,623	70,302,526	102,436,815	39,272,663	48,595,118	30,327,515	53,110,052	702,348	731,645	0	0
Georgia	8,923,795	11,690,663	3,200,000	3,600,000	5,723,795	8,090,663	5,723,795	8,090,663	0	0	0	0	0	0
Hawaii	14,233,186	13,103,983	3,049,593	3,667,047	11,183,593	9,436,936	5,761,655	3,568,779	5,421,938	5,762,231	0	105,926	20,000	20,000
Idaho	9,059,568	9,366,052	4,616,645	4,430,450	4,442,923	4,935,602	2,416,028	2,860,414	483,295	397,505	1,543,600	1,677,683	0	0
Illinois	16,553,689	17,207,125	1,948,263	2,049,697	14,605,426	15,157,428	9,920,422	12,033,575	1,295,057	278,320	3,389,947	2,845,533	0	0
Indiana	8,444,832	6,983,364	975,000	975,000	7,469,832	6,008,364	7,469,832	5,853,287	0	155,077	0	0	0	0
Iowa	12,950,176	36,992,222	625,480	1,260,999	12,324,696	35,731,223	10,685,500	11,108,508	295,243	24,582,715	1,343,953	40,000	0	0
Kansas	6,509,225	6,635,626	1,448,133	1,501,433	5,061,092	5,134,193	4,056,168	4,047,781	0	0	1,004,924	1,086,412	0	0
Kentucky	20,410,096	20,498,849	1,635,906	2,137,354	18,774,190	18,361,495	9,534,208	10,018,810	9,239,982	8,331,855	0	10,830	3,500,000	0
Louisiana	9,165,144	9,203,635	6,523,169	7,253,894	2,641,975	1,949,741	2,469,331	1,486,680	172,644	463,061	0	0	0	0
Maine	8,847,471	9,918,765	1,542,846	1,883,123	7,304,625	8,035,642	1,337,600	2,334,410	5,362,419	4,986,235	604,606	714,997	0	3,000,000
Maryland	22,825,402	20,084,540	1,962,000	1,928,700	20,863,402	18,155,840	19,900,478	16,995,323	726,000	1,060,517	236,924	100,000	0	0
Massachusetts	4,884,430	4,878,927	862,331	785,738	4,022,099	4,093,189	3,459,409	3,217,469	461,987	775,294	100,703	100,426	26,405	224,093
Michigan	9,469,440	9,802,873	1,688,930	1,509,097	7,780,510	8,293,776	6,780,510	7,293,776	1,000,000	1,000,000	0	0	0	0
Minnesota	12,212,546	11,653,327	1,507,582	1,509,585	10,704,964	10,143,742	4,857,157	6,021,682	3,750,220	2,787,678	2,097,587	1,334,382	2,519,990	1,813,507
Mississippi	7,168,109	7,420,851	3,933,046	4,028,133	3,235,063	3,392,718	2,000,005	1,878,150	623,983	545,843	611,075	968,725	0	0
Missouri	13,329,841	13,658,961	8,065,733	7,546,964	5,264,108	6,111,997	3,800,408	4,103,114	1,035,245	1,701,941	428,455	306,942	0	0
Montana	7,543,860	6,474,190	1,604,601	1,694,519	5,939,259	4,779,671	3,638,002	3,605,814	2,301,257	1,055,573	0	118,284	0	0
Nebraska	4,232,691	4,061,651	327,845	320,392	3,904,846	3,741,259	2,477,858	2,353,836	79,213	193,286	1,347,775	1,194,137	0	0
Nevada	1,377,888	1,868,869	339,516	428,607	1,038,372	1,440,262	768,891	1,105,620	151,136	134,544	118,345	200,098	0	0
New Hampshire	1,804,156	1,921,421	502,616	591,869	1,301,540	1,329,552	466,016	508,062	639,342	697,146	196,182	124,344	0	0
New Jersey	27,939,539	17,068,781	3,407,529	2,980,802	24,532,010	14,087,979	14,725,600	11,063,123	6,207,874	238,038	3,598,536	2,786,818	3,000,000	0
New Mexico	1,422,955	1,821,583	560,955	494,193	862,000	1,327,390	692,000	704,390	50,000	398,000	120,000	225,000	0	0
New York	167,231,605	182,736,305	101,863,804	108,093,556	65,367,801	74,642,749	23,423,069	26,294,743	26,686,294	28,278,301	15,258,438	20,069,705	0	0
North Carolina	27,342,380	29,611,785	18,843,326	19,478,718	8,499,054	10,133,067	6,498,590	7,985,478	665,000	683,000	1,335,464	1,464,589	37,221	346,612
North Dakota	6,352,675	8,072,257	591,770	366,294	5,760,905	7,705,963	2,524,028	2,843,755	2,495,714	4,054,335	741,163	807,873	0	500,000
Ohio	125,120,668	159,322,228	1,754,417	2,645,393	123,366,251	156,676,835	2,277,508	4,041,268	119,114,473	150,860,239	1,974,270	1,775,328	0	0
Oklahoma	21,226,236	20,304,740	9,250	9,850	21,216,986	20,294,890	10,570,542	11,131,651	8,489,233	6,716,441	2,157,211	2,446,798	153,278	493,621

TABLE 2. State agency expenditures for R&D and R&D plant, by state and performer: FYs 2010–11
(Dollars)

State	All R&D expenditures ^a		Internal performers ^b		External performers ^c								R&D plant	
					Total		Academic institutions		Companies and individuals ^d		Other ^e			
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Oregon	18,013,730	20,001,272	14,368,928	17,063,005	3,644,802	2,938,267	2,954,420	2,672,740	39,120	54,865	651,262	210,662	0	0
Pennsylvania	76,947,795	71,098,139	5,052,858	5,826,832	71,894,937	65,271,307	47,400,670	38,258,858	1,898,934	4,596,817	22,595,333	22,415,632	6,038,598	5,495,050
Rhode Island	1,461,239	1,947,727	53,547	80,000	1,407,692	1,867,727	1,123,866	1,381,743	283,826	485,984	0	0	0	0
South Carolina	36,536,007	47,795,394	32,641,056	42,532,704	3,894,951	5,262,690	3,894,951	5,262,690	0	0	0	0	4,092,304	11,875
South Dakota	3,762,637	3,629,155	722,906	652,055	3,039,731	2,977,100	1,808,004	1,276,971	805,819	1,010,240	425,908	689,889	0	0
Tennessee	1,064,262	3,606,726	0	20,000	1,064,262	3,586,726	1,064,262	3,586,726	0	0	0	0	0	0
Texas	35,163,655	47,372,367	2,813,346	9,823,374	32,350,309	37,548,993	31,590,922	28,525,530	226,414	7,926,989	532,973	1,096,474	0	0
Utah	30,812,205	34,418,764	10,150,322	10,361,727	20,661,883	24,057,037	18,961,883	22,057,037	1,700,000	2,000,000	0	0	87,065,072	85,963,745
Vermont	1,665,079	1,711,673	1,442,023	1,543,503	223,056	168,170	168,076	157,692	54,980	10,478	0	0	0	0
Virginia	17,495,156	17,241,804	6,744,260	6,567,645	10,750,896	10,674,159	9,697,896	10,040,064	975,000	520,000	78,000	114,095	0	0
Washington	24,525,701	24,500,489	9,866,316	10,245,788	14,659,385	14,254,701	10,760,146	10,660,239	2,363,586	2,332,462	1,535,653	1,262,000	0	0
West Virginia	23,867,732	35,475,338	7,094,173	8,130,744	16,773,559	27,344,594	16,309,854	26,665,810	0	300,000	463,705	378,784	10,000	156,814
Wisconsin	12,435,548	21,128,936	5,060,717	6,126,083	7,374,831	15,002,853	4,645,999	5,919,133	872,523	7,008,379	1,856,309	2,075,341	0	0
Wyoming	5,471,379	5,419,398	3,609,627	3,134,016	1,861,752	2,285,382	1,545,733	1,945,091	48,869	0	267,150	340,291	0	0
Puerto Rico ^g	551,391	537,869	360,000	400,000	191,391	137,869	191,391	137,869	0	0	0	0	0	0

^a All R&D expenditures do not include R&D plant.

^b Internal performers include employees within the same state department or agency in support of an internal R&D project.

^c External performers are those outside the department or agency who perform R&D under the administrative oversight or control of the department or agency; this may include projects for the department or agency performed by others or an extramural research program.

^d Companies and individuals include individuals under contract for research projects.

^e Other includes federal government; nonprofit organizations; city, county, regional, or other local governments; other departments or agencies within the same state; and other state governments.

^f U.S. total reflects all 50 states and the District of Columbia.

^g Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 3. State agency expenditures for R&D, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
United States ^a	1,021,016,894	1,132,678,871	NA	1,213,524,157	1,261,366,529	1,403,816,235
Alabama	7,269,319	9,065,725	NA	12,929,167	15,113,917	19,684,063
Alaska	10,019,060	9,526,100	NA	7,741,467	9,274,800	11,349,400
Arizona	37,151,471	20,442,635	NA	9,363,943	17,682,315	18,626,577
Arkansas	4,869,648	7,658,199	NA	11,465,214	14,446,084	14,705,327
California	107,793,045	91,842,652	NA	146,793,247	154,216,981	149,810,643
Colorado	8,997,236	11,924,981	NA	15,563,581	20,828,274	18,141,931
Connecticut	19,209,064	29,285,710	NA	28,559,052	40,065,786	39,192,091
Delaware	2,812,102	2,611,108	NA	1,683,562	2,389,720	2,609,902
District of Columbia	1,173,076	2,009,000	NA	487,411	696,198	1,221,108
Florida	42,329,624	51,968,573	NA	66,513,756	120,848,726	150,764,438
Georgia	10,620,188	4,886,946	NA	6,662,887	8,923,795	11,690,663
Hawaii	12,067,849	22,643,330	NA	13,976,364	14,233,186	13,103,983
Idaho	2,280,873	2,739,006	NA	8,552,058	9,059,568	9,366,052
Illinois	37,184,281	28,372,676	NA	9,570,893	16,553,689	17,207,125
Indiana	6,220,575	40,534,381	NA	47,549,928	8,444,832	6,983,364
Iowa	13,564,062	6,790,053	NA	37,976,643	12,950,176	36,992,222
Kansas	14,348,384	11,752,696	NA	12,305,385	6,509,225	6,635,626
Kentucky	17,558,997	11,960,634	NA	13,938,134	20,410,096	20,498,849
Louisiana	11,216,568	6,587,314	NA	8,285,478	9,165,144	9,203,635
Maine	17,509,051	27,525,552	NA	6,400,019	8,847,471	9,918,765
Maryland	24,945,119	40,298,691	NA	21,093,331	22,825,402	20,084,540
Massachusetts	10,729,419	5,600,189	NA	3,290,198	4,884,430	4,878,927
Michigan	75,016,589	32,849,159	NA	8,630,209	9,469,440	9,802,873
Minnesota	6,219,201	10,529,048	NA	16,655,913	12,212,546	11,653,327
Mississippi	2,744,882	7,343,892	NA	3,623,953	7,168,109	7,420,851
Missouri	18,465,303	15,567,277	NA	15,797,247	13,329,841	13,658,961
Montana	8,606,319	8,200,230	NA	7,200,442	7,543,860	6,474,190
Nebraska	5,602,163	4,043,480	NA	4,415,644	4,232,691	4,061,651
Nevada	1,397,463	1,748,776	NA	1,510,607	1,377,888	1,868,869
New Hampshire	2,040,544	1,685,178	NA	1,860,269	1,804,156	1,921,421
New Jersey	25,900,482	19,981,741	NA	15,146,838	27,939,539	17,068,781
New Mexico	3,105,000	672,921	NA	1,655,529	1,422,955	1,821,583
New York	103,597,135	128,361,166	NA	151,467,015	167,231,605	182,736,305
North Carolina	14,344,310	37,607,109	NA	40,404,202	27,342,380	29,611,785
North Dakota	21,062,090	9,908,722	NA	16,415,807	6,352,675	8,072,257
Ohio	55,068,629	114,086,509	NA	121,394,963	125,120,668	159,322,228
Oklahoma	8,922,036	10,731,050	NA	15,930,878	21,226,236	20,304,740
Oregon	7,382,722	7,389,914	NA	11,120,140	18,013,730	20,001,272
Pennsylvania	117,320,158	103,973,448	NA	102,958,404	76,947,795	71,098,139
Rhode Island	150,000	1,771,949	NA	1,877,724	1,461,239	1,947,727
South Carolina	22,427,746	31,969,826	NA	28,599,885	36,536,007	47,795,394
South Dakota	5,791,586	5,473,603	NA	4,430,602	3,762,637	3,629,155
Tennessee	5,355,000	4,549,998	NA	3,752,587	1,064,262	3,606,726
Texas	28,019,645	29,650,947	NA	49,381,346	35,163,655	47,372,367
Utah	3,214,170	2,752,228	NA	26,442,711	30,812,205	34,418,764
Vermont	1,680,533	1,529,805	NA	738,707	1,665,079	1,711,673
Virginia	11,579,623	15,486,526	NA	17,412,519	17,495,156	17,241,804
Washington	22,834,218	23,333,431	NA	13,892,247	24,525,701	24,500,489
West Virginia	6,024,577	22,179,830	NA	10,357,006	23,867,732	35,475,338

TABLE 3. State agency expenditures for R&D, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
Wisconsin	10,949,155	13,774,600	NA	24,942,415	12,435,548	21,128,936
Wyoming	6,326,604	19,500,357	NA	4,806,630	5,471,379	5,419,398
Puerto Rico ^b	1,458,790	2,326,241	NA	na	551,391	537,869

na = not applicable; did not report to survey. NA = not available; survey was not conducted for FY 2008.

^a U.S. total reflects all 50 states and the District of Columbia.

^b Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTES: State R&D totals can display considerable volatility between survey years due to several national and state-specific factors. Large changes are not unusual, especially for discretionary spending items such as R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of State Government R&D (multiple years).

TABLE 4. State agency expenditures for R&D for all performers, by state and source of funds: FYs 2010–11
(Dollars)

State	Source of funds					
	All R&D expenditures		Federal government		State and all others ^a	
	2010	2011	2010	2011	2010	2011
United States ^b	1,261,366,529	1,403,816,235	375,654,806	403,299,698	885,711,723	1,000,516,537
Alabama	15,113,917	19,684,063	11,332,512	12,632,066	3,781,405	7,051,997
Alaska	9,274,800	11,349,400	2,766,100	4,548,900	6,508,700	6,800,500
Arizona	17,682,315	18,626,577	7,013,167	8,138,077	10,669,148	10,488,500
Arkansas	14,446,084	14,705,327	2,473,992	4,465,149	11,972,092	10,240,178
California	154,216,981	149,810,643	21,210,061	18,776,564	133,006,920	131,034,079
Colorado	20,828,274	18,141,931	6,363,519	5,930,771	14,464,755	12,211,160
Connecticut	40,065,786	39,192,091	11,067,425	11,158,166	28,998,361	28,033,925
Delaware	2,389,720	2,609,902	796,963	847,732	1,592,757	1,762,170
District of Columbia	696,198	1,221,108	657,612	1,168,232	38,586	52,876
Florida	120,848,726	150,764,438	27,629,492	26,588,661	93,219,234	124,175,777
Georgia	8,923,795	11,690,663	5,018,230	6,919,140	3,905,565	4,771,523
Hawaii	14,233,186	13,103,983	11,483,268	10,343,631	2,749,918	2,760,352
Idaho	9,059,568	9,366,052	4,716,185	4,925,050	4,343,383	4,441,002
Illinois	16,553,689	17,207,125	4,851,170	7,033,966	11,702,519	10,173,159
Indiana	8,444,832	6,983,364	6,559,869	5,428,287	1,884,963	1,555,077
Iowa	12,950,176	36,992,222	4,210,203	3,391,265	8,739,973	33,600,957
Kansas	6,509,225	6,635,626	3,625,557	3,675,258	2,883,668	2,960,368
Kentucky	20,410,096	20,498,849	5,263,230	5,873,846	15,146,866	14,625,003
Louisiana	9,165,144	9,203,635	4,929,033	4,936,833	4,236,111	4,266,802
Maine	8,847,471	9,918,765	1,836,035	2,439,296	7,011,436	7,479,469
Maryland	22,825,402	20,084,540	1,643,939	1,551,214	21,181,463	18,533,326
Massachusetts	4,884,430	4,878,927	814,609	1,209,020	4,069,821	3,669,907
Michigan	9,469,440	9,802,873	6,885,798	7,110,347	2,583,642	2,692,526
Minnesota	12,212,546	11,653,327	3,457,202	3,782,840	8,755,344	7,870,487
Mississippi	7,168,109	7,420,851	5,671,257	5,454,392	1,496,852	1,966,459
Missouri	13,329,841	13,658,961	3,161,177	4,103,709	10,168,664	9,555,252
Montana	7,543,860	6,474,190	2,659,895	2,868,954	4,883,965	3,605,236
Nebraska	4,232,691	4,061,651	878,999	1,071,515	3,353,692	2,990,136
Nevada	1,377,888	1,868,869	923,813	659,868	454,075	1,209,001
New Hampshire	1,804,156	1,921,421	896,396	1,081,852	907,760	839,569
New Jersey	27,939,539	17,068,781	3,735,882	4,387,432	24,203,657	12,681,349
New Mexico	1,422,955	1,821,583	1,072,611	1,443,195	350,344	378,388
New York	167,231,605	182,736,305	52,420,540	49,909,092	114,811,065	132,827,213
North Carolina	27,342,380	29,611,785	10,223,740	11,187,114	17,118,640	18,424,671
North Dakota	6,352,675	8,072,257	575,654	557,822	5,777,021	7,514,435
Ohio	125,120,668	159,322,228	3,351,457	4,455,517	121,769,211	154,866,711
Oklahoma	21,226,236	20,304,740	5,229,705	6,138,385	15,996,531	14,166,355
Oregon	18,013,730	20,001,272	12,870,466	14,753,575	5,143,264	5,247,697
Pennsylvania	76,947,795	71,098,139	5,882,402	6,652,868	71,065,393	64,445,271
Rhode Island	1,461,239	1,947,727	281,728	515,480	1,179,511	1,432,247
South Carolina	36,536,007	47,795,394	27,055,207	36,355,976	9,480,800	11,439,418
South Dakota	3,762,637	3,629,155	3,145,143	2,882,410	617,494	746,745
Tennessee	1,064,262	3,606,726	851,410	2,949,381	212,852	657,345
Texas	35,163,655	47,372,367	21,943,248	21,488,561	13,220,407	25,883,806
Utah	30,812,205	34,418,764	20,724,230	20,687,819	10,087,975	13,730,945
Vermont	1,665,079	1,711,673	1,100,865	1,184,957	564,214	526,716
Virginia	17,495,156	17,241,804	9,370,939	9,735,857	8,124,217	7,505,947
Washington	24,525,701	24,500,489	8,486,402	7,320,769	16,039,299	17,179,720
West Virginia	23,867,732	35,475,338	7,830,732	6,157,841	16,037,000	29,317,497

TABLE 4. State agency expenditures for R&D for all performers, by state and source of funds: FYs 2010–11
(Dollars)

State	All R&D expenditures		Source of funds			
			Federal government		State and all others ^a	
	2010	2011	2010	2011	2010	2011
Wisconsin	12,435,548	21,128,936	7,890,044	15,611,863	4,545,504	5,517,073
Wyoming	5,471,379	5,419,398	815,693	809,183	4,655,686	4,610,215
Puerto Rico ^c	551,391	537,869	0	0	551,391	537,869

^a State and all others include companies, nonprofit organizations, other state governments, and city, county, regional, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 5. State agency expenditures for R&D for internal performers, by state and source of funds: FYs 2010–11
(Dollars)

State	R&D expenditures for internal performers		Source of funds					
	2010	2011	Federal government		State		Other ^a	
			2010	2011	2010	2011	2010	2011
United States ^b	416,096,832	461,506,205	174,886,520	186,828,964	206,557,400	229,500,487	34,652,912	45,176,754
Alabama	9,749,394	14,250,319	6,491,488	7,901,631	2,476,195	2,467,546	781,711	3,881,142
Alaska	7,885,200	9,004,800	1,805,100	2,666,300	5,916,100	5,842,000	164,000	496,500
Arizona	7,545,171	7,410,362	5,302,731	5,628,729	1,680,713	1,394,851	561,727	386,782
Arkansas	5,406,407	6,077,854	396,039	462,905	142,368	133,949	4,868,000	5,481,000
California	30,126,000	38,369,776	3,661,000	4,418,000	18,348,000	19,933,116	8,117,000	14,018,660
Colorado	7,108,498	6,942,978	3,336,387	3,083,445	3,290,301	3,452,847	481,810	406,686
Connecticut	22,561,170	23,573,706	8,915,366	8,998,439	13,412,694	14,010,735	233,110	564,532
Delaware	1,968,736	2,049,018	500,979	411,848	1,417,757	1,637,170	50,000	0
District of Columbia	189,691	220,886	160,105	206,508	29,586	14,378	0	0
Florida	50,546,200	48,327,623	18,239,295	16,915,588	30,972,399	29,992,602	1,334,506	1,419,433
Georgia	3,200,000	3,600,000	0	0	0	0	3,200,000	3,600,000
Hawaii	3,049,593	3,667,047	2,040,552	2,392,388	904,966	1,187,251	104,075	87,408
Idaho	4,616,645	4,430,450	3,079,605	2,942,905	1,249,975	1,181,599	287,065	305,946
Illinois	1,948,263	2,049,697	1,066,301	1,158,450	881,962	891,247	0	0
Indiana	975,000	975,000	680,000	680,000	295,000	295,000	0	0
Iowa	625,480	1,260,999	92,794	199,146	530,515	807,721	2,171	254,132
Kansas	1,448,133	1,501,433	886,026	930,106	562,107	571,327	0	0
Kentucky	1,635,906	2,137,354	1,053,812	1,380,967	582,094	756,387	0	0
Louisiana	6,523,169	7,253,894	4,233,248	4,346,033	1,925,527	2,721,138	364,394	186,723
Maine	1,542,846	1,883,123	845,913	1,128,981	651,327	657,494	45,606	96,648
Maryland	1,962,000	1,928,700	436,000	436,000	1,509,000	1,474,000	17,000	18,700
Massachusetts	862,331	785,738	91,473	111,033	478,911	516,888	291,947	157,817
Michigan	1,688,930	1,509,097	1,031,365	913,168	657,565	595,929	0	0
Minnesota	1,507,582	1,509,585	714,987	596,480	284,106	296,700	508,489	616,405
Mississippi	3,933,046	4,028,133	3,064,819	2,887,053	868,227	1,141,080	0	0
Missouri	8,065,733	7,546,964	692,767	679,975	7,365,685	6,802,036	7,281	64,953
Montana	1,604,601	1,694,519	1,199,328	1,331,450	264,543	323,069	140,730	40,000
Nebraska	327,845	320,392	0	0	177,083	179,172	150,762	141,220
Nevada	339,516	428,607	34,078	49,223	305,438	379,384	0	0
New Hampshire	502,616	591,869	223,026	290,409	279,590	301,460	0	0
New Jersey	3,407,529	2,980,802	1,264,005	904,212	2,143,524	2,076,590	0	0
New Mexico	560,955	494,193	448,764	395,354	112,191	98,839	0	0
New York	101,863,804	108,093,556	37,726,818	34,624,354	62,407,722	71,989,410	1,729,264	1,479,792
North Carolina	18,843,326	19,478,718	2,005,717	2,365,444	13,289,928	13,727,698	3,547,681	3,385,576
North Dakota	591,770	366,294	58,205	61,823	533,565	304,471	0	0
Ohio	1,754,417	2,645,393	912,934	1,080,159	841,483	1,565,234	0	0
Oklahoma	9,250	9,850	0	0	9,250	9,850	0	0
Oregon	14,368,928	17,063,005	10,828,777	13,193,665	1,175,547	1,418,727	2,364,604	2,450,613
Pennsylvania	5,052,858	5,826,832	2,294,633	2,411,671	2,758,225	3,415,161	0	0
Rhode Island	53,547	80,000	42,838	64,000	10,709	16,000	0	0
South Carolina	32,641,056	42,532,704	24,804,733	32,831,302	6,336,323	8,201,402	1,500,000	1,500,000
South Dakota	722,906	652,055	578,325	521,644	144,581	130,411	0	0
Tennessee	0	20,000	0	20,000	0	0	0	0
Texas	2,813,346	9,823,374	2,129,968	2,154,344	683,378	7,669,030	0	0
Utah	10,150,322	10,361,727	5,200,322	5,411,727	3,450,000	3,450,000	1,500,000	1,500,000
Vermont	1,442,023	1,543,503	922,420	1,043,904	519,603	499,599	0	0
Virginia	6,744,260	6,567,645	3,764,409	3,421,383	2,923,124	3,106,790	56,727	39,472
Washington	9,866,316	10,245,788	4,606,742	4,741,427	3,862,891	3,903,373	1,396,683	1,600,988
West Virginia	7,094,173	8,130,744	2,915,292	3,702,157	3,493,095	3,741,385	685,786	687,202

TABLE 5. State agency expenditures for R&D for internal performers, by state and source of funds: FYs 2010–11
(Dollars)

State	R&D expenditures for internal performers		Source of funds					
			Federal government		State		Other ^a	
	2010	2011	2010	2011	2010	2011	2010	2011
Wisconsin	5,060,717	6,126,083	3,817,287	4,499,232	1,082,647	1,318,427	160,783	308,424
Wyoming	3,609,627	3,134,016	289,747	234,002	3,319,880	2,900,014	0	0
Puerto Rico ^c	360,000	400,000	0	0	360,000	400,000	0	0

^a Other includes companies, nonprofit organizations, other state governments, and city, county, regional, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTE: Internal performers include employees within the same state department or agency in support of an internal R&D project.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 6. State agency expenditures for R&D by internal performers, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
United States ^a	260,194,902	318,534,442	NA	311,253,284	416,096,832	461,506,205
Alabama	4,339,426	5,786,160	NA	9,138,896	9,749,394	14,250,319
Alaska	5,356,472	7,541,700	NA	6,387,016	7,885,200	9,004,800
Arizona	8,576,436	6,833,220	NA	6,869,506	7,545,171	7,410,362
Arkansas	1,073,285	420,340	NA	467,767	5,406,407	6,077,854
California	16,494,016	10,967,603	NA	25,144,000	30,126,000	38,369,776
Colorado	6,594,969	7,004,927	NA	10,109,554	7,108,498	6,942,978
Connecticut	14,519,731	13,979,139	NA	12,571,612	22,561,170	23,573,706
Delaware	1,207,011	2,011,600	NA	1,021,115	1,968,736	2,049,018
District of Columbia	302,000	2,009,000	NA	0	189,691	220,886
Florida	10,013,516	9,073,670	NA	10,356,355	50,546,200	48,327,623
Georgia	861,231	60,551	NA	3,500,000	3,200,000	3,600,000
Hawaii	2,329,186	7,617,547	NA	3,268,044	3,049,593	3,667,047
Idaho	257,926	1,127,217	NA	4,397,225	4,616,645	4,430,450
Illinois	17,617,332	18,022,400	NA	1,304,428	1,948,263	2,049,697
Indiana	2,364,046	36,349,207	NA	941,982	975,000	975,000
Iowa	5,754,032	363,153	NA	27,200	625,480	1,260,999
Kansas	2,137,741	1,636,784	NA	1,598,127	1,448,133	1,501,433
Kentucky	3,702,849	998,840	NA	6,241,919	1,635,906	2,137,354
Louisiana	7,530,897	4,259,147	NA	5,014,571	6,523,169	7,253,894
Maine	0	330,000	NA	1,566,832	1,542,846	1,883,123
Maryland	6,086,183	16,726,066	NA	5,683,023	1,962,000	1,928,700
Massachusetts	3,623,773	922,416	NA	831,202	862,331	785,738
Michigan	1,527,314	1,373,780	NA	1,800,696	1,688,930	1,509,097
Minnesota	2,132,277	2,904,128	NA	1,974,655	1,507,582	1,509,585
Mississippi	1,484,612	5,728,190	NA	2,884,940	3,933,046	4,028,133
Missouri	12,171,794	9,815,796	NA	9,289,817	8,065,733	7,546,964
Montana	2,404,391	1,007,000	NA	1,304,712	1,604,601	1,694,519
Nebraska	436,000	291,000	NA	125,000	327,845	320,392
Nevada	323,042	581,534	NA	342,744	339,516	428,607
New Hampshire	424,762	167,708	NA	1,018,069	502,616	591,869
New Jersey	5,483,784	5,093,922	NA	4,278,027	3,407,529	2,980,802
New Mexico	3,000,000	576,921	NA	535,531	560,955	494,193
New York	42,047,823	31,635,352	NA	57,345,677	101,863,804	108,093,556
North Carolina	3,789,289	27,479,434	NA	31,451,251	18,843,326	19,478,718
North Dakota	762,297	500,943	NA	568,135	591,770	366,294
Ohio	1,515,058	283,131	NA	3,883,347	1,754,417	2,645,393
Oklahoma	83,333	252,516	NA	2,709,663	9,250	9,850
Oregon	3,318,194	2,851,734	NA	5,768,545	14,368,928	17,063,005
Pennsylvania	3,310,731	4,020,292	NA	2,992,367	5,052,858	5,826,832
Rhode Island	0	134,200	NA	67,000	53,547	80,000
South Carolina	15,780,585	26,968,153	NA	24,161,908	32,641,056	42,532,704
South Dakota	2,318,754	3,070,095	NA	424,407	722,906	652,055
Tennessee	704,000	595,010	NA	0	0	20,000
Texas	5,870,258	5,496,761	NA	4,763,897	2,813,346	9,823,374
Utah	964,170	1,333,630	NA	10,715,649	10,150,322	10,361,727
Vermont	848,787	847,350	NA	738,707	1,442,023	1,543,503
Virginia	5,045,794	7,577,630	NA	8,242,184	6,744,260	6,567,645
Washington	12,187,408	12,103,757	NA	6,940,712	9,866,316	10,245,788
West Virginia	1,767,688	2,414,915	NA	2,555,126	7,094,173	8,130,744

TABLE 6. State agency expenditures for R&D by internal performers, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
Wisconsin	5,534,273	4,766,000	NA	5,329,091	5,060,717	6,126,083
Wyoming	4,216,426	4,622,873	NA	2,601,053	3,609,627	3,134,016
Puerto Rico ^b	1,274,358	328,664	NA	na	360,000	400,000

na = not applicable; did not report to survey. NA = not available; survey not conducted for FY 2008.

^a U.S. total reflects all 50 states and the District of Columbia.

^b Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTES: Internal performers include employees within the same state department or agency in support of an internal R&D project. State R&D totals can display considerable volatility between survey years due to several national and state-specific factors. Large changes are not unusual, especially for discretionary spending items such as R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of State Government R&D (multiple years).

TABLE 7. State agency expenditures for basic research and basic research share of all R&D expenditures, by state: FYs 2010–11
(Dollars)

State	All R&D expenditures		Basic research expenditures		Basic research (%)	
	2010	2011	2010	2011	2010	2011
United States ^a	1,261,366,529	1,403,816,235	292,540,183	321,639,199	23.2	22.9
Alabama	15,113,917	19,684,063	5,240,539	9,946,929	34.7	50.5
Alaska	9,274,800	11,349,400	0	12,000	na	0.1
Arizona	17,682,315	18,626,577	117,506	87,517	0.7	0.5
Arkansas	14,446,084	14,705,327	11,403,424	10,651,930	78.9	72.4
California	154,216,981	149,810,643	1,318,211	712,728	0.9	0.5
Colorado	20,828,274	18,141,931	1,288,724	1,639,850	6.2	9.0
Connecticut	40,065,786	39,192,091	14,984,630	13,679,024	37.4	34.9
Delaware	2,389,720	2,609,902	635,782	570,155	26.6	21.8
District of Columbia	696,198	1,221,108	503,267	856,728	72.3	70.2
Florida	120,848,726	150,764,438	47,738,239	74,443,290	39.5	49.4
Georgia	8,923,795	11,690,663	3,200,000	3,600,000	35.9	30.8
Hawaii	14,233,186	13,103,983	1,967,340	2,727,184	13.8	20.8
Idaho	9,059,568	9,366,052	839,677	992,083	9.3	10.6
Illinois	16,553,689	17,207,125	8,725,628	7,361,176	52.7	42.8
Indiana	8,444,832	6,983,364	1,300,309	1,072,000	15.4	15.4
Iowa	12,950,176	36,992,222	7,948,328	6,450,452	61.4	17.4
Kansas	6,509,225	6,635,626	547,107	556,327	8.4	8.4
Kentucky	20,410,096	20,498,849	5,080,548	4,396,944	24.9	21.4
Louisiana	9,165,144	9,203,635	0	0	na	na
Maine	8,847,471	9,918,765	501,000	498,000	5.7	5.0
Maryland	22,825,402	20,084,540	17,255,146	13,125,823	75.6	65.4
Massachusetts	4,884,430	4,878,927	324,987	323,121	6.7	6.6
Michigan	9,469,440	9,802,873	954,960	1,222,793	10.1	12.5
Minnesota	12,212,546	11,653,327	123,880	459,579	1.0	3.9
Mississippi	7,168,109	7,420,851	3,160,000	2,290,000	44.1	30.9
Missouri	13,329,841	13,658,961	175,187	256,512	1.3	1.9
Montana	7,543,860	6,474,190	59,000	212,480	0.8	3.3
Nebraska	4,232,691	4,061,651	330,106	360,408	7.8	8.9
Nevada	1,377,888	1,868,869	0	0	na	na
New Hampshire	1,804,156	1,921,421	794,170	724,969	44.0	37.7
New Jersey	27,939,539	17,068,781	8,690,009	5,460,204	31.1	32.0
New Mexico	1,422,955	1,821,583	0	0	na	na
New York	167,231,605	182,736,305	37,441,334	34,416,390	22.4	18.8
North Carolina	27,342,380	29,611,785	4,226,662	4,264,685	15.5	14.4
North Dakota	6,352,675	8,072,257	110,951	196,623	1.7	2.4
Ohio	125,120,668	159,322,228	24,831,510	25,732,918	19.8	16.2
Oklahoma	21,226,236	20,304,740	6,382,537	6,596,449	30.1	32.5
Oregon	18,013,730	20,001,272	0	0	na	na
Pennsylvania	76,947,795	71,098,139	43,119,156	39,831,269	56.0	56.0
Rhode Island	1,461,239	1,947,727	77,342	0	5.3	na
South Carolina	36,536,007	47,795,394	440,828	959,476	1.2	2.0
South Dakota	3,762,637	3,629,155	25,000	0	0.7	na
Tennessee	1,064,262	3,606,726	1,064,262	3,606,726	100.0	100.0
Texas	35,163,655	47,372,367	2,445,873	2,891,539	7.0	6.1
Utah	30,812,205	34,418,764	4,650,322	4,861,727	15.1	14.1
Vermont	1,665,079	1,711,673	203,180	260,540	12.2	15.2
Virginia	17,495,156	17,241,804	3,901,875	4,549,749	22.3	26.4
Washington	24,525,701	24,500,489	2,415,791	2,598,004	9.9	10.6
West Virginia	23,867,732	35,475,338	15,340,235	25,814,762	64.3	72.8

TABLE 7. State agency expenditures for basic research and basic research share of all R&D expenditures, by state: FYs 2010–11 (Dollars)

State	All R&D expenditures		Basic research expenditures		Basic research (%)	
	2010	2011	2010	2011	2010	2011
Wisconsin	12,435,548	21,128,936	355,621	68,136	2.9	0.3
Wyoming	5,471,379	5,419,398	300,000	300,000	5.5	5.5
Puerto Rico ^b	551,391	537,869	191,391	137,869	34.7	25.6

na = not applicable; no basic research reported.

^a U.S. total reflects all 50 states and the District of Columbia.

^b Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 8. State R&D expenditures, by state and type of R&D: FYs 2010–11
(Dollars)

State	All R&D expenditures		Agriculture		Energy ^a		Environment and natural resources		Health		Transportation		Other ^b	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
	United States ^c	1,261,366,529	1,403,816,235	73,056,780	74,502,498	216,407,888	256,199,776	322,546,482	336,802,780	294,731,282	314,199,669	247,321,165	265,499,832	107,302,932
Alabama	15,113,917	19,684,063	0	0	988,806	1,279,672	8,922,103	13,521,133	0	0	4,730,116	4,407,856	472,892	475,402
Alaska	9,274,800	11,349,400	687,500	713,500	1,359,100	1,301,000	5,833,600	6,767,900	0	0	1,394,600	2,567,000	0	0
Arizona	17,682,315	18,626,577	142,816	732,254	267,174	1,702,776	6,023,906	5,743,162	8,330,000	8,330,000	2,175,550	1,756,700	742,869	361,685
Arkansas	14,446,084	14,705,327	6,643,460	7,945,440	1,736,657	3,156,213	658,590	680,971	0	0	1,064,332	927,990	4,343,045	1,994,713
California	154,216,981	149,810,643	1,057,945	1,227,206	105,072,000	95,975,000	9,169,723	15,129,525	0	0	38,136,000	37,445,000	781,313	33,912
Colorado	20,828,274	18,141,931	826,517	583,117	1,464,536	409,252	7,142,396	7,185,567	8,527,268	6,759,774	1,930,506	2,270,155	937,051	934,066
Connecticut	40,065,786	39,192,091	3,259,642	3,326,548	358,778	553,640	13,081,012	12,517,073	19,337,597	18,783,202	4,028,757	4,011,628	0	0
Delaware	2,389,720	2,609,902	0	0	0	0	2,139,720	2,359,902	0	0	250,000	250,000	0	0
District of Columbia	696,198	1,221,108	0	0	0	0	0	0	503,267	956,728	192,931	264,380	0	0
Florida	120,848,726	150,764,438	16,952,501	15,991,126	3,571,447	4,158,768	50,262,488	47,437,237	39,962,706	65,570,757	9,804,294	15,645,022	295,290	1,961,528
Georgia	8,923,795	11,690,663	0	0	1,000,000	1,200,000	0	0	0	0	7,723,795	10,290,663	200,000	200,000
Hawaii	14,233,186	13,103,983	505,967	914,799	5,825,028	6,020,023	5,229,835	5,607,794	0	0	2,672,356	561,367	0	0
Idaho	9,059,568	9,366,052	1,529,838	1,720,839	0	0	6,123,012	6,064,901	0	0	1,406,718	1,580,312	0	0
Illinois	16,553,689	17,207,125	0	0	190,000	0	0	0	2,596,733	680,013	7,066,133	9,287,308	6,700,823	7,239,804
Indiana	8,444,832	6,983,364	0	0	0	0	1,700,000	1,700,000	0	0	5,616,545	4,074,838	1,128,287	1,208,526
Iowa	12,950,176	36,992,222	0	0	0	26,590,826	7,074,696	3,640,397	0	0	5,770,000	6,050,000	105,480	710,999
Kansas	6,509,225	6,635,626	1,104,311	1,167,853	0	0	365,000	465,000	0	0	5,039,914	5,002,773	0	0
Kentucky	20,410,096	20,498,849	0	45,130	4,256,458	3,372,112	2,005,156	2,137,523	7,371,306	7,136,813	4,042,181	4,425,113	2,734,995	3,382,158
Louisiana	9,165,144	9,203,635	0	0	0	0	2,522,697	2,807,583	0	0	6,642,447	6,396,052	0	0
Maine	8,847,471	9,918,765	1,152,303	987,050	5,000	5,000	2,527,524	3,728,729	349,014	1,082,201	709,306	505,860	4,104,324	3,609,925
Maryland	22,825,402	20,084,540	228,000	451,700	40,000	25,000	390,000	616,000	17,699,478	13,611,823	3,167,924	4,080,017	1,300,000	1,300,000
Massachusetts	4,884,430	4,878,927	0	0	0	0	1,116,916	842,629	2,130,489	2,045,865	1,637,025	1,504,260	0	486,173
Michigan	9,469,440	9,802,873	36,910	82,793	0	0	4,792,530	4,595,080	0	0	4,640,000	5,125,000	0	0
Minnesota	12,212,546	11,653,327	1,301,382	1,387,590	1,243,965	249,201	1,813,748	794,167	0	0	7,853,451	9,222,369	0	0
Mississippi	7,168,109	7,420,851	0	0	1,550,000	1,250,000	3,634,374	3,295,081	0	0	1,883,735	2,463,770	100,000	412,000
Missouri	13,329,841	13,658,961	189,947	85,115	0	0	9,482,088	8,530,764	0	0	3,657,806	5,043,082	0	0
Montana	7,543,860	6,474,190	1,850,656	1,493,635	835,942	405,260	2,185,884	2,343,724	822,299	848,774	917,662	1,168,956	931,417	213,841
Nebraska	4,232,691	4,061,651	927,985	977,548	5,000	10,000	2,214,924	1,902,385	97,864	48,482	986,918	1,123,236	0	0
Nevada	1,377,888	1,868,869	0	0	0	0	329,423	475,821	0	0	1,048,465	1,393,048	0	0
New Hampshire	1,804,156	1,921,421	219,170	113,969	0	0	100,000	111,000	0	0	1,009,986	1,196,452	475,000	500,000
New Jersey	27,939,539	17,068,781	0	0	500,000	0	4,305,318	1,988,395	15,814,169	9,537,742	6,570,052	5,542,644	750,000	0
New Mexico	1,422,955	1,821,583	0	0	0	0	0	0	0	0	1,422,955	1,821,583	0	0
New York	167,231,605	182,736,305	2,117,582	1,779,089	29,571,969	45,400,532	17,193,333	8,925,684	71,023,824	70,939,954	13,024,897	12,191,046	34,300,000	43,500,000
North Carolina	27,342,380	29,611,785	12,625,716	12,878,500	100,000	105,000	5,076,664	6,817,285	50,000	50,000	9,225,000	9,500,000	265,000	261,000
North Dakota	6,352,675	8,072,257	1,444,526	2,014,848	4,153,800	5,200,850	22,500	15,000	0	0	598,349	578,559	133,500	263,000
Ohio	125,120,668	159,322,228	0	0	41,236,142	47,150,392	38,137,758	38,596,214	19,731,000	13,231,000	13,111,393	17,281,878	12,904,375	43,062,744
Oklahoma	21,226,236	20,304,740	1,295,705	1,608,677	387,401	149,201	1,631,015	2,505,761	5,049,251	5,478,209	3,845,728	4,101,968	9,017,136	6,460,924
Oregon	18,013,730	20,001,272	489,631	532,446	175,000	50,000	14,867,136	16,924,664	0	0	2,481,963	2,494,162	0	0
Pennsylvania	76,947,795	71,098,139	755,736	640,671	0	0	7,891,207	7,749,253	60,032,594	54,788,921	2,979,258	3,919,294	5,289,000	4,000,000
Rhode Island	1,461,239	1,947,727	0	0	0	0	401,045	590,282	776,356	912,363	283,838	445,082	0	0
South Carolina	36,536,007	47,795,394	0	92,305	185,322	115,338	34,711,576	45,163,028	255,506	844,138	1,383,603	1,580,585	0	0
South Dakota	3,762,637	3,629,155	25,000	0	0	0	1,638,739	1,628,888	0	0	2,098,898	2,000,267	0	0

TABLE 8. State R&D expenditures, by state and type of R&D: FYs 2010–11
(Dollars)

State	All R&D expenditures		Agriculture		Energy ^a		Environment and natural resources		Health		Transportation		Other ^b	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Tennessee	1,064,262	3,606,726	0	0	0	0	0	320,000	0	0	1,064,262	3,286,726	0	0
Texas	35,163,655	47,372,367	3,618,361	2,877,596	0	0	6,351,022	4,805,152	123,000	15,838,498	25,071,272	23,851,121	0	0
Utah	30,812,205	34,418,764	3,589	113,336	7,375,546	7,209,348	6,329,203	7,943,186	12,853,867	14,602,894	2,600,000	2,600,000	1,650,000	1,950,000
Vermont	1,665,079	1,711,673	490,900	652,700	300,000	300,000	75,000	75,000	132,198	190,117	666,981	493,856	0	0
Virginia	17,495,156	17,241,804	2,285,378	2,213,361	157,000	118,000	3,147,713	3,829,525	611,496	682,506	8,931,272	8,469,431	2,362,297	1,928,981
Washington	24,525,701	24,500,489	8,340,489	8,317,099	0	0	10,782,537	11,087,560	0	0	5,402,675	5,095,830	0	0
West Virginia	23,867,732	35,475,338	0	151,428	2,495,817	2,737,372	1,818,077	1,873,514	0	0	5,100,000	5,583,425	14,453,838	25,129,599
Wisconsin	12,435,548	21,128,936	770,721	536,004	0	0	6,717,528	10,197,725	550,000	1,248,895	3,572,299	4,115,612	825,000	5,030,700
Wyoming	5,471,379	5,419,398	176,596	147,226	0	0	4,607,766	4,765,616	0	0	687,017	506,556	0	0
Puerto Rico ^d	551,391	537,869	0	0	0	0	0	0	0	0	0	0	551,391	537,869

^a Energy category was introduced with the FY 2010 and FY 2011 State Government R&D Survey. Previously, energy-related R&D was reported primarily in the Other and the Environment and natural resources categories.

^b Other functions include, but are not limited to, corrections, criminal justice, education, forensic science, labor, public safety, and social services.

^c U.S. total reflects all 50 states and the District of Columbia.

^d Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 9. State agency expenditures for R&D funded from federal sources, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
United States ^a	255,400,683	279,267,900	NA	305,316,078	375,654,806	403,299,698
Alabama	3,636,117	4,968,557	NA	8,118,750	11,332,512	12,632,066
Alaska	5,647,941	4,945,800	NA	2,956,434	2,766,100	4,548,900
Arizona	5,659,756	5,436,201	NA	6,302,846	7,013,167	8,138,077
Arkansas	2,066,318	1,224,152	NA	3,578,975	2,473,992	4,465,149
California	27,867,854	13,491,703	NA	19,033,606	21,210,061	18,776,564
Colorado	4,044,780	4,684,285	NA	4,612,094	6,363,519	5,930,771
Connecticut	6,735,926	6,906,959	NA	6,507,528	11,067,425	11,158,166
Delaware	277,211	844,200	NA	566,184	796,963	847,732
District of Columbia	938,460	1,621,000	NA	487,411	657,612	1,168,232
Florida	9,887,481	9,439,483	NA	13,605,050	27,629,492	26,588,661
Georgia	5,545,780	2,763,180	NA	2,918,071	5,018,230	6,919,140
Hawaii	8,578,749	17,593,176	NA	10,716,399	11,483,268	10,343,631
Idaho	652,451	1,276,787	NA	3,986,193	4,716,185	4,925,050
Illinois	1,521,332	1,990,000	NA	3,414,851	4,851,170	7,033,966
Indiana	4,428,024	4,017,815	NA	4,681,045	6,559,869	5,428,287
Iowa	4,388,234	2,424,713	NA	1,949,200	4,210,203	3,391,265
Kansas	4,864,624	4,107,233	NA	5,619,610	3,625,557	3,675,258
Kentucky	6,823,866	6,315,996	NA	4,755,197	5,263,230	5,873,846
Louisiana	6,382,762	4,125,505	NA	4,539,936	4,929,033	4,936,833
Maine	0	65,000	NA	1,304,294	1,836,035	2,439,296
Maryland	5,053,001	7,228,749	NA	4,234,200	1,643,939	1,551,214
Massachusetts	1,125,989	1,200,525	NA	379,847	814,609	1,209,020
Michigan	4,127,849	3,910,171	NA	6,054,036	6,885,798	7,110,347
Minnesota	2,002,686	3,083,506	NA	4,864,789	3,457,202	3,782,840
Mississippi	2,285,202	6,272,085	NA	2,926,523	5,671,257	5,454,392
Missouri	5,473,754	4,962,973	NA	5,556,085	3,161,177	4,103,709
Montana	2,913,589	1,837,440	NA	2,249,403	2,659,895	2,868,954
Nebraska	1,940,130	1,275,191	NA	1,162,077	878,999	1,071,515
Nevada	505,000	1,115,700	NA	1,242,142	923,813	659,868
New Hampshire	1,793,026	1,599,228	NA	937,998	896,396	1,081,852
New Jersey	2,927,179	4,040,714	NA	4,293,720	3,735,882	4,387,432
New Mexico	0	538,337	NA	1,324,423	1,072,611	1,443,195
New York	11,175,919	7,858,707	NA	41,138,817	52,420,540	49,909,092
North Carolina	8,043,625	13,118,979	NA	8,477,435	10,223,740	11,187,114
North Dakota	5,957,704	3,713,936	NA	1,895,456	575,654	557,822
Ohio	8,767,534	8,253,286	NA	5,141,853	3,351,457	4,455,517
Oklahoma	643,333	3,296,216	NA	5,120,111	5,229,705	6,138,385
Oregon	2,245,190	2,470,211	NA	3,957,639	12,870,466	14,753,575
Pennsylvania	4,278,736	5,321,876	NA	5,975,911	5,882,402	6,652,868
Rhode Island	150,000	403,939	NA	396,154	281,728	515,480
South Carolina	19,731,986	29,773,259	NA	22,877,576	27,055,207	36,355,976
South Dakota	3,011,796	3,847,153	NA	3,522,778	3,145,143	2,882,410
Tennessee	4,658,000	3,638,000	NA	3,002,070	851,410	2,949,381
Texas	20,318,659	19,853,357	NA	22,174,250	21,943,248	21,488,561
Utah	1,800,000	1,880,823	NA	5,593,015	20,724,230	20,687,819
Vermont	1,282,280	783,845	NA	610,565	1,100,865	1,184,957
Virginia	6,387,630	9,427,028	NA	11,409,211	9,370,939	9,735,857
Washington	7,728,621	8,091,640	NA	5,686,187	8,486,402	7,320,769
West Virginia	2,663,801	5,008,707	NA	3,733,032	7,830,732	6,157,841

TABLE 9. State agency expenditures for R&D funded from federal sources, by state: FYs 2006–11

(Dollars)

State	2006	2007	2008	2009	2010	2011
Wisconsin	4,772,502	6,316,820	NA	8,656,553	7,890,044	15,611,863
Wyoming	1,688,296	10,903,754	NA	1,068,548	815,693	809,183
Puerto Rico ^b	103,503	0	NA	na	0	0

na = not applicable; did not respond to survey. NA = not available; survey not conducted for FY 2008.

^a U.S. total reflects all 50 states and the District of Columbia.

^b Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTES: State R&D totals can display considerable volatility between survey years due to several national and state-specific factors. Large changes are not unusual, especially for discretionary spending items such as R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of State Government R&D (multiple years).

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
United States ^b	1,261,366,529	416,096,832	845,269,697	107,342,868
Alabama	15,113,917	9,749,394	5,364,523	0
Conservation and Natural Resources, Department of	2,152,483	1,231,288	921,195	0
Forensic Science, Department of	472,892	472,892	0	0
Geological Survey	3,196,187	3,196,187	0	0
Marine Environmental Sciences Consortium	4,562,239	4,562,239	0	0
Transportation, Department of	4,730,116	286,788	4,443,328	0
Alaska	9,274,800	7,885,200	1,389,600	0
Fish and Game, Department of	2,223,300	2,123,300	100,000	0
Geological and Geophysical Surveys, Division of	5,656,900	5,631,900	25,000	0
Transportation and Public Facilities, Department of	1,394,600	130,000	1,264,600	0
Arizona	17,682,315	7,545,171	10,137,144	0
Agriculture, Department of	260,322	0	260,322	0
Game and Fish Department	4,891,846	4,438,689	453,157	0
Geological Survey	1,859,997	1,776,082	83,915	0
Health Services, Department of	8,330,000	250,000	8,080,000	0
Transportation, Department of	2,340,150	1,080,400	1,259,750	0
Arkansas	14,446,084	5,406,407	9,039,677	0
Beef Council	80,555	0	80,555	0
Catfish Promotion Board	56,076	0	56,076	0
Corn and Grain Sorghum Promotion Board	495,500	0	495,500	0
Game and Fish Commission	658,590	122,833	535,757	0
Highway and Transportation Department	1,064,332	115,565	948,767	0
Rice Research and Promotion Board	2,727,000	2,727,000	0	0
Science and Technology Authority	6,948,031	300,009	6,648,022	0
Soybean Promotion Board	2,141,000	2,141,000	0	0
Wheat Promotion Board	275,000	0	275,000	0
California	154,216,981	30,126,000	124,090,981	0
Energy Commission	105,072,000	11,745,000	93,327,000	0
Food and Agriculture, Department of	2,101,971	0	2,101,971	0
Transportation, Department of	38,136,000	10,214,000	27,922,000	0
Water Resources, Department of	8,907,010	8,167,000	740,010	0
Colorado	20,828,274	7,108,498	13,719,776	880,000
Economic Development, Office of	7,404,089	0	7,404,089	0
Natural Resources, Department of	8,622,796	5,323,727	3,299,069	880,000
Public Health and Environment, Department of	2,205,496	5,000	2,200,496	0
Public Safety, Department of	890,000	890,000	0	0
Transportation, Department of	1,705,893	889,771	816,122	0
Connecticut	40,065,786	22,561,170	17,504,616	0
Agricultural Experiment Station	10,263,017	10,263,017	0	0
Environmental Protection, Department of	8,723,462	6,944,985	1,778,477	0
Mental Health and Addiction Services, Department of	3,647,105	2,535,935	1,111,170	0
Public Health, Department of	13,204,640	322,573	12,882,067	0
Transportation, Department of	4,227,562	2,494,660	1,732,902	0
Delaware	2,389,720	1,968,736	420,984	0
Geological Survey	1,512,415	1,512,415	0	0
Natural Resources and Environmental Control, Department of	627,305	456,321	170,984	0
Transportation, Department of	250,000	0	250,000	0
District of Columbia	696,198	189,691	506,507	0
Health, Department of	503,267	41,760	461,507	0
Transportation, Department of	192,931	147,931	45,000	0

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Florida	120,848,726	50,546,200	70,302,526	0
Agriculture and Consumer Services, Department of	11,433,478	3,097,116	8,336,362	0
Citrus, Department of	10,145,417	258,000	9,887,417	0
Environmental Protection, Department of	2,918,473	1,931,252	987,221	0
Fish and Wildlife Conservation Commission	47,344,015	45,259,832	2,084,183	0
Health, Department of	39,091,799	0	39,091,799	0
Space	325,706	0	325,706	0
Transportation, Department of	9,589,838	0	9,589,838	0
Georgia	8,923,795	3,200,000	5,723,795	0
Herty Advanced Materials Development Center	3,200,000	3,200,000	0	0
Transportation, Department of	5,723,795	0	5,723,795	0
Hawaii	14,233,186	3,049,593	11,183,593	20,000
Agriculture, Department of	414,967	335,006	79,961	20,000
Business, Economic Development and Tourism, Department of	5,825,028	467,423	5,357,605	0
Land and Natural Resources, Department of	5,320,835	2,163,164	3,157,671	0
Transportation, Department of	2,672,356	84,000	2,588,356	0
Idaho	9,059,568	4,616,645	4,442,923	0
Barley Commission	125,531	75,255	50,276	0
Bean Commission	63,752	0	63,752	0
Environmental Quality, Department of	65,370	34,979	30,391	0
Fish and Game, Department of	4,151,342	3,728,696	422,646	0
Potato Commission	830,000	45,000	785,000	0
Transportation, Department of	1,406,718	177,915	1,228,803	0
Water Resources, Department of	1,906,300	554,800	1,351,500	0
Wheat Commission	510,555	0	510,555	0
Illinois	16,553,689	1,948,263	14,605,426	0
Children and Family Services, Department of	6,128,895	0	6,128,895	0
Commerce and Economic Opportunity, Department of	190,000	0	190,000	0
Public Health, Department of	2,596,733	0	2,596,733	0
State Police	571,928	571,928	0	0
Transportation, Department of	7,066,133	1,376,335	5,689,798	0
Indiana	8,444,832	975,000	7,469,832	0
Criminal Justice Institute	450,000	200,000	250,000	0
Economic Development Corporation	678,287	0	678,287	0
Natural Resources, Department of	1,700,000	300,000	1,400,000	0
Transportation, Department of	5,616,545	475,000	5,141,545	0
Iowa	12,950,176	625,480	12,324,696	0
College Student Aid Commission	83,480	83,480	0	0
Criminal and Juvenile Justice Programs, Division of	22,000	22,000	0	0
Natural Resources, Department of	7,074,696	0	7,074,696	0
Transportation, Department of	5,770,000	520,000	5,250,000	0
Kansas	6,509,225	1,448,133	5,061,092	0
Transportation, Department of	5,039,914	1,393,133	3,646,781	0
Wheat Commission	1,104,311	0	1,104,311	0
Wildlife, Parks, and Tourism, Department of	365,000	55,000	310,000	0
Kentucky	20,410,096	1,635,906	18,774,190	3,500,000
Agricultural Policy, Governor's Office of	220,000	0	220,000	0
Budget and Fiscal Management, Office of	4,042,181	0	4,042,181	0
Commercialization and Innovation, Department of	9,239,959	100,000	9,139,959	3,500,000
Energy Policy, Governor's Office for	2,458,700	0	2,458,700	0
Environmental Education Council	0	0	0	0
Fish and Wildlife Resources, Department of	1,987,656	1,518,406	469,250	0
Nature Preserves Commission	17,500	17,500	0	0

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Public Health, Department of	2,444,100	0	2,444,100	0
Louisiana	9,165,144	6,523,169	2,641,975	0
Transportation and Development, Department of	6,642,447	4,809,020	1,833,427	0
Wildlife and Fisheries, Department of	2,522,697	1,714,149	808,548	0
Maine	8,847,471	1,542,846	7,304,625	0
Conservation, Department of	383,000	383,000	0	0
Environmental Protection, Department of	225,000	150,000	75,000	0
Marine Resources, Department of	1,370,454	711,502	658,952	0
State Fire Marshal's Office	3,000	3,000	0	0
Technology Institute	6,156,711	0	6,156,711	0
Transportation, Department of	709,306	295,344	413,962	0
Maryland	22,825,402	1,962,000	20,863,402	0
Business and Economic Development, Department of	1,300,000	1,300,000	0	0
Health and Mental Hygiene, Department of	2,175,332	0	2,175,332	0
Natural Resources, Department of	247,000	117,000	130,000	0
Technology Development Corporation	15,524,146	0	15,524,146	0
Transportation, Department of	3,578,924	545,000	3,033,924	0
Massachusetts	4,884,430	862,331	4,022,099	26,405
Capital Asset Management, Division of	0	0	0	26,405
Environmental Protection, Department of	445,801	161,801	284,000	0
Fish and Game, Department of	671,115	571,115	100,000	0
Mental Health, Department of	1,965,502	129,415	1,836,087	0
Public Health, Department of	164,987	0	164,987	0
Transportation Planning, Office of	1,637,025	0	1,637,025	0
Michigan	9,469,440	1,688,930	7,780,510	0
Agriculture, Department of	36,910	0	36,910	0
Natural Resources, Department of	4,792,530	1,648,930	3,143,600	0
Transportation, Department of	4,640,000	40,000	4,600,000	0
Minnesota	12,212,546	1,507,582	10,704,964	2,519,990
Agriculture, Department of	2,718,439	956,093	1,762,346	0
Forest Resources Council	280,396	43,000	237,396	0
Pollution Control Agency	1,036,255	0	1,036,255	0
Transportation, Department of	8,177,456	508,489	7,668,967	2,519,990
Mississippi	7,168,109	3,933,046	3,235,063	0
Innovative Geospatial Solutions, Enterprise for	3,974,000	1,953,000	2,021,000	0
Transportation, Department of	1,809,735	595,672	1,214,063	0
Wildlife, Fisheries, and Parks, Department of	1,384,374	1,384,374	0	0
Missouri	13,329,841	8,065,733	5,264,108	0
Agriculture, Department of	189,947	0	189,947	0
Conservation, Department of	9,143,947	7,136,153	2,007,794	0
Natural Resources, Department of	338,141	122,557	215,584	0
Transportation, Department of	3,657,806	807,023	2,850,783	0
Montana	7,543,860	1,604,601	5,939,259	0
Agriculture, Department of	1,533,814	0	1,533,814	0
Commerce, Department of	2,774,601	0	2,774,601	0
Environmental Quality, Department of	69,066	59,131	9,935	0
Fish, Wildlife, and Parks	1,939,993	1,323,392	616,601	0
Natural Resources and Conservation, Department of	17,500	0	17,500	0
Transportation, Department of	1,208,886	222,078	986,808	0
Nebraska	4,232,691	327,845	3,904,846	0
Agriculture, Department of	232,850	0	232,850	0
Corn Board	344,913	0	344,913	0

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Dry Bean Commission	150,762	150,762	0	0
Grain Sorghum Board	1,988	0	1,988	0
Natural Resources, Department of	2,164,260	173,583	1,990,677	0
Roads, Department of	986,418	0	986,418	0
Wheat Board	351,500	3,500	348,000	0
Nevada	1,377,888	339,516	1,038,372	0
Transportation, Department of	1,048,465	294,079	754,386	0
Wildlife, Department of	329,423	45,437	283,986	0
New Hampshire	1,804,156	502,616	1,301,540	0
Agriculture, Markets, and Food, Department of	169,170	0	169,170	0
Resources and Economic Development, Department of	625,000	150,000	475,000	0
Transportation, Department of	1,009,986	352,616	657,370	0
New Jersey	27,939,539	3,407,529	24,532,010	3,000,000
Brain Injury Research, Commission on	2,530,362	207,117	2,323,245	0
Cancer Research, Commission on	1,200,000	0	1,200,000	0
Environmental Protection, Department of	4,305,318	1,523,900	2,781,418	0
Research and Treatment of Autism, Council for	5,563,345	39,556	5,523,789	0
Science and Technology, Commission on	3,695,000	0	3,695,000	0
Spinal Cord Research, Commission on	4,075,462	378,951	3,696,511	0
Transportation, Department of	6,570,052	1,258,005	5,312,047	3,000,000
New Mexico	1,422,955	560,955	862,000	0
Transportation, Department of	1,422,955	560,955	862,000	0
New York	167,231,605	101,863,804	65,367,801	0
Agriculture and Markets, Department of	3,892,582	2,775,000	1,117,582	0
Energy Research and Development Authority	41,029,418	10,598,946	30,430,472	0
Environmental Conservation, Department of	4,161,101	949,681	3,211,420	0
Foundation for Science, Technology and Innovation	52,300,000	36,800,000	15,500,000	0
Health, Department of	57,919,392	47,726,192	10,193,200	0
Transportation, Department of	7,929,112	3,013,985	4,915,127	0
North Carolina	27,342,380	18,843,326	8,499,054	37,221
Agriculture and Consumer Services, Department of	12,525,716	12,525,716	0	32,221
Environment and Natural Resources, Department of	3,551,664	3,197,610	354,054	0
Transportation, Department of	11,265,000	3,120,000	8,145,000	5,000
North Dakota	6,352,675	591,770	5,760,905	0
Agriculture, Department of	140,464	0	140,464	0
Lignite Research Council	2,098,967	304,909	1,794,058	0
Mineral Resources, Department of	45,000	45,000	0	0
Oil and Gas Research Program	1,186,820	109,105	1,077,715	0
Renewable Energy Research Program	979,013	60,000	919,013	0
Soybean Council	714,023	0	714,023	0
Transportation, Department of	598,349	72,756	525,593	0
Wheat Commission	590,039	0	590,039	0
Ohio	125,120,668	1,754,417	123,366,251	0
Air Quality Development Authority	1,120,000	0	1,120,000	0
Development, Department of	118,914,375	0	118,914,375	0
Mental Health, Department of	721,000	490,000	231,000	0
Natural Resources, Department of	3,253,900	1,011,197	2,242,703	0
Transportation, Department of	1,111,393	253,220	858,173	0
Oklahoma	21,226,236	9,250	21,216,986	153,278
Center for the Advancement of Science and Technology	15,345,706	0	15,345,706	153,278
Health, Department of	9,250	9,250	0	0
Sorghum Commission	22,500	0	22,500	0
Transportation, Department of	4,132,781	0	4,132,781	0

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Wheat Commission	253,434	0	253,434	0
Wildlife Conservation, Department of	1,462,565	0	1,462,565	0
Oregon	18,013,730	14,368,928	3,644,802	0
Agriculture, Department of	664,631	0	664,631	0
Fish and Wildlife, Department of	9,585,000	9,535,000	50,000	0
Forestry, Department of	354,882	70,181	284,701	0
Geology and Mineral Industries, Department of	4,097,576	3,996,254	101,322	0
Transportation, Department of	2,481,963	691,265	1,790,698	0
Watershed Enhancement Board	829,678	76,228	753,450	0
Pennsylvania	76,947,795	5,052,858	71,894,937	6,038,598
Agriculture, Department of	755,736	0	755,736	0
Community and Economic Development, Department of	6,839,000	0	6,839,000	0
Conservation and Natural Resources, Department of	2,731,005	1,639,317	1,091,688	0
Environmental Protection, Department of	1,859,108	215,999	1,643,109	0
Fish and Boat Commission	640,326	555,633	84,693	0
Game Commission	2,660,768	1,976,639	684,129	0
Health, Department of	58,482,594	0	58,482,594	6,038,598
Transportation, Department of	2,979,258	665,270	2,313,988	0
Rhode Island	1,461,239	53,547	1,407,692	0
Economic Development Corporation	1,109,080	0	1,109,080	0
Transportation, Department of	352,159	53,547	298,612	0
South Carolina	36,536,007	32,641,056	3,894,951	4,092,304
Health and Environmental Control, Department of	133,172	133,172	0	0
Mental Health, Department of	122,334	21,450	100,884	0
Natural Resources, Department of	32,939,330	31,939,330	1,000,000	4,092,304
Public Service Authority	185,322	0	185,322	0
Sea Grant Consortium	1,772,246	354,215	1,418,031	0
Transportation, Department of	1,383,603	192,889	1,190,714	0
South Dakota	3,762,637	722,906	3,039,731	0
Agriculture, Department of	25,000	0	25,000	0
Game, Fish and Parks, Department of	1,638,739	0	1,638,739	0
Transportation, Department of	2,098,898	722,906	1,375,992	0
Tennessee	1,064,262	0	1,064,262	0
Transportation, Department of	1,064,262	0	1,064,262	0
Texas	35,163,655	2,813,346	32,350,309	0
Agriculture, Department of	2,319,442	0	2,319,442	0
Environmental Quality, Commission on	3,888,189	0	3,888,189	0
Health and Human Services Commission	123,000	123,000	0	0
Parks and Wildlife, Department of	1,746,387	1,073,290	673,097	0
Transportation, Department of	25,071,272	1,617,056	23,454,216	0
Water Development Board	2,015,365	0	2,015,365	0
Utah	30,812,205	10,150,322	20,661,883	87,065,072
Health, Department of	50,322	50,322	0	0
Natural Resources, Department of	8,000,000	8,000,000	0	0
Science Technology and Research, Governor's Office of Economic Development	20,161,883	0	20,161,883	87,065,072
Transportation, Department of	2,600,000	2,100,000	500,000	0
Vermont	1,665,079	1,442,023	223,056	0
Agriculture, Agency of	865,900	865,900	0	0
Human Services, Agency of	132,198	132,198	0	0
Transportation, Agency of	666,981	443,925	223,056	0

TABLE 10. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2010
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Virginia	17,495,156	6,744,260	10,750,896	0
Agriculture and Consumer Services, Department of	2,271,833	0	2,271,833	0
Consolidated Lab Services, Division of	683,917	513,917	170,000	0
Corrections, Department of	897,484	897,484	0	0
Forensic Science, Department of	181,813	181,813	0	0
Health, Department of	46,962	46,962	0	0
Innovative Technology, Center for	1,480,000	430,000	1,050,000	0
Marine Resources Commission	2,441,157	0	2,441,157	0
Natural History, Museum of	560,718	560,718	0	0
Transportation, Department of	8,931,272	4,113,366	4,817,906	0
Washington	24,525,701	9,866,316	14,659,385	0
Agriculture, Department of	328,111	0	328,111	0
Fish and Wildlife, Department of	6,881,561	6,813,791	67,770	0
Grain Commission	3,345,600	0	3,345,600	0
Natural Resources, Department of	4,035,976	1,056,177	2,979,799	0
Potato Commission	794,391	54,500	739,891	0
Red Raspberry Commission	173,387	0	173,387	0
Transportation, Department of	5,402,675	1,461,848	3,940,827	0
Tree Fruit Research Commission	3,430,000	480,000	2,950,000	0
Wine Commission	134,000	0	134,000	0
West Virginia	23,867,732	7,094,173	16,773,559	10,000
Environmental Protection, Department of	986,278	522,573	463,705	0
Geological and Economic Survey	2,682,942	2,682,942	0	0
Higher Education Policy Commission	14,258,436	721,822	13,536,614	0
Highways, Department of	5,100,000	2,350,000	2,750,000	10,000
Justice and Community Services, Division of	8,277	8,277	0	0
Natural Resources, Division of	831,799	808,559	23,240	0
Wisconsin	12,435,548	5,060,717	7,374,831	0
Agriculture, Trade, and Consumer Protection, Department of	770,721	41,160	729,561	0
Economic Development Corporation	1,375,000	0	1,375,000	0
Natural Resources, Department of	6,717,528	4,719,109	1,998,419	0
Transportation, Department of	3,572,299	300,448	3,271,851	0
Wyoming	5,471,379	3,609,627	1,861,752	0
Agriculture, Department of	176,596	0	176,596	0
Environmental Quality, Department of	150,000	0	150,000	0
Game and Fish, Department of	1,291,150	564,002	727,148	0
Geological Survey	2,866,616	2,599,466	267,150	0
Transportation, Department of	687,017	446,159	240,858	0
Water Development Office	300,000	0	300,000	0
Puerto Rico ^c	300,000	0	300,000	0
Education Council	551,391	360,000	191,391	0

^a All R&D performers do not include R&D plant.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTES: Internal performers include employees within the same state department or agency in support of an internal R&D project. External performers are those outside the department or agency who perform R&D under the administrative oversight or control of the department or agency; this may include projects for the department or agency performed by others or an extramural research program.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
United States ^b	1,403,816,235	461,506,205	942,310,030	109,124,517
Alabama	19,684,063	14,250,319	5,433,744	940,000
Conservation and Natural Resources, Department of	2,448,043	1,135,367	1,312,676	940,000
Forensic Science, Department of	475,402	475,402	0	0
Geological Survey	3,355,833	3,355,833	0	0
Marine Environmental Sciences Consortium	8,996,929	8,996,929	0	0
Transportation, Department of	4,407,856	286,788	4,121,068	0
Alaska	11,349,400	9,004,800	2,344,600	0
Fish and Game, Department of	2,697,600	2,697,600	0	0
Geological and Geophysical Surveys, Division of	6,084,800	6,051,200	33,600	0
Transportation and Public Facilities, Department of	2,567,000	256,000	2,311,000	0
Arizona	18,626,577	7,410,362	11,216,215	239,200
Agriculture, Department of	819,771	0	819,771	0
Game and Fish Department	4,643,079	4,137,092	505,987	0
Geological Survey	2,794,127	1,710,870	1,083,257	0
Health Services, Department of	8,330,000	250,000	8,080,000	0
Transportation, Department of	2,039,600	1,312,400	727,200	239,200
Arkansas	14,705,327	6,077,854	8,627,473	0
Beef Council	74,085	0	74,085	0
Catfish Promotion Board	43,648	0	43,648	0
Corn and Grain Sorghum Promotion Board	605,600	0	605,600	0
Game and Fish Commission	680,971	116,250	564,721	0
Highway and Transportation Department	927,990	144,978	783,012	0
Rice Research and Promotion Board	2,870,000	2,870,000	0	0
Science and Technology Authority	6,729,033	335,626	6,393,407	0
Soybean Promotion Board	2,611,000	2,611,000	0	0
Wheat Promotion Board	163,000	0	163,000	0
California	149,810,643	38,369,776	111,440,867	9,920,000
Energy Commission	95,975,000	13,129,000	82,846,000	0
Food and Agriculture, Department of	1,528,667	0	1,528,667	0
Transportation, Department of	37,445,000	10,997,000	26,448,000	0
Water Resources, Department of	14,861,976	14,243,776	618,200	9,920,000
Colorado	18,141,931	6,942,978	11,198,953	0
Economic Development, Office of	5,479,605	0	5,479,605	0
Natural Resources, Department of	7,654,500	5,238,226	2,416,274	0
Public Health and Environment, Department of	1,873,822	1,500	1,872,322	0
Public Safety, Department of	890,000	890,000	0	0
Transportation, Department of	2,244,004	813,252	1,430,752	0
Connecticut	39,192,091	23,573,706	15,618,385	0
Agricultural Experiment Station	10,631,320	10,631,320	0	0
Environmental Protection, Department of	8,101,784	7,219,560	882,224	0
Mental Health and Addiction Services, Department of	4,363,990	3,043,830	1,320,160	0
Public Health, Department of	11,894,644	258,906	11,635,738	0
Transportation, Department of	4,200,353	2,420,090	1,780,263	0
Delaware	2,609,902	2,049,018	560,884	0
Geological Survey	1,663,179	1,663,179	0	0
Natural Resources and Environmental Control, Department of	696,723	385,839	310,884	0
Transportation, Department of	250,000	0	250,000	0
District of Columbia	1,221,108	220,886	1,000,222	0
Health, Department of	956,728	148,997	807,731	0
Transportation, Department of	264,380	71,889	192,491	0
Florida	150,764,438	48,327,623	102,436,815	0
Agriculture and Consumer Services, Department of	11,707,343	3,029,030	8,678,313	0
Citrus, Department of	9,445,480	254,000	9,191,480	0
Environmental Protection, Department of	2,787,307	2,015,890	771,417	0

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011

(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Fish and Wildlife Conservation Commission	44,649,930	43,028,703	1,621,227	0
Health, Department of	64,723,630	0	64,723,630	0
Space	5,239,510	0	5,239,510	0
Transportation, Department of	12,211,238	0	12,211,238	0
Georgia	11,690,663	3,600,000	8,090,663	0
Herty Advanced Materials Development Center	3,600,000	3,600,000	0	0
Transportation, Department of	8,090,663	0	8,090,663	0
Hawaii	13,103,983	3,667,047	9,436,936	20,000
Agriculture, Department of	564,799	384,151	180,648	20,000
Business, Economic Development and Tourism, Department of	6,020,023	430,459	5,589,564	0
Land and Natural Resources, Department of	5,957,794	2,360,494	3,597,300	0
Transportation, Department of	561,367	491,943	69,424	0
Idaho	9,366,052	4,430,450	4,935,602	0
Barley Commission	94,342	50,039	44,303	0
Bean Commission	93,882	0	93,882	0
Environmental Quality, Department of	25,587	3,005	22,582	0
Fish and Game, Department of	4,210,814	3,636,677	574,137	0
Potato Commission	935,000	60,000	875,000	0
Transportation, Department of	1,580,312	170,629	1,409,683	0
Water Resources, Department of	1,828,500	510,100	1,318,400	0
Wheat Commission	597,615	0	597,615	0
Illinois	17,207,125	2,049,697	15,157,428	0
Children and Family Services, Department of	6,681,163	0	6,681,163	0
Public Health, Department of	680,013	0	680,013	0
State Police	558,641	558,641	0	0
Transportation, Department of	9,287,308	1,491,056	7,796,252	0
Indiana	6,983,364	975,000	6,008,364	0
Criminal Justice Institute	450,000	200,000	250,000	0
Economic Development Corporation	833,364	0	833,364	0
Natural Resources, Department of	1,700,000	300,000	1,400,000	0
Transportation, Department of	4,000,000	475,000	3,525,000	0
Iowa	36,992,222	1,260,999	35,731,223	0
College Student Aid Commission	92,753	92,753	0	0
Criminal and Juvenile Justice Programs, Division of	20,246	20,246	0	0
Economic Development Authority, Energy Office	26,590,826	0	26,590,826	0
Natural Resources, Department of	3,640,397	0	3,640,397	0
Transportation, Department of	6,050,000	550,000	5,500,000	0
Workforce Development	598,000	598,000	0	0
Kansas	6,635,626	1,501,433	5,134,193	0
Transportation, Department of	5,002,773	1,436,433	3,566,340	0
Wheat Commission	1,167,853	0	1,167,853	0
Wildlife, Parks, and Tourism, Department of	465,000	65,000	400,000	0
Kentucky	20,498,849	2,137,354	18,361,495	0
Agricultural Policy, Governor's Office of	45,130	0	45,130	0
Budget and Fiscal Management, Office of	4,425,113	0	4,425,113	0
Commercialization and Innovation, Department of	8,409,917	100,000	8,309,917	0
Early Childhood Development, Division of	541,000	291,000	250,000	0
Energy Policy, Governor's Office for	2,729,900	0	2,729,900	0
Environmental Education Council	37,666	0	37,666	0
Fish and Wildlife Resources, Department of	2,111,023	1,727,854	383,169	0
Nature Preserves Commission	26,500	18,500	8,000	0
Public Health, Department of	2,172,600	0	2,172,600	0
Louisiana	9,203,635	7,253,894	1,949,741	0
Transportation and Development, Department of	6,396,052	5,137,074	1,258,978	0
Wildlife and Fisheries, Department of	2,807,583	2,116,820	690,763	0

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Maine	9,918,765	1,883,123	8,035,642	3,000,000
Agriculture, Department of	72,750	0	72,750	0
Conservation, Department of	380,000	380,000	0	0
Drug Enforcement Agency	75,000	0	75,000	0
Environmental Protection, Department of	225,000	150,000	75,000	0
Marine Resources, Department of	2,127,121	1,070,689	1,056,432	0
State Fire Marshal's Office	3,000	3,000	0	0
Technology Institute	6,530,034	0	6,530,034	3,000,000
Transportation, Department of	505,860	279,434	226,426	0
Maryland	20,084,540	1,928,700	18,155,840	0
Business and Economic Development, Department of	1,300,000	1,300,000	0	0
Health and Mental Hygiene, Department of	2,400,000	0	2,400,000	0
Natural Resources, Department of	268,700	83,700	185,000	0
Technology Development Corporation	11,211,823	0	11,211,823	0
Transportation, Department of	4,904,017	545,000	4,359,017	0
Massachusetts	4,878,927	785,738	4,093,189	224,093
Capital Asset Management, Division of	0	0	0	224,093
Early Education and Care, Department of	486,173	0	486,173	0
Environmental Protection, Department of	259,147	168,147	91,000	0
Fish and Game, Department of	583,482	483,482	100,000	0
Mental Health, Department of	1,882,744	134,109	1,748,635	0
Public Health, Department of	163,121	0	163,121	0
Transportation Planning, Office of	1,504,260	0	1,504,260	0
Michigan	9,802,873	1,509,097	8,293,776	0
Agriculture, Department of	82,793	0	82,793	0
Natural Resources, Department of	4,595,080	1,484,097	3,110,983	0
Transportation, Department of	5,125,000	25,000	5,100,000	0
Minnesota	11,653,327	1,509,585	10,143,742	1,813,507
Agriculture, Department of	1,774,976	782,000	992,976	0
Forest Resources Council	114,592	40,000	74,592	0
Pollution Control Agency	134,502	0	134,502	0
Transportation, Department of	9,629,257	687,585	8,941,672	1,813,507
Mississippi	7,420,851	4,028,133	3,392,718	0
Innovative Geospatial Solutions, Enterprise for	2,686,000	979,000	1,707,000	0
Transportation, Department of	2,389,770	704,052	1,685,718	0
Wildlife, Fisheries, and Parks, Department of	2,345,081	2,345,081	0	0
Missouri	13,658,961	7,546,964	6,111,997	0
Agriculture, Department of	32,308	0	32,308	0
Conservation, Department of	8,216,486	6,470,271	1,746,215	0
Natural Resources, Department of	367,085	158,278	208,807	0
Transportation, Department of	5,043,082	918,415	4,124,667	0
Montana	6,474,190	1,694,519	4,779,671	0
Agriculture, Department of	1,653,768	0	1,653,768	0
Commerce, Department of	1,376,063	0	1,376,063	0
Environmental Quality, Department of	283,206	87,031	196,175	0
Fish, Wildlife, and Parks	1,857,865	1,365,003	492,862	0
Natural Resources and Conservation, Department of	30,000	0	30,000	0
Transportation, Department of	1,273,288	242,485	1,030,803	0
Nebraska	4,061,651	320,392	3,741,259	0
Agriculture, Department of	342,385	0	342,385	0
Corn Board	267,123	0	267,123	0
Dry Bean Commission	141,220	141,220	0	0
Grain Sorghum Board	13,444	0	13,444	0
Natural Resources, Department of	1,770,243	175,172	1,595,071	0
Roads, Department of	1,123,236	0	1,123,236	0
Wheat Board	404,000	4,000	400,000	0

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011

(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Nevada	1,868,869	428,607	1,440,262	0
Transportation, Department of	1,393,048	362,976	1,030,072	0
Wildlife, Department of	475,821	65,631	410,190	0
New Hampshire	1,921,421	591,869	1,329,552	0
Agriculture, Markets, and Food, Department of	40,969	0	40,969	0
Resources and Economic Development, Department of	684,000	184,000	500,000	0
Transportation, Department of	1,196,452	407,869	788,583	0
New Jersey	17,068,781	2,980,802	14,087,979	0
Brain Injury Research, Commission on	3,260,413	132,172	3,128,241	0
Cancer Research, Commission on	350,000	0	350,000	0
Environmental Protection, Department of	1,988,395	1,460,400	527,995	0
Research and Treatment of Autism, Council for	3,385,611	320,180	3,065,431	0
Spinal Cord Research, Commission on	2,541,718	180,838	2,360,880	0
Transportation, Department of	5,542,644	887,212	4,655,432	0
New Mexico	1,821,583	494,193	1,327,390	0
Transportation, Department of	1,821,583	494,193	1,327,390	0
New York	182,736,305	108,093,556	74,642,749	0
Agriculture and Markets, Department of	3,554,089	2,775,000	779,089	0
Energy Research and Development Authority	48,057,371	11,551,001	36,506,370	0
Environmental Conservation, Department of	2,939,284	963,959	1,975,325	0
Foundation for Science, Technology and Innovation	68,000,000	47,400,000	20,600,000	0
Health, Department of	55,192,779	42,914,417	12,278,362	0
Transportation, Department of	4,992,782	2,489,179	2,503,603	0
North Carolina	29,611,785	19,478,718	10,133,067	346,612
Agriculture and Consumer Services, Department of	12,773,500	12,773,500	0	341,112
Environment and Natural Resources, Department of	5,267,285	3,527,218	1,740,067	0
Transportation, Department of	11,571,000	3,178,000	8,393,000	5,500
North Dakota	8,072,257	366,294	7,705,963	500,000
Agriculture, Department of	75,710	0	75,710	0
Lignite Research Council	2,790,750	141,250	2,649,500	0
Mineral Resources, Department of	73,500	73,500	0	0
Oil and Gas Research Program	1,378,125	44,265	1,333,860	0
Renewable Energy Research Program	1,236,475	30,000	1,206,475	0
Soybean Council	808,649	0	808,649	0
Transportation, Department of	578,559	77,279	501,280	0
Wheat Commission	1,130,489	0	1,130,489	500,000
Ohio	159,322,228	2,645,393	156,676,835	0
Air Quality Development Authority	2,034,728	0	2,034,728	0
Development, Department of	150,072,744	0	150,072,744	0
Mental Health, Department of	721,000	490,000	231,000	0
Natural Resources, Department of	3,711,878	1,944,556	1,767,322	0
Transportation, Department of	2,781,878	210,837	2,571,041	0
Oklahoma	20,304,740	9,850	20,294,890	493,621
Center for the Advancement of Science and Technology	13,052,997	0	13,052,997	493,621
Health, Department of	9,850	9,850	0	0
Sorghum Commission	22,500	0	22,500	0
Transportation, Department of	4,437,947	0	4,437,947	0
Wheat Commission	514,195	0	514,195	0
Wildlife Conservation, Department of	2,267,251	0	2,267,251	0
Oregon	20,001,272	17,063,005	2,938,267	0
Agriculture, Department of	582,446	0	582,446	0
Fish and Wildlife, Department of	11,326,000	11,266,000	60,000	0
Forestry, Department of	478,413	107,203	371,210	0
Geology and Mineral Industries, Department of	4,979,303	4,803,055	176,248	0
Transportation, Department of	2,494,162	806,249	1,687,913	0
Watershed Enhancement Board	140,948	80,498	60,450	0

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011

(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Pennsylvania	71,098,139	5,826,832	65,271,307	5,495,050
Agriculture, Department of	640,671	0	640,671	0
Community and Economic Development, Department of	4,700,000	0	4,700,000	0
Conservation and Natural Resources, Department of	2,212,545	1,594,754	617,791	0
Environmental Protection, Department of	1,059,451	215,631	843,820	0
Fish and Boat Commission	781,643	694,905	86,738	0
Game Commission	3,695,614	2,780,122	915,492	0
Health, Department of	54,088,921	0	54,088,921	5,495,050
Transportation, Department of	3,919,294	541,420	3,377,874	0
Rhode Island	1,947,727	80,000	1,867,727	0
Economic Development Corporation	1,303,377	0	1,303,377	0
Transportation, Department of	644,350	80,000	564,350	0
South Carolina	47,795,394	42,532,704	5,262,690	11,875
Health and Environmental Control, Department of	721,804	721,804	0	0
Mental Health, Department of	122,334	21,450	100,884	0
Natural Resources, Department of	42,392,567	41,391,567	1,001,000	11,875
Public Service Authority	115,338	0	115,338	0
Sea Grant Consortium	2,862,766	354,215	2,508,551	0
Transportation, Department of	1,580,585	43,668	1,536,917	0
South Dakota	3,629,155	652,055	2,977,100	0
Game, Fish and Parks, Department of	1,628,888	0	1,628,888	0
Transportation, Department of	2,000,267	652,055	1,348,212	0
Tennessee	3,606,726	20,000	3,586,726	0
Environment and Conservation, Department of	320,000	20,000	300,000	0
Transportation, Department of	3,286,726	0	3,286,726	0
Texas	47,372,367	9,823,374	37,548,993	0
Agriculture, Department of	1,853,946	0	1,853,946	0
Cancer Prevention and Research Institute	15,715,498	7,014,052	8,701,446	0
Environmental Quality, Commission on	1,599,224	0	1,599,224	0
Health and Human Services Commission	123,000	123,000	0	0
Parks and Wildlife, Department of	1,819,498	1,140,319	679,179	0
Transportation, Department of	23,851,121	1,546,003	22,305,118	0
Water Development Board	2,410,080	0	2,410,080	0
Utah	34,418,764	10,361,727	24,057,037	85,963,745
Health, Department of	261,727	261,727	0	0
Natural Resources, Department of	8,000,000	8,000,000	0	0
Science Technology and Research, Governor's Office of Economic Development	23,557,037	0	23,557,037	85,963,745
Transportation, Department of	2,600,000	2,100,000	500,000	0
Vermont	1,711,673	1,543,503	168,170	0
Agriculture, Agency of	1,027,700	1,027,700	0	0
Human Services, Agency of	190,117	190,117	0	0
Transportation, Agency of	493,856	325,686	168,170	0
Virginia	17,241,804	6,567,645	10,674,159	0
Agriculture and Consumer Services, Department of	2,169,935	0	2,169,935	0
Consolidated Lab Services, Division of	784,808	614,808	170,000	0
Corrections, Department of	919,542	919,542	0	0
Forensic Science, Department of	160,439	160,439	0	0
Health, Department of	27,900	27,900	0	0
Innovative Technology, Center for	1,010,000	320,000	690,000	0
Marine Resources Commission	3,130,629	0	3,130,629	0
Natural History, Museum of	569,120	569,120	0	0
Transportation, Department of	8,469,431	3,955,836	4,513,595	0
Washington	24,500,489	10,245,788	14,254,701	0
Agriculture, Department of	190,841	0	190,841	0
Fish and Wildlife, Department of	7,190,560	7,128,911	61,649	0

TABLE 11. State agency expenditures for R&D and R&D plant, by state, department or agency, and R&D performer: FY 2011
(Dollars)

Department or agency	All R&D performers ^a	Internal performers	External performers	R&D plant
Grain Commission	3,573,613	0	3,573,613	0
Natural Resources, Department of	4,032,000	1,409,200	2,622,800	0
Potato Commission	842,198	49,700	792,498	0
Red Raspberry Commission	225,447	0	225,447	0
Transportation, Department of	5,095,830	1,522,977	3,572,853	0
Tree Fruit Research Commission	3,215,000	135,000	3,080,000	0
Wine Commission	135,000	0	135,000	0
West Virginia	35,475,338	8,130,744	27,344,594	156,814
Agriculture, Department of	151,428	151,428	0	5,894
Environmental Protection, Department of	885,794	507,010	378,784	0
Geological and Economic Survey	3,274,416	3,274,416	0	0
Higher Education Policy Commission	24,577,042	851,217	23,725,825	0
Highways, Department of	5,583,425	2,508,425	3,075,000	150,000
Justice and Community Services, Division of	15,513	10,113	5,400	920
Natural Resources, Division of	987,720	828,135	159,585	0
Wisconsin	21,128,936	6,126,083	15,002,853	0
Agriculture, Trade, and Consumer Protection, Department of	536,004	93,569	442,435	0
Economic Development Corporation	7,979,595	0	7,979,595	0
Natural Resources, Department of	8,497,725	5,716,730	2,780,995	0
Transportation, Department of	4,115,612	315,784	3,799,828	0
Wyoming	5,419,398	3,134,016	2,285,382	0
Agriculture, Department of	147,226	0	147,226	0
Environmental Quality, Department of	150,000	0	150,000	0
Game and Fish, Department of	1,775,184	561,483	1,213,701	0
Geological Survey	2,540,432	2,200,141	340,291	0
Transportation, Department of	506,556	372,392	134,164	0
Water Development Office	300,000	0	300,000	0
Puerto Rico ^c	537,869	400,000	137,869	0
Education Council	537,869	400,000	137,869	0

^a All R&D performers do not include R&D plant.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTES: Internal performers include employees within the same state department or agency in support of an internal R&D project. External performers are those outside the department or agency who perform R&D under the administrative oversight or control of the department or agency; this may include projects for the department or agency performed by others or an extramural research program.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
United States ^b	1,261,366,529	375,654,806	885,711,723
Alabama	15,113,917	11,332,512	3,781,405
Conservation and Natural Resources, Department of	2,152,483	1,771,143	381,340
Forensic Science, Department of	472,892	409,115	63,777
Geological Survey	3,196,187	1,391,833	1,804,354
Marine Environmental Sciences Consortium	4,562,239	3,664,523	897,716
Transportation, Department of	4,730,116	4,095,898	634,218
Alaska	9,274,800	2,766,100	6,508,700
Fish and Game, Department of	2,223,300	377,700	1,845,600
Geological and Geophysical Surveys, Division of	5,656,900	1,348,400	4,308,500
Transportation and Public Facilities, Department of	1,394,600	1,040,000	354,600
Arizona	17,682,315	7,013,167	10,669,148
Agriculture, Department of	260,322	220,764	39,558
Game and Fish Department	4,891,846	3,828,622	1,063,224
Geological Survey	1,859,997	1,145,081	714,916
Health Services, Department of	8,330,000	0	8,330,000
Transportation, Department of	2,340,150	1,818,700	521,450
Arkansas	14,446,084	2,473,992	11,972,092
Beef Council	80,555	0	80,555
Catfish Promotion Board	56,076	0	56,076
Corn and Grain Sorghum Promotion Board	495,500	0	495,500
Game and Fish Commission	658,590	363,721	294,869
Highway and Transportation Department	1,064,332	773,169	291,163
Rice Research and Promotion Board	2,727,000	0	2,727,000
Science and Technology Authority	6,948,031	1,337,102	5,610,929
Soybean Promotion Board	2,141,000	0	2,141,000
Wheat Promotion Board	275,000	0	275,000
California	154,216,981	21,210,061	133,006,920
Energy Commission	105,072,000	3,871,000	101,201,000
Food and Agriculture, Department of	2,101,971	768,051	1,333,920
Transportation, Department of	38,136,000	16,551,000	21,585,000
Water Resources, Department of	8,907,010	20,010	8,887,000
Colorado	20,828,274	6,363,519	14,464,755
Economic Development, Office of	7,404,089	0	7,404,089
Natural Resources, Department of	8,622,796	3,311,294	5,311,502
Public Health and Environment, Department of	2,205,496	1,534,511	670,985
Public Safety, Department of	890,000	140,000	750,000
Transportation, Department of	1,705,893	1,377,714	328,179
Connecticut	40,065,786	11,067,425	28,998,361
Agricultural Experiment Station	10,263,017	3,534,893	6,728,124
Environmental Protection, Department of	8,723,462	3,460,180	5,263,282
Mental Health and Addiction Services, Department of	3,647,105	1,043,845	2,603,260
Public Health, Department of	13,204,640	245,000	12,959,640
Transportation, Department of	4,227,562	2,783,507	1,444,055
Delaware	2,389,720	796,963	1,592,757
Geological Survey	1,512,415	329,658	1,182,757
Natural Resources and Environmental Control, Department of	627,305	342,305	285,000
Transportation, Department of	250,000	125,000	125,000
District of Columbia	696,198	657,612	38,586
Health, Department of	503,267	503,267	0
Transportation, Department of	192,931	154,345	38,586

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Florida	120,848,726	27,629,492	93,219,234
Agriculture and Consumer Services, Department of	11,433,478	2,008,012	9,425,466
Citrus, Department of	10,145,417	0	10,145,417
Environmental Protection, Department of	2,918,473	345,132	2,573,341
Fish and Wildlife Conservation Commission	47,344,015	16,384,091	30,959,924
Health, Department of	39,091,799	0	39,091,799
Space	325,706	0	325,706
Transportation, Department of	9,589,838	8,892,257	697,581
Georgia	8,923,795	5,018,230	3,905,565
Herty Advanced Materials Development Center	3,200,000	0	3,200,000
Transportation, Department of	5,723,795	5,018,230	705,565
Hawaii	14,233,186	11,483,268	2,749,918
Agriculture, Department of	414,967	48,414	366,553
Business, Economic Development and Tourism, Department of	5,825,028	5,825,028	0
Land and Natural Resources, Department of	5,320,835	3,434,942	1,885,893
Transportation, Department of	2,672,356	2,174,884	497,472
Idaho	9,059,568	4,716,185	4,343,383
Barley Commission	125,531	0	125,531
Bean Commission	63,752	63,752	0
Environmental Quality, Department of	65,370	65,370	0
Fish and Game, Department of	4,151,342	3,059,069	1,092,273
Potato Commission	830,000	125,000	705,000
Transportation, Department of	1,406,718	1,241,094	165,624
Water Resources, Department of	1,906,300	161,900	1,744,400
Wheat Commission	510,555	0	510,555
Illinois	16,553,689	4,851,170	11,702,519
Children and Family Services, Department of	6,128,895	332,499	5,796,396
Commerce and Economic Opportunity, Department of	190,000	0	190,000
Public Health, Department of	2,596,733	0	2,596,733
State Police	571,928	2,801	569,127
Transportation, Department of	7,066,133	4,515,870	2,550,263
Indiana	8,444,832	6,559,869	1,884,963
Criminal Justice Institute	450,000	450,000	0
Economic Development Corporation	678,287	678,287	0
Natural Resources, Department of	1,700,000	1,500,000	200,000
Transportation, Department of	5,616,545	3,931,582	1,684,963
Iowa	12,950,176	4,210,203	8,739,973
College Student Aid Commission	83,480	83,480	0
Criminal and Juvenile Justice Programs, Division of	22,000	9,314	12,686
Natural Resources, Department of	7,074,696	2,122,409	4,952,287
Transportation, Department of	5,770,000	1,995,000	3,775,000
Kansas	6,509,225	3,625,557	2,883,668
Transportation, Department of	5,039,914	3,475,557	1,564,357
Wheat Commission	1,104,311	0	1,104,311
Wildlife, Parks, and Tourism, Department of	365,000	150,000	215,000
Kentucky	20,410,096	5,263,230	15,146,866
Agricultural Policy, Governor's Office of	220,000	0	220,000
Budget and Fiscal Management, Office of	4,042,181	3,746,418	295,763
Commercialization and Innovation, Department of	9,239,959	0	9,239,959
Energy Policy, Governor's Office for	2,458,700	0	2,458,700
Environmental Education Council	0	0	0
Fish and Wildlife Resources, Department of	1,987,656	1,507,437	480,219

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Nature Preserves Commission	17,500	9,375	8,125
Public Health, Department of	2,444,100	0	2,444,100
Louisiana	9,165,144	4,929,033	4,236,111
Transportation and Development, Department of	6,642,447	3,915,839	2,726,608
Wildlife and Fisheries, Department of	2,522,697	1,013,194	1,509,503
Maine	8,847,471	1,836,035	7,011,436
Conservation, Department of	383,000	123,000	260,000
Environmental Protection, Department of	225,000	0	225,000
Marine Resources, Department of	1,370,454	1,145,590	224,864
State Fire Marshal's Office	3,000	0	3,000
Technology Institute	6,156,711	0	6,156,711
Transportation, Department of	709,306	567,445	141,861
Maryland	22,825,402	1,643,939	21,181,463
Business and Economic Development, Department of	1,300,000	0	1,300,000
Health and Mental Hygiene, Department of	2,175,332	0	2,175,332
Natural Resources, Department of	247,000	0	247,000
Technology Development Corporation	15,524,146	0	15,524,146
Transportation, Department of	3,578,924	1,643,939	1,934,985
Massachusetts	4,884,430	814,609	4,069,821
Capital Asset Management, Division of	0	0	0
Environmental Protection, Department of	445,801	59,373	386,428
Fish and Game, Department of	671,115	180,100	491,015
Mental Health, Department of	1,965,502	0	1,965,502
Public Health, Department of	164,987	0	164,987
Transportation Planning, Office of	1,637,025	575,136	1,061,889
Michigan	9,469,440	6,885,798	2,583,642
Agriculture, Department of	36,910	0	36,910
Natural Resources, Department of	4,792,530	2,885,798	1,906,732
Transportation, Department of	4,640,000	4,000,000	640,000
Minnesota	12,212,546	3,457,202	8,755,344
Agriculture, Department of	2,718,439	714,987	2,003,452
Forest Resources Council	280,396	0	280,396
Pollution Control Agency	1,036,255	0	1,036,255
Transportation, Department of	8,177,456	2,742,215	5,435,241
Mississippi	7,168,109	5,671,257	1,496,852
Innovative Geospatial Solutions, Enterprise for	3,974,000	3,100,000	874,000
Transportation, Department of	1,809,735	1,532,976	276,759
Wildlife, Fisheries, and Parks, Department of	1,384,374	1,038,281	346,093
Missouri	13,329,841	3,161,177	10,168,664
Agriculture, Department of	189,947	26,615	163,332
Conservation, Department of	9,143,947	60,839	9,083,108
Natural Resources, Department of	338,141	301,118	37,023
Transportation, Department of	3,657,806	2,772,605	885,201
Montana	7,543,860	2,659,895	4,883,965
Agriculture, Department of	1,533,814	202,881	1,330,933
Commerce, Department of	2,774,601	0	2,774,601
Environmental Quality, Department of	69,066	37,046	32,020
Fish, Wildlife, and Parks	1,939,993	1,342,946	597,047
Natural Resources and Conservation, Department of	17,500	8,750	8,750
Transportation, Department of	1,208,886	1,068,272	140,614
Nebraska	4,232,691	878,999	3,353,692
Agriculture, Department of	232,850	139,185	93,665
Corn Board	344,913	0	344,913

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Dry Bean Commission	150,762	0	150,762
Grain Sorghum Board	1,988	0	1,988
Natural Resources, Department of	2,164,260	0	2,164,260
Roads, Department of	986,418	739,814	246,604
Wheat Board	351,500	0	351,500
Nevada	1,377,888	923,813	454,075
Transportation, Department of	1,048,465	676,745	371,720
Wildlife, Department of	329,423	247,068	82,355
New Hampshire	1,804,156	896,396	907,760
Agriculture, Markets, and Food, Department of	169,170	16,000	153,170
Resources and Economic Development, Department of	625,000	100,000	525,000
Transportation, Department of	1,009,986	780,396	229,590
New Jersey	27,939,539	3,735,882	24,203,657
Brain Injury Research, Commission on	2,530,362	0	2,530,362
Cancer Research, Commission on	1,200,000	0	1,200,000
Environmental Protection, Department of	4,305,318	423,835	3,881,483
Research and Treatment of Autism, Council for	5,563,345	0	5,563,345
Science and Technology, Commission on	3,695,000	0	3,695,000
Spinal Cord Research, Commission on	4,075,462	0	4,075,462
Transportation, Department of	6,570,052	3,312,047	3,258,005
New Mexico	1,422,955	1,072,611	350,344
Transportation, Department of	1,422,955	1,072,611	350,344
New York	167,231,605	52,420,540	114,811,065
Agriculture and Markets, Department of	3,892,582	3,610,000	282,582
Energy Research and Development Authority	41,029,418	0	41,029,418
Environmental Conservation, Department of	4,161,101	3,122,406	1,038,695
Foundation for Science, Technology and Innovation	52,300,000	12,000,000	40,300,000
Health, Department of	57,919,392	27,344,844	30,574,548
Transportation, Department of	7,929,112	6,343,290	1,585,822
North Carolina	27,342,380	10,223,740	17,118,640
Agriculture and Consumer Services, Department of	12,525,716	0	12,525,716
Environment and Natural Resources, Department of	3,551,664	478,740	3,072,924
Transportation, Department of	11,265,000	9,745,000	1,520,000
North Dakota	6,352,675	575,654	5,777,021
Agriculture, Department of	140,464	0	140,464
Lignite Research Council	2,098,967	0	2,098,967
Mineral Resources, Department of	45,000	0	45,000
Oil and Gas Research Program	1,186,820	0	1,186,820
Renewable Energy Research Program	979,013	0	979,013
Soybean Council	714,023	0	714,023
Transportation, Department of	598,349	575,654	22,695
Wheat Commission	590,039	0	590,039
Ohio	125,120,668	3,351,457	121,769,211
Air Quality Development Authority	1,120,000	0	1,120,000
Development, Department of	118,914,375	0	118,914,375
Mental Health, Department of	721,000	300,000	421,000
Natural Resources, Department of	3,253,900	2,297,236	956,664
Transportation, Department of	1,111,393	754,221	357,172
Oklahoma	21,226,236	5,229,705	15,996,531
Center for the Advancement of Science and Technology	15,345,706	0	15,345,706
Health, Department of	9,250	0	9,250
Sorghum Commission	22,500	0	22,500
Transportation, Department of	4,132,781	4,132,781	0

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Wheat Commission	253,434	0	253,434
Wildlife Conservation, Department of	1,462,565	1,096,924	365,641
Oregon	18,013,730	12,870,466	5,143,264
Agriculture, Department of	664,631	0	664,631
Fish and Wildlife, Department of	9,585,000	9,275,000	310,000
Forestry, Department of	354,882	33,248	321,634
Geology and Mineral Industries, Department of	4,097,576	1,301,446	2,796,130
Transportation, Department of	2,481,963	1,829,131	652,832
Watershed Enhancement Board	829,678	431,641	398,037
Pennsylvania	76,947,795	5,882,402	71,065,393
Agriculture, Department of	755,736	0	755,736
Community and Economic Development, Department of	6,839,000	0	6,839,000
Conservation and Natural Resources, Department of	2,731,005	180,958	2,550,047
Environmental Protection, Department of	1,859,108	1,467,460	391,648
Fish and Boat Commission	640,326	458,878	181,448
Game Commission	2,660,768	1,697,619	963,149
Health, Department of	58,482,594	0	58,482,594
Transportation, Department of	2,979,258	2,077,487	901,771
Rhode Island	1,461,239	281,728	1,179,511
Economic Development Corporation	1,109,080	0	1,109,080
Transportation, Department of	352,159	281,728	70,431
South Carolina	36,536,007	27,055,207	9,480,800
Health and Environmental Control, Department of	133,172	133,172	0
Mental Health, Department of	122,334	0	122,334
Natural Resources, Department of	32,939,330	24,351,464	8,587,866
Public Service Authority	185,322	0	185,322
Sea Grant Consortium	1,772,246	1,418,031	354,215
Transportation, Department of	1,383,603	1,152,540	231,063
South Dakota	3,762,637	3,145,143	617,494
Agriculture, Department of	25,000	0	25,000
Game, Fish and Parks, Department of	1,638,739	1,466,025	172,714
Transportation, Department of	2,098,898	1,679,118	419,780
Tennessee	1,064,262	851,410	212,852
Transportation, Department of	1,064,262	851,410	212,852
Texas	35,163,655	21,943,248	13,220,407
Agriculture, Department of	2,319,442	123,666	2,195,776
Environmental Quality, Commission on	3,888,189	0	3,888,189
Health and Human Services Commission	123,000	74,000	49,000
Parks and Wildlife, Department of	1,746,387	1,398,473	347,914
Transportation, Department of	25,071,272	20,347,109	4,724,163
Water Development Board	2,015,365	0	2,015,365
Utah	30,812,205	20,724,230	10,087,975
Health, Department of	50,322	50,322	0
Natural Resources, Department of	8,000,000	4,000,000	4,000,000
Science Technology and Research, Governor's Office of Economic Development	20,161,883	15,273,908	4,887,975
Transportation, Department of	2,600,000	1,400,000	1,200,000
Vermont	1,665,079	1,100,865	564,214
Agriculture, Agency of	865,900	415,900	450,000
Human Services, Agency of	132,198	132,198	0
Transportation, Agency of	666,981	552,767	114,214

TABLE 12. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Virginia	17,495,156	9,370,939	8,124,217
Agriculture and Consumer Services, Department of	2,271,833	98,288	2,173,545
Consolidated Lab Services, Division of	683,917	583,917	100,000
Corrections, Department of	897,484	0	897,484
Forensic Science, Department of	181,813	6,813	175,000
Health, Department of	46,962	46,962	0
Innovative Technology, Center for	1,480,000	1,480,000	0
Marine Resources Commission	2,441,157	1,500,000	941,157
Natural History, Museum of	560,718	140	560,578
Transportation, Department of	8,931,272	5,654,819	3,276,453
Washington	24,525,701	8,486,402	16,039,299
Agriculture, Department of	328,111	99,461	228,650
Fish and Wildlife, Department of	6,881,561	3,421,080	3,460,481
Grain Commission	3,345,600	0	3,345,600
Natural Resources, Department of	4,035,976	1,401,930	2,634,046
Potato Commission	794,391	0	794,391
Red Raspberry Commission	173,387	173,387	0
Transportation, Department of	5,402,675	3,390,544	2,012,131
Tree Fruit Research Commission	3,430,000	0	3,430,000
Wine Commission	134,000	0	134,000
West Virginia	23,867,732	7,830,732	16,037,000
Environmental Protection, Department of	986,278	59,250	927,028
Geological and Economic Survey	2,682,942	296,119	2,386,823
Higher Education Policy Commission	14,258,436	3,336,932	10,921,504
Highways, Department of	5,100,000	3,600,000	1,500,000
Justice and Community Services, Division of	8,277	2,034	6,243
Natural Resources, Division of	831,799	536,397	295,402
Wisconsin	12,435,548	7,890,044	4,545,504
Agriculture, Trade, and Consumer Protection, Department of	770,721	328,763	441,958
Economic Development Corporation	1,375,000	0	1,375,000
Natural Resources, Department of	6,717,528	4,393,797	2,323,731
Transportation, Department of	3,572,299	3,167,484	404,815
Wyoming	5,471,379	815,693	4,655,686
Agriculture, Department of	176,596	0	176,596
Environmental Quality, Department of	150,000	0	150,000
Game and Fish, Department of	1,291,150	403,605	887,545
Geological Survey	2,866,616	238,688	2,627,928
Transportation, Department of	687,017	173,400	513,617
Water Development Office	300,000	0	300,000
Puerto Rico ^c	551,391	0	551,391
Education Council	551,391	0	551,391

^a State and all others include nonprofit organizations, other state governments, and city, county, regional, township, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
United States ^b	1,403,816,235	403,299,698	1,000,516,537
Alabama	19,684,063	12,632,066	7,051,997
Conservation and Natural Resources, Department of	2,448,043	1,970,178	477,865
Forensic Science, Department of	475,402	314,252	161,150
Geological Survey	3,355,833	1,566,762	1,789,071
Marine Environmental Sciences Consortium	8,996,929	5,073,778	3,923,151
Transportation, Department of	4,407,856	3,707,096	700,760
Alaska	11,349,400	4,548,900	6,800,500
Fish and Game, Department of	2,697,600	490,000	2,207,600
Geological and Geophysical Surveys, Division of	6,084,800	2,004,900	4,079,900
Transportation and Public Facilities, Department of	2,567,000	2,054,000	513,000
Arizona	18,626,577	8,138,077	10,488,500
Agriculture, Department of	819,771	590,382	229,389
Game and Fish Department	4,643,079	3,768,025	875,054
Geological Survey	2,794,127	2,258,043	536,084
Health Services, Department of	8,330,000	0	8,330,000
Transportation, Department of	2,039,600	1,521,627	517,973
Arkansas	14,705,327	4,465,149	10,240,178
Beef Council	74,085	0	74,085
Catfish Promotion Board	43,648	0	43,648
Corn and Grain Sorghum Promotion Board	605,600	0	605,600
Game and Fish Commission	680,971	219,533	461,438
Highway and Transportation Department	927,990	660,534	267,456
Rice Research and Promotion Board	2,870,000	0	2,870,000
Science and Technology Authority	6,729,033	3,585,082	3,143,951
Soybean Promotion Board	2,611,000	0	2,611,000
Wheat Promotion Board	163,000	0	163,000
California	149,810,643	18,776,564	131,034,079
Energy Commission	95,975,000	1,725,000	94,250,000
Food and Agriculture, Department of	1,528,667	262,964	1,265,703
Transportation, Department of	37,445,000	16,784,000	20,661,000
Water Resources, Department of	14,861,976	4,600	14,857,376
Colorado	18,141,931	5,930,771	12,211,160
Economic Development, Office of	5,479,605	0	5,479,605
Natural Resources, Department of	7,654,500	2,464,946	5,189,554
Public Health and Environment, Department of	1,873,822	1,459,114	414,708
Public Safety, Department of	890,000	140,000	750,000
Transportation, Department of	2,244,004	1,866,711	377,293
Connecticut	39,192,091	11,158,166	28,033,925
Agricultural Experiment Station	10,631,320	3,418,677	7,212,643
Environmental Protection, Department of	8,101,784	3,459,553	4,642,231
Mental Health and Addiction Services, Department of	4,363,990	1,537,463	2,826,527
Public Health, Department of	11,894,644	5,000	11,889,644
Transportation, Department of	4,200,353	2,737,473	1,462,880
Delaware	2,609,902	847,732	1,762,170
Geological Survey	1,663,179	219,709	1,443,470
Natural Resources and Environmental Control, Department of	696,723	503,023	193,700
Transportation, Department of	250,000	125,000	125,000
District of Columbia	1,221,108	1,168,232	52,876
Health, Department of	956,728	956,728	0
Transportation, Department of	264,380	211,504	52,876

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Florida	150,764,438	26,588,661	124,175,777
Agriculture and Consumer Services, Department of	11,707,343	2,655,569	9,051,774
Citrus, Department of	9,445,480	0	9,445,480
Environmental Protection, Department of	2,787,307	276,268	2,511,039
Fish and Wildlife Conservation Commission	44,649,930	14,956,975	29,692,955
Health, Department of	64,723,630	0	64,723,630
Space	5,239,510	0	5,239,510
Transportation, Department of	12,211,238	8,699,849	3,511,389
Georgia	11,690,663	6,919,140	4,771,523
Herty Advanced Materials Development Center	3,600,000	0	3,600,000
Transportation, Department of	8,090,663	6,919,140	1,171,523
Hawaii	13,103,983	10,343,631	2,760,352
Agriculture, Department of	564,799	82,226	482,573
Business, Economic Development and Tourism, Department of	6,020,023	6,020,023	0
Land and Natural Resources, Department of	5,957,794	4,147,219	1,810,575
Transportation, Department of	561,367	94,163	467,204
Idaho	9,366,052	4,925,050	4,441,002
Barley Commission	94,342	0	94,342
Bean Commission	93,882	93,882	0
Environmental Quality, Department of	25,587	25,587	0
Fish and Game, Department of	4,210,814	3,175,425	1,035,389
Potato Commission	935,000	150,000	785,000
Transportation, Department of	1,580,312	1,385,456	194,856
Water Resources, Department of	1,828,500	94,700	1,733,800
Wheat Commission	597,615	0	597,615
Illinois	17,207,125	7,033,966	10,173,159
Children and Family Services, Department of	6,681,163	924,669	5,756,494
Public Health, Department of	680,013	0	680,013
State Police	558,641	2,520	556,121
Transportation, Department of	9,287,308	6,106,777	3,180,531
Indiana	6,983,364	5,428,287	1,555,077
Criminal Justice Institute	450,000	450,000	0
Economic Development Corporation	833,364	678,287	155,077
Natural Resources, Department of	1,700,000	1,500,000	200,000
Transportation, Department of	4,000,000	2,800,000	1,200,000
Iowa	36,992,222	3,391,265	33,600,957
College Student Aid Commission	92,753	92,753	0
Criminal and Juvenile Justice Programs, Division of	20,246	8,393	11,853
Economic Development Authority, Energy Office	26,590,826	0	26,590,826
Natural Resources, Department of	3,640,397	1,092,119	2,548,278
Transportation, Department of	6,050,000	2,100,000	3,950,000
Workforce Development	598,000	98,000	500,000
Kansas	6,635,626	3,675,258	2,960,368
Transportation, Department of	5,002,773	3,525,258	1,477,515
Wheat Commission	1,167,853	0	1,167,853
Wildlife, Parks, and Tourism, Department of	465,000	150,000	315,000
Kentucky	20,498,849	5,873,846	14,625,003
Agricultural Policy, Governor's Office of	45,130	0	45,130
Budget and Fiscal Management, Office of	4,425,113	4,135,113	290,000
Commercialization and Innovation, Department of	8,409,917	0	8,409,917
Early Childhood Development, Division of	541,000	250,000	291,000
Energy Policy, Governor's Office for	2,729,900	0	2,729,900
Environmental Education Council	37,666	37,666	0

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Fish and Wildlife Resources, Department of	2,111,023	1,440,942	670,081
Nature Preserves Commission	26,500	10,125	16,375
Public Health, Department of	2,172,600	0	2,172,600
Louisiana	9,203,635	4,936,833	4,266,802
Transportation and Development, Department of	6,396,052	3,779,256	2,616,796
Wildlife and Fisheries, Department of	2,807,583	1,157,577	1,650,006
Maine	9,918,765	2,439,296	7,479,469
Agriculture, Department of	72,750	72,750	0
Conservation, Department of	380,000	120,000	260,000
Drug Enforcement Agency	75,000	0	75,000
Environmental Protection, Department of	225,000	0	225,000
Marine Resources, Department of	2,127,121	1,841,857	285,264
State Fire Marshal's Office	3,000	0	3,000
Technology Institute	6,530,034	0	6,530,034
Transportation, Department of	505,860	404,689	101,171
Maryland	20,084,540	1,551,214	18,533,326
Business and Economic Development, Department of	1,300,000	0	1,300,000
Health and Mental Hygiene, Department of	2,400,000	0	2,400,000
Natural Resources, Department of	268,700	0	268,700
Technology Development Corporation	11,211,823	0	11,211,823
Transportation, Department of	4,904,017	1,551,214	3,352,803
Massachusetts	4,878,927	1,209,020	3,669,907
Capital Asset Management, Division of	0	0	0
Early Education and Care, Department of	486,173	386,178	99,995
Environmental Protection, Department of	259,147	47,033	212,114
Fish and Game, Department of	583,482	199,000	384,482
Mental Health, Department of	1,882,744	0	1,882,744
Public Health, Department of	163,121	0	163,121
Transportation Planning, Office of	1,504,260	576,809	927,451
Michigan	9,802,873	7,110,347	2,692,526
Agriculture, Department of	82,793	0	82,793
Natural Resources, Department of	4,595,080	2,710,347	1,884,733
Transportation, Department of	5,125,000	4,400,000	725,000
Minnesota	11,653,327	3,782,840	7,870,487
Agriculture, Department of	1,774,976	592,000	1,182,976
Forest Resources Council	114,592	0	114,592
Pollution Control Agency	134,502	0	134,502
Transportation, Department of	9,629,257	3,190,840	6,438,417
Mississippi	7,420,851	5,454,392	1,966,459
Innovative Geospatial Solutions, Enterprise for	2,686,000	1,855,000	831,000
Transportation, Department of	2,389,770	1,840,581	549,189
Wildlife, Fisheries, and Parks, Department of	2,345,081	1,758,811	586,270
Missouri	13,658,961	4,103,709	9,555,252
Agriculture, Department of	32,308	0	32,308
Conservation, Department of	8,216,486	5,195	8,211,291
Natural Resources, Department of	367,085	203,659	163,426
Transportation, Department of	5,043,082	3,894,855	1,148,227
Montana	6,474,190	2,868,954	3,605,236
Agriculture, Department of	1,653,768	169,624	1,484,144
Commerce, Department of	1,376,063	0	1,376,063
Environmental Quality, Department of	283,206	170,427	112,779
Fish, Wildlife, and Parks	1,857,865	1,396,362	461,503

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Natural Resources and Conservation, Department of	30,000	30,000	0
Transportation, Department of	1,273,288	1,102,541	170,747
Nebraska	4,061,651	1,071,515	2,990,136
Agriculture, Department of	342,385	229,088	113,297
Corn Board	267,123	0	267,123
Dry Bean Commission	141,220	0	141,220
Grain Sorghum Board	13,444	0	13,444
Natural Resources, Department of	1,770,243	0	1,770,243
Roads, Department of	1,123,236	842,427	280,809
Wheat Board	404,000	0	404,000
Nevada	1,868,869	659,868	1,209,001
Transportation, Department of	1,393,048	303,003	1,090,045
Wildlife, Department of	475,821	356,865	118,956
New Hampshire	1,921,421	1,081,852	839,569
Agriculture, Markets, and Food, Department of	40,969	2,860	38,109
Resources and Economic Development, Department of	684,000	111,000	573,000
Transportation, Department of	1,196,452	967,992	228,460
New Jersey	17,068,781	4,387,432	12,681,349
Brain Injury Research, Commission on	3,260,413	0	3,260,413
Cancer Research, Commission on	350,000	0	350,000
Environmental Protection, Department of	1,988,395	232,000	1,756,395
Research and Treatment of Autism, Council for	3,385,611	0	3,385,611
Spinal Cord Research, Commission on	2,541,718	0	2,541,718
Transportation, Department of	5,542,644	4,155,432	1,387,212
New Mexico	1,821,583	1,443,195	378,388
Transportation, Department of	1,821,583	1,443,195	378,388
New York	182,736,305	49,909,092	132,827,213
Agriculture and Markets, Department of	3,554,089	3,281,652	272,437
Energy Research and Development Authority	48,057,371	0	48,057,371
Environmental Conservation, Department of	2,939,284	2,239,696	699,588
Foundation for Science, Technology and Innovation	68,000,000	15,000,000	53,000,000
Health, Department of	55,192,779	25,393,518	29,799,261
Transportation, Department of	4,992,782	3,994,226	998,556
North Carolina	29,611,785	11,187,114	18,424,671
Agriculture and Consumer Services, Department of	12,773,500	0	12,773,500
Environment and Natural Resources, Department of	5,267,285	1,164,114	4,103,171
Transportation, Department of	11,571,000	10,023,000	1,548,000
North Dakota	8,072,257	557,822	7,514,435
Agriculture, Department of	75,710	0	75,710
Lignite Research Council	2,790,750	0	2,790,750
Mineral Resources, Department of	73,500	0	73,500
Oil and Gas Research Program	1,378,125	0	1,378,125
Renewable Energy Research Program	1,236,475	0	1,236,475
Soybean Council	808,649	0	808,649
Transportation, Department of	578,559	557,822	20,737
Wheat Commission	1,130,489	0	1,130,489
Ohio	159,322,228	4,455,517	154,866,711
Air Quality Development Authority	2,034,728	0	2,034,728
Development, Department of	150,072,744	0	150,072,744
Mental Health, Department of	721,000	300,000	421,000
Natural Resources, Department of	3,711,878	2,105,371	1,606,507
Transportation, Department of	2,781,878	2,050,146	731,732

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Oklahoma	20,304,740	6,138,385	14,166,355
Center for the Advancement of Science and Technology	13,052,997	0	13,052,997
Health, Department of	9,850	0	9,850
Sorghum Commission	22,500	0	22,500
Transportation, Department of	4,437,947	4,437,947	0
Wheat Commission	514,195	0	514,195
Wildlife Conservation, Department of	2,267,251	1,700,438	566,813
Oregon	20,001,272	14,753,575	5,247,697
Agriculture, Department of	582,446	0	582,446
Fish and Wildlife, Department of	11,326,000	10,758,000	568,000
Forestry, Department of	478,413	95,319	383,094
Geology and Mineral Industries, Department of	4,979,303	2,187,243	2,792,060
Transportation, Department of	2,494,162	1,713,013	781,149
Watershed Enhancement Board	140,948	0	140,948
Pennsylvania	71,098,139	6,652,868	64,445,271
Agriculture, Department of	640,671	0	640,671
Community and Economic Development, Department of	4,700,000	0	4,700,000
Conservation and Natural Resources, Department of	2,212,545	143,662	2,068,883
Environmental Protection, Department of	1,059,451	626,428	433,023
Fish and Boat Commission	781,643	564,548	217,095
Game Commission	3,695,614	1,940,357	1,755,257
Health, Department of	54,088,921	0	54,088,921
Transportation, Department of	3,919,294	3,377,873	541,421
Rhode Island	1,947,727	515,480	1,432,247
Economic Development Corporation	1,303,377	0	1,303,377
Transportation, Department of	644,350	515,480	128,870
South Carolina	47,795,394	36,355,976	11,439,418
Health and Environmental Control, Department of	721,804	721,804	0
Mental Health, Department of	122,334	0	122,334
Natural Resources, Department of	42,392,567	31,913,254	10,479,313
Public Service Authority	115,338	0	115,338
Sea Grant Consortium	2,862,766	2,378,572	484,194
Transportation, Department of	1,580,585	1,342,346	238,239
South Dakota	3,629,155	2,882,410	746,745
Game, Fish and Parks, Department of	1,628,888	1,282,196	346,692
Transportation, Department of	2,000,267	1,600,214	400,053
Tennessee	3,606,726	2,949,381	657,345
Environment and Conservation, Department of	320,000	320,000	0
Transportation, Department of	3,286,726	2,629,381	657,345
Texas	47,372,367	21,488,561	25,883,806
Agriculture, Department of	1,853,946	605,305	1,248,641
Cancer Prevention and Research Institute	15,715,498	0	15,715,498
Environmental Quality, Commission on	1,599,224	0	1,599,224
Health and Human Services Commission	123,000	74,000	49,000
Parks and Wildlife, Department of	1,819,498	1,487,897	331,601
Transportation, Department of	23,851,121	19,321,359	4,529,762
Water Development Board	2,410,080	0	2,410,080
Utah	34,418,764	20,687,819	13,730,945
Health, Department of	261,727	261,727	0
Natural Resources, Department of	8,000,000	4,000,000	4,000,000
Science Technology and Research, Governor's Office of Economic Development	23,557,037	15,026,092	8,530,945
Transportation, Department of	2,600,000	1,400,000	1,200,000

TABLE 13. State agency expenditures for R&D for all performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State and all others ^a
Vermont	1,711,673	1,184,957	526,716
Agriculture, Agency of	1,027,700	577,700	450,000
Human Services, Agency of	190,117	190,117	0
Transportation, Agency of	493,856	417,140	76,716
Virginia	17,241,804	9,735,857	7,505,947
Agriculture and Consumer Services, Department of	2,169,935	196,215	1,973,720
Consolidated Lab Services, Division of	784,808	684,808	100,000
Corrections, Department of	919,542	0	919,542
Forensic Science, Department of	160,439	4,439	156,000
Health, Department of	27,900	27,900	0
Innovative Technology, Center for	1,010,000	1,010,000	0
Marine Resources Commission	3,130,629	2,000,000	1,130,629
Natural History, Museum of	569,120	18,629	550,491
Transportation, Department of	8,469,431	5,793,866	2,675,565
Washington	24,500,489	7,320,769	17,179,720
Agriculture, Department of	190,841	0	190,841
Fish and Wildlife, Department of	7,190,560	3,273,560	3,917,000
Grain Commission	3,573,613	0	3,573,613
Natural Resources, Department of	4,032,000	722,245	3,309,755
Potato Commission	842,198	0	842,198
Red Raspberry Commission	225,447	225,447	0
Transportation, Department of	5,095,830	3,099,517	1,996,313
Tree Fruit Research Commission	3,215,000	0	3,215,000
Wine Commission	135,000	0	135,000
West Virginia	35,475,338	6,157,841	29,317,497
Agriculture, Department of	151,428	151,428	0
Environmental Protection, Department of	885,794	163,659	722,135
Geological and Economic Survey	3,274,416	719,602	2,554,814
Higher Education Policy Commission	24,577,042	4,128,786	20,448,256
Highways, Department of	5,583,425	297,532	5,285,893
Justice and Community Services, Division of	15,513	7,842	7,671
Natural Resources, Division of	987,720	688,992	298,728
Wisconsin	21,128,936	15,611,863	5,517,073
Agriculture, Trade, and Consumer Protection, Department of	536,004	243,280	292,724
Economic Development Corporation	7,979,595	6,206,000	1,773,595
Natural Resources, Department of	8,497,725	5,505,704	2,992,021
Transportation, Department of	4,115,612	3,656,879	458,733
Wyoming	5,419,398	809,183	4,610,215
Agriculture, Department of	147,226	0	147,226
Environmental Quality, Department of	150,000	0	150,000
Game and Fish, Department of	1,775,184	490,667	1,284,517
Geological Survey	2,540,432	255,028	2,285,404
Transportation, Department of	506,556	63,488	443,068
Water Development Office	300,000	0	300,000
Puerto Rico ^c	537,869	0	537,869
Education Council	537,869	0	537,869

^a State and all others include nonprofit organizations, other state governments, and city, county, regional, township, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
United States ^b	416,096,832	174,886,520	206,557,400	34,652,912
Alabama	9,749,394	6,491,488	2,476,195	781,711
Conservation and Natural Resources, Department of	1,231,288	1,025,967	205,321	0
Forensic Science, Department of	472,892	409,115	63,777	0
Geological Survey	3,196,187	1,391,883	1,526,044	278,260
Marine Environmental Sciences Consortium	4,562,239	3,664,523	394,265	503,451
Transportation, Department of	286,788	0	286,788	0
Alaska	7,885,200	1,805,100	5,916,100	164,000
Fish and Game, Department of	2,123,300	377,700	1,745,600	0
Geological and Geophysical Surveys, Division of	5,631,900	1,323,400	4,144,500	164,000
Transportation and Public Facilities, Department of	130,000	104,000	26,000	0
Arizona	7,545,171	5,302,731	1,680,713	561,727
Agriculture, Department of	0	0	0	0
Game and Fish Department	4,438,689	3,375,465	583,543	479,681
Geological Survey	1,776,082	1,062,966	631,070	82,046
Health Services, Department of	250,000	0	250,000	0
Transportation, Department of	1,080,400	864,300	216,100	0
Arkansas	5,406,407	396,039	142,368	4,868,000
Beef Council	0	0	0	0
Catfish Promotion Board	0	0	0	0
Corn and Grain Sorghum Promotion Board	0	0	0	0
Game and Fish Commission	122,833	12,000	110,833	0
Highway and Transportation Department	115,565	84,030	31,535	0
Rice Research and Promotion Board	2,727,000	0	0	2,727,000
Science and Technology Authority	300,009	300,009	0	0
Soybean Promotion Board	2,141,000	0	0	2,141,000
Wheat Promotion Board	0	0	0	0
California	30,126,000	3,661,000	18,348,000	8,117,000
Energy Commission	11,745,000	0	11,745,000	0
Food and Agriculture, Department of	0	0	0	0
Transportation, Department of	10,214,000	3,661,000	6,553,000	0
Water Resources, Department of	8,167,000	0	50,000	8,117,000
Colorado	7,108,498	3,336,387	3,290,301	481,810
Economic Development, Office of	0	0	0	0
Natural Resources, Department of	5,323,727	2,484,570	2,357,347	481,810
Public Health and Environment, Department of	5,000	0	5,000	0
Public Safety, Department of	890,000	140,000	750,000	0
Transportation, Department of	889,771	711,817	177,954	0
Connecticut	22,561,170	8,915,366	13,412,694	233,110
Agricultural Experiment Station	10,263,017	3,534,893	6,495,014	233,110
Environmental Protection, Department of	6,944,985	2,841,836	4,103,149	0
Mental Health and Addiction Services, Department of	2,535,935	1,043,845	1,492,090	0
Public Health, Department of	322,573	245,000	77,573	0
Transportation, Department of	2,494,660	1,249,792	1,244,868	0
Delaware	1,968,736	500,979	1,417,757	50,000
Geological Survey	1,512,415	329,658	1,182,757	0
Natural Resources and Environmental Control, Department of	456,321	171,321	235,000	50,000
Transportation, Department of	0	0	0	0
District of Columbia	189,691	160,105	29,586	0
Health, Department of	41,760	41,760	0	0
Transportation, Department of	147,931	118,345	29,586	0

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Florida	50,546,200	18,239,295	30,972,399	1,334,506
Agriculture and Consumer Services, Department of	3,097,116	1,637,559	1,459,557	0
Citrus, Department of	258,000	0	258,000	0
Environmental Protection, Department of	1,931,252	217,645	1,616,669	96,938
Fish and Wildlife Conservation Commission	45,259,832	16,384,091	27,638,173	1,237,568
Health, Department of	0	0	0	0
Space	0	0	0	0
Transportation, Department of	0	0	0	0
Georgia	3,200,000	0	0	3,200,000
Herty Advanced Materials Development Center	3,200,000	0	0	3,200,000
Transportation, Department of	0	0	0	0
Hawaii	3,049,593	2,040,552	904,966	104,075
Agriculture, Department of	335,006	34,787	300,219	0
Business, Economic Development and Tourism, Department of	467,423	467,423	0	0
Land and Natural Resources, Department of	2,163,164	1,532,342	526,747	104,075
Transportation, Department of	84,000	6,000	78,000	0
Idaho	4,616,645	3,079,605	1,249,975	287,065
Barley Commission	75,255	0	0	75,255
Bean Commission	0	0	0	0
Environmental Quality, Department of	34,979	34,979	0	0
Fish and Game, Department of	3,728,696	2,740,394	821,492	166,810
Potato Commission	45,000	0	0	45,000
Transportation, Department of	177,915	142,332	35,583	0
Water Resources, Department of	554,800	161,900	392,900	0
Wheat Commission	0	0	0	0
Illinois	1,948,263	1,066,301	881,962	0
Children and Family Services, Department of	0	0	0	0
Commerce and Economic Opportunity, Department of	0	0	0	0
Public Health, Department of	0	0	0	0
State Police	571,928	2,801	569,127	0
Transportation, Department of	1,376,335	1,063,500	312,835	0
Indiana	975,000	680,000	295,000	0
Criminal Justice Institute	200,000	200,000	0	0
Economic Development Corporation	0	0	0	0
Natural Resources, Department of	300,000	100,000	200,000	0
Transportation, Department of	475,000	380,000	95,000	0
Iowa	625,480	92,794	530,515	2,171
College Student Aid Commission	83,480	83,480	0	0
Criminal and Juvenile Justice Programs, Division of	22,000	9,314	10,515	2,171
Natural Resources, Department of	0	0	0	0
Transportation, Department of	520,000	0	520,000	0
Kansas	1,448,133	886,026	562,107	0
Transportation, Department of	1,393,133	846,026	547,107	0
Wheat Commission	0	0	0	0
Wildlife, Parks, and Tourism, Department of	55,000	40,000	15,000	0
Kentucky	1,635,906	1,053,812	582,094	0
Agricultural Policy, Governor's Office of	0	0	0	0
Budget and Fiscal Management, Office of	0	0	0	0
Commercialization and Innovation, Department of	100,000	0	100,000	0
Energy Policy, Governor's Office for	0	0	0	0
Environmental Education Council	0	0	0	0
Fish and Wildlife Resources, Department of	1,518,406	1,044,437	473,969	0

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Nature Preserves Commission	17,500	9,375	8,125	0
Public Health, Department of	0	0	0	0
Louisiana	6,523,169	4,233,248	1,925,527	364,394
Transportation and Development, Department of	4,809,020	3,614,208	853,326	341,486
Wildlife and Fisheries, Department of	1,714,149	619,040	1,072,201	22,908
Maine	1,542,846	845,913	651,327	45,606
Conservation, Department of	383,000	123,000	250,000	10,000
Environmental Protection, Department of	150,000	0	150,000	0
Marine Resources, Department of	711,502	486,638	189,258	35,606
State Fire Marshal's Office	3,000	0	3,000	0
Technology Institute	0	0	0	0
Transportation, Department of	295,344	236,275	59,069	0
Maryland	1,962,000	436,000	1,509,000	17,000
Business and Economic Development, Department of	1,300,000	0	1,300,000	0
Health and Mental Hygiene, Department of	0	0	0	0
Natural Resources, Department of	117,000	0	100,000	17,000
Technology Development Corporation	0	0	0	0
Transportation, Department of	545,000	436,000	109,000	0
Massachusetts	862,331	91,473	478,911	291,947
Capital Asset Management, Division of	0	0	0	0
Environmental Protection, Department of	161,801	11,373	150,428	0
Fish and Game, Department of	571,115	80,100	199,068	291,947
Mental Health, Department of	129,415	0	129,415	0
Public Health, Department of	0	0	0	0
Transportation Planning, Office of	0	0	0	0
Michigan	1,688,930	1,031,365	657,565	0
Agriculture, Department of	0	0	0	0
Natural Resources, Department of	1,648,930	1,031,365	617,565	0
Transportation, Department of	40,000	0	40,000	0
Minnesota	1,507,582	714,987	284,106	508,489
Agriculture, Department of	956,093	714,987	241,106	0
Forest Resources Council	43,000	0	43,000	0
Pollution Control Agency	0	0	0	0
Transportation, Department of	508,489	0	0	508,489
Mississippi	3,933,046	3,064,819	868,227	0
Innovative Geospatial Solutions, Enterprise for	1,953,000	1,550,000	403,000	0
Transportation, Department of	595,672	476,538	119,134	0
Wildlife, Fisheries, and Parks, Department of	1,384,374	1,038,281	346,093	0
Missouri	8,065,733	692,767	7,365,685	7,281
Agriculture, Department of	0	0	0	0
Conservation, Department of	7,136,153	60,839	7,075,314	0
Natural Resources, Department of	122,557	85,534	29,742	7,281
Transportation, Department of	807,023	546,394	260,629	0
Montana	1,604,601	1,199,328	264,543	140,730
Agriculture, Department of	0	0	0	0
Commerce, Department of	0	0	0	0
Environmental Quality, Department of	59,131	31,871	27,260	0
Fish, Wildlife, and Parks	1,323,392	989,795	192,867	140,730
Natural Resources and Conservation, Department of	0	0	0	0
Transportation, Department of	222,078	177,662	44,416	0

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Nebraska	327,845	0	177,083	150,762
Agriculture, Department of	0	0	0	0
Corn Board	0	0	0	0
Dry Bean Commission	150,762	0	0	150,762
Grain Sorghum Board	0	0	0	0
Natural Resources, Department of	173,583	0	173,583	0
Roads, Department of	0	0	0	0
Wheat Board	3,500	0	3,500	0
Nevada	339,516	34,078	305,438	0
Transportation, Department of	294,079	0	294,079	0
Wildlife, Department of	45,437	34,078	11,359	0
New Hampshire	502,616	223,026	279,590	0
Agriculture, Markets, and Food, Department of	0	0	0	0
Resources and Economic Development, Department of	150,000	100,000	50,000	0
Transportation, Department of	352,616	123,026	229,590	0
New Jersey	3,407,529	1,264,005	2,143,524	0
Brain Injury Research, Commission on	207,117	0	207,117	0
Cancer Research, Commission on	0	0	0	0
Environmental Protection, Department of	1,523,900	111,000	1,412,900	0
Research and Treatment of Autism, Council for	39,556	0	39,556	0
Science and Technology, Commission on	0	0	0	0
Spinal Cord Research, Commission on	378,951	0	378,951	0
Transportation, Department of	1,258,005	1,153,005	105,000	0
New Mexico	560,955	448,764	112,191	0
Transportation, Department of	560,955	448,764	112,191	0
New York	101,863,804	37,726,818	62,407,722	1,729,264
Agriculture and Markets, Department of	2,775,000	2,775,000	0	0
Energy Research and Development Authority	10,598,946	0	10,598,946	0
Environmental Conservation, Department of	949,681	379,712	569,969	0
Foundation for Science, Technology and Innovation	36,800,000	5,400,000	31,400,000	0
Health, Department of	47,726,192	26,760,918	19,236,010	1,729,264
Transportation, Department of	3,013,985	2,411,188	602,797	0
North Carolina	18,843,326	2,005,717	13,289,928	3,547,681
Agriculture and Consumer Services, Department of	12,525,716	0	9,821,159	2,704,557
Environment and Natural Resources, Department of	3,197,610	405,717	2,718,769	73,124
Transportation, Department of	3,120,000	1,600,000	750,000	770,000
North Dakota	591,770	58,205	533,565	0
Agriculture, Department of	0	0	0	0
Lignite Research Council	304,909	0	304,909	0
Mineral Resources, Department of	45,000	0	45,000	0
Oil and Gas Research Program	109,105	0	109,105	0
Renewable Energy Research Program	60,000	0	60,000	0
Soybean Council	0	0	0	0
Transportation, Department of	72,756	58,205	14,551	0
Wheat Commission	0	0	0	0
Ohio	1,754,417	912,934	841,483	0
Air Quality Development Authority	0	0	0	0
Development, Department of	0	0	0	0
Mental Health, Department of	490,000	300,000	190,000	0
Natural Resources, Department of	1,011,197	612,934	398,263	0
Transportation, Department of	253,220	0	253,220	0

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Oklahoma	9,250	0	9,250	0
Center for the Advancement of Science and Technology	0	0	0	0
Health, Department of	9,250	0	9,250	0
Sorghum Commission	0	0	0	0
Transportation, Department of	0	0	0	0
Wheat Commission	0	0	0	0
Wildlife Conservation, Department of	0	0	0	0
Oregon	14,368,928	10,828,777	1,175,547	2,364,604
Agriculture, Department of	0	0	0	0
Fish and Wildlife, Department of	9,535,000	9,225,000	310,000	0
Forestry, Department of	70,181	7,080	58,164	4,937
Geology and Mineral Industries, Department of	3,996,254	1,200,124	436,463	2,359,667
Transportation, Department of	691,265	396,573	294,692	0
Watershed Enhancement Board	76,228	0	76,228	0
Pennsylvania	5,052,858	2,294,633	2,758,225	0
Agriculture, Department of	0	0	0	0
Community and Economic Development, Department of	0	0	0	0
Conservation and Natural Resources, Department of	1,639,317	118,860	1,520,457	0
Environmental Protection, Department of	215,999	206,221	9,778	0
Fish and Boat Commission	555,633	416,532	139,101	0
Game Commission	1,976,639	1,020,804	955,835	0
Health, Department of	0	0	0	0
Transportation, Department of	665,270	532,216	133,054	0
Rhode Island	53,547	42,838	10,709	0
Economic Development Corporation	0	0	0	0
Transportation, Department of	53,547	42,838	10,709	0
South Carolina	32,641,056	24,804,733	6,336,323	1,500,000
Health and Environmental Control, Department of	133,172	133,172	0	0
Mental Health, Department of	21,450	0	21,450	0
Natural Resources, Department of	31,939,330	24,351,464	6,087,866	1,500,000
Public Service Authority	0	0	0	0
Sea Grant Consortium	354,215	160,000	194,215	0
Transportation, Department of	192,889	160,097	32,792	0
South Dakota	722,906	578,325	144,581	0
Agriculture, Department of	0	0	0	0
Game, Fish and Parks, Department of	0	0	0	0
Transportation, Department of	722,906	578,325	144,581	0
Tennessee	0	0	0	0
Transportation, Department of	0	0	0	0
Texas	2,813,346	2,129,968	683,378	0
Agriculture, Department of	0	0	0	0
Environmental Quality, Commission on	0	0	0	0
Health and Human Services Commission	123,000	74,000	49,000	0
Parks and Wildlife, Department of	1,073,290	763,039	310,251	0
Transportation, Department of	1,617,056	1,292,929	324,127	0
Water Development Board	0	0	0	0
Utah	10,150,322	5,200,322	3,450,000	1,500,000
Health, Department of	50,322	50,322	0	0
Natural Resources, Department of	8,000,000	4,000,000	2,500,000	1,500,000
Science Technology and Research, Governor's Office of Economic Development	0	0	0	0
Transportation, Department of	2,100,000	1,150,000	950,000	0

TABLE 14. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2010
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Vermont	1,442,023	922,420	519,603	0
Agriculture, Agency of	865,900	415,900	450,000	0
Human Services, Agency of	132,198	132,198	0	0
Transportation, Agency of	443,925	374,322	69,603	0
Virginia	6,744,260	3,764,409	2,923,124	56,727
Agriculture and Consumer Services, Department of	0	0	0	0
Consolidated Lab Services, Division of	513,917	513,917	0	0
Corrections, Department of	897,484	0	897,484	0
Forensic Science, Department of	181,813	6,813	175,000	0
Health, Department of	46,962	46,962	0	0
Innovative Technology, Center for	430,000	430,000	0	0
Marine Resources Commission	0	0	0	0
Natural History, Museum of	560,718	140	503,851	56,727
Transportation, Department of	4,113,366	2,766,577	1,346,789	0
Washington	9,866,316	4,606,742	3,862,891	1,396,683
Agriculture, Department of	0	0	0	0
Fish and Wildlife, Department of	6,813,791	3,421,080	2,152,478	1,240,233
Grain Commission	0	0	0	0
Natural Resources, Department of	1,056,177	235,400	818,827	1,950
Potato Commission	54,500	0	0	54,500
Red Raspberry Commission	0	0	0	0
Transportation, Department of	1,461,848	950,262	511,586	0
Tree Fruit Research Commission	480,000	0	380,000	100,000
Wine Commission	0	0	0	0
West Virginia	7,094,173	2,915,292	3,493,095	685,786
Environmental Protection, Department of	522,573	15,250	187,851	319,472
Geological and Economic Survey	2,682,942	296,119	2,270,509	116,314
Higher Education Policy Commission	721,822	338,732	383,090	0
Highways, Department of	2,350,000	1,750,000	350,000	250,000
Justice and Community Services, Division of	8,277	2,034	6,243	0
Natural Resources, Division of	808,559	513,157	295,402	0
Wisconsin	5,060,717	3,817,287	1,082,647	160,783
Agriculture, Trade, and Consumer Protection, Department of	41,160	26,801	14,359	0
Economic Development Corporation	0	0	0	0
Natural Resources, Department of	4,719,109	3,550,128	1,008,198	160,783
Transportation, Department of	300,448	240,358	60,090	0
Wyoming	3,609,627	289,747	3,319,880	0
Agriculture, Department of	0	0	0	0
Environmental Quality, Department of	0	0	0	0
Game and Fish, Department of	564,002	236,664	327,338	0
Geological Survey	2,599,466	0	2,599,466	0
Transportation, Department of	446,159	53,083	393,076	0
Water Development Office	0	0	0	0
Puerto Rico ^c	360,000	0	360,000	0
Education Council	360,000	0	360,000	0

^a Other includes nonprofit organizations, other state governments, and city, county, regional, township, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTE: Internal performers include employees within the same state department or agency in support of an internal R&D project.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
United States ^b	461,506,205	186,828,964	229,500,487	45,176,754
Alabama	14,250,319	7,901,631	2,467,546	3,881,142
Conservation and Natural Resources, Department of	1,135,367	946,839	188,528	0
Forensic Science, Department of	475,402	314,252	161,150	0
Geological Survey	3,355,833	1,566,762	1,462,260	326,811
Marine Environmental Sciences Consortium	8,996,929	5,073,778	368,820	3,554,331
Transportation, Department of	286,788	0	286,788	0
Alaska	9,004,800	2,666,300	5,842,000	496,500
Fish and Game, Department of	2,697,600	490,000	2,207,600	0
Geological and Geophysical Surveys, Division of	6,051,200	1,971,300	3,583,400	496,500
Transportation and Public Facilities, Department of	256,000	205,000	51,000	0
Arizona	7,410,362	5,628,729	1,394,851	386,782
Agriculture, Department of	0	0	0	0
Game and Fish Department	4,137,092	3,262,038	571,161	303,893
Geological Survey	1,710,870	1,316,791	311,190	82,889
Health Services, Department of	250,000	0	250,000	0
Transportation, Department of	1,312,400	1,049,900	262,500	0
Arkansas	6,077,854	462,905	133,949	5,481,000
Beef Council	0	0	0	0
Catfish Promotion Board	0	0	0	0
Corn and Grain Sorghum Promotion Board	0	0	0	0
Game and Fish Commission	116,250	12,000	104,250	0
Highway and Transportation Department	144,978	115,279	29,699	0
Rice Research and Promotion Board	2,870,000	0	0	2,870,000
Science and Technology Authority	335,626	335,626	0	0
Soybean Promotion Board	2,611,000	0	0	2,611,000
Wheat Promotion Board	0	0	0	0
California	38,369,776	4,418,000	19,933,116	14,018,660
Energy Commission	13,129,000	0	13,129,000	0
Food and Agriculture, Department of	0	0	0	0
Transportation, Department of	10,997,000	4,418,000	6,579,000	0
Water Resources, Department of	14,243,776	0	225,116	14,018,660
Colorado	6,942,978	3,083,445	3,452,847	406,686
Economic Development, Office of	0	0	0	0
Natural Resources, Department of	5,238,226	2,292,843	2,538,697	406,686
Public Health and Environment, Department of	1,500	0	1,500	0
Public Safety, Department of	890,000	140,000	750,000	0
Transportation, Department of	813,252	650,602	162,650	0
Connecticut	23,573,706	8,998,439	14,010,735	564,532
Agricultural Experiment Station	10,631,320	3,418,677	6,673,111	539,532
Environmental Protection, Department of	7,219,560	2,884,651	4,334,909	0
Mental Health and Addiction Services, Department of	3,043,830	1,537,463	1,506,367	0
Public Health, Department of	258,906	5,000	228,906	25,000
Transportation, Department of	2,420,090	1,152,648	1,267,442	0
Delaware	2,049,018	411,848	1,637,170	0
Geological Survey	1,663,179	219,709	1,443,470	0
Natural Resources and Environmental Control, Department of	385,839	192,139	193,700	0
Transportation, Department of	0	0	0	0
District of Columbia	220,886	206,508	14,378	0
Health, Department of	148,997	148,997	0	0
Transportation, Department of	71,889	57,511	14,378	0

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Florida	48,327,623	16,915,588	29,992,602	1,419,433
Agriculture and Consumer Services, Department of	3,029,030	1,687,215	1,341,815	0
Citrus, Department of	254,000	0	254,000	0
Environmental Protection, Department of	2,015,890	271,398	1,701,934	42,558
Fish and Wildlife Conservation Commission	43,028,703	14,956,975	26,694,853	1,376,875
Health, Department of	0	0	0	0
Space	0	0	0	0
Transportation, Department of	0	0	0	0
Georgia	3,600,000	0	0	3,600,000
Herty Advanced Materials Development Center	3,600,000	0	0	3,600,000
Transportation, Department of	0	0	0	0
Hawaii	3,667,047	2,392,388	1,187,251	87,408
Agriculture, Department of	384,151	54,971	321,280	7,900
Business, Economic Development and Tourism, Department of	430,459	430,459	0	0
Land and Natural Resources, Department of	2,360,494	1,882,219	398,767	79,508
Transportation, Department of	491,943	24,739	467,204	0
Idaho	4,430,450	2,942,905	1,181,599	305,946
Barley Commission	50,039	0	0	50,039
Bean Commission	0	0	0	0
Environmental Quality, Department of	3,005	3,005	0	0
Fish and Game, Department of	3,636,677	2,708,697	732,073	195,907
Potato Commission	60,000	0	0	60,000
Transportation, Department of	170,629	136,503	34,126	0
Water Resources, Department of	510,100	94,700	415,400	0
Wheat Commission	0	0	0	0
Illinois	2,049,697	1,158,450	891,247	0
Children and Family Services, Department of	0	0	0	0
Public Health, Department of	0	0	0	0
State Police	558,641	2,520	556,121	0
Transportation, Department of	1,491,056	1,155,930	335,126	0
Indiana	975,000	680,000	295,000	0
Criminal Justice Institute	200,000	200,000	0	0
Economic Development Corporation	0	0	0	0
Natural Resources, Department of	300,000	100,000	200,000	0
Transportation, Department of	475,000	380,000	95,000	0
Iowa	1,260,999	199,146	807,721	254,132
College Student Aid Commission	92,753	92,753	0	0
Criminal and Juvenile Justice Programs, Division of	20,246	8,393	7,721	4,132
Economic Development Authority, Energy Office	0	0	0	0
Natural Resources, Department of	0	0	0	0
Transportation, Department of	550,000	0	550,000	0
Workforce Development	598,000	98,000	250,000	250,000
Kansas	1,501,433	930,106	571,327	0
Transportation, Department of	1,436,433	880,106	556,327	0
Wheat Commission	0	0	0	0
Wildlife, Parks, and Tourism, Department of	65,000	50,000	15,000	0
Kentucky	2,137,354	1,380,967	756,387	0
Agricultural Policy, Governor's Office of	0	0	0	0
Budget and Fiscal Management, Office of	0	0	0	0
Commercialization and Innovation, Department of	100,000	0	100,000	0
Early Childhood Development, Division of	291,000	291,000	0	0
Energy Policy, Governor's Office for	0	0	0	0
Environmental Education Council	0	0	0	0

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Fish and Wildlife Resources, Department of	1,727,854	1,079,842	648,012	0
Nature Preserves Commission	18,500	10,125	8,375	0
Public Health, Department of	0	0	0	0
Louisiana	7,253,894	4,346,033	2,721,138	186,723
Transportation and Development, Department of	5,137,074	3,512,763	1,459,180	165,131
Wildlife and Fisheries, Department of	2,116,820	833,270	1,261,958	21,592
Maine	1,883,123	1,128,981	657,494	96,648
Agriculture, Department of	0	0	0	0
Conservation, Department of	380,000	120,000	250,000	10,000
Drug Enforcement Agency	0	0	0	0
Environmental Protection, Department of	150,000	0	150,000	0
Marine Resources, Department of	1,070,689	785,434	198,607	86,648
State Fire Marshal's Office	3,000	0	3,000	0
Technology Institute	0	0	0	0
Transportation, Department of	279,434	223,547	55,887	0
Maryland	1,928,700	436,000	1,474,000	18,700
Business and Economic Development, Department of	1,300,000	0	1,300,000	0
Health and Mental Hygiene, Department of	0	0	0	0
Natural Resources, Department of	83,700	0	65,000	18,700
Technology Development Corporation	0	0	0	0
Transportation, Department of	545,000	436,000	109,000	0
Massachusetts	785,738	111,033	516,888	157,817
Capital Asset Management, Division of	0	0	0	0
Early Education and Care, Department of	0	0	0	0
Environmental Protection, Department of	168,147	12,033	156,114	0
Fish and Game, Department of	483,482	99,000	226,665	157,817
Mental Health, Department of	134,109	0	134,109	0
Public Health, Department of	0	0	0	0
Transportation Planning, Office of	0	0	0	0
Michigan	1,509,097	913,168	595,929	0
Agriculture, Department of	0	0	0	0
Natural Resources, Department of	1,484,097	913,168	570,929	0
Transportation, Department of	25,000	0	25,000	0
Minnesota	1,509,585	596,480	296,700	616,405
Agriculture, Department of	782,000	592,000	190,000	0
Forest Resources Council	40,000	0	40,000	0
Pollution Control Agency	0	0	0	0
Transportation, Department of	687,585	4,480	66,700	616,405
Mississippi	4,028,133	2,887,053	1,141,080	0
Innovative Geospatial Solutions, Enterprise for	979,000	565,000	414,000	0
Transportation, Department of	704,052	563,242	140,810	0
Wildlife, Fisheries, and Parks, Department of	2,345,081	1,758,811	586,270	0
Missouri	7,546,964	679,975	6,802,036	64,953
Agriculture, Department of	0	0	0	0
Conservation, Department of	6,470,271	5,195	6,465,076	0
Natural Resources, Department of	158,278	47,659	45,666	64,953
Transportation, Department of	918,415	627,121	291,294	0
Montana	1,694,519	1,331,450	323,069	40,000
Agriculture, Department of	0	0	0	0
Commerce, Department of	0	0	0	0
Environmental Quality, Department of	87,031	53,572	33,459	0
Fish, Wildlife, and Parks	1,365,003	1,083,890	241,113	40,000

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Natural Resources and Conservation, Department of	0	0	0	0
Transportation, Department of	242,485	193,988	48,497	0
Nebraska	320,392	0	179,172	141,220
Agriculture, Department of	0	0	0	0
Corn Board	0	0	0	0
Dry Bean Commission	141,220	0	0	141,220
Grain Sorghum Board	0	0	0	0
Natural Resources, Department of	175,172	0	175,172	0
Roads, Department of	0	0	0	0
Wheat Board	4,000	0	4,000	0
Nevada	428,607	49,223	379,384	0
Transportation, Department of	362,976	0	362,976	0
Wildlife, Department of	65,631	49,223	16,408	0
New Hampshire	591,869	290,409	301,460	0
Agriculture, Markets, and Food, Department of	0	0	0	0
Resources and Economic Development, Department of	184,000	111,000	73,000	0
Transportation, Department of	407,869	179,409	228,460	0
New Jersey	2,980,802	904,212	2,076,590	0
Brain Injury Research, Commission on	132,172	0	132,172	0
Cancer Research, Commission on	0	0	0	0
Environmental Protection, Department of	1,460,400	122,000	1,338,400	0
Research and Treatment of Autism, Council for	320,180	0	320,180	0
Spinal Cord Research, Commission on	180,838	0	180,838	0
Transportation, Department of	887,212	782,212	105,000	0
New Mexico	494,193	395,354	98,839	0
Transportation, Department of	494,193	395,354	98,839	0
New York	108,093,556	34,624,354	71,989,410	1,479,792
Agriculture and Markets, Department of	2,775,000	2,775,000	0	0
Energy Research and Development Authority	11,551,001	0	11,551,001	0
Environmental Conservation, Department of	963,959	382,040	581,919	0
Foundation for Science, Technology and Innovation	47,400,000	5,400,000	42,000,000	0
Health, Department of	42,914,417	24,075,971	17,358,654	1,479,792
Transportation, Department of	2,489,179	1,991,343	497,836	0
North Carolina	19,478,718	2,365,444	13,727,698	3,385,576
Agriculture and Consumer Services, Department of	12,773,500	0	10,209,680	2,563,820
Environment and Natural Resources, Department of	3,527,218	735,444	2,758,018	33,756
Transportation, Department of	3,178,000	1,630,000	760,000	788,000
North Dakota	366,294	61,823	304,471	0
Agriculture, Department of	0	0	0	0
Lignite Research Council	141,250	0	141,250	0
Mineral Resources, Department of	73,500	0	73,500	0
Oil and Gas Research Program	44,265	0	44,265	0
Renewable Energy Research Program	30,000	0	30,000	0
Soybean Council	0	0	0	0
Transportation, Department of	77,279	61,823	15,456	0
Wheat Commission	0	0	0	0
Ohio	2,645,393	1,080,159	1,565,234	0
Air Quality Development Authority	0	0	0	0
Development, Department of	0	0	0	0
Mental Health, Department of	490,000	300,000	190,000	0
Natural Resources, Department of	1,944,556	780,159	1,164,397	0
Transportation, Department of	210,837	0	210,837	0

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Oklahoma	9,850	0	9,850	0
Center for the Advancement of Science and Technology	0	0	0	0
Health, Department of	9,850	0	9,850	0
Sorghum Commission	0	0	0	0
Transportation, Department of	0	0	0	0
Wheat Commission	0	0	0	0
Wildlife Conservation, Department of	0	0	0	0
Oregon	17,063,005	13,193,665	1,418,727	2,450,613
Agriculture, Department of	0	0	0	0
Fish and Wildlife, Department of	11,266,000	10,698,000	568,000	0
Forestry, Department of	107,203	9,039	84,793	13,371
Geology and Mineral Industries, Department of	4,803,055	2,010,995	354,818	2,437,242
Transportation, Department of	806,249	475,631	330,618	0
Watershed Enhancement Board	80,498	0	80,498	0
Pennsylvania	5,826,832	2,411,671	3,415,161	0
Agriculture, Department of	0	0	0	0
Community and Economic Development, Department of	0	0	0	0
Conservation and Natural Resources, Department of	1,594,754	126,662	1,468,092	0
Environmental Protection, Department of	215,631	145,197	70,434	0
Fish and Boat Commission	694,905	521,179	173,726	0
Game Commission	2,780,122	1,185,497	1,594,625	0
Health, Department of	0	0	0	0
Transportation, Department of	541,420	433,136	108,284	0
Rhode Island	80,000	64,000	16,000	0
Economic Development Corporation	0	0	0	0
Transportation, Department of	80,000	64,000	16,000	0
South Carolina	42,532,704	32,831,302	8,201,402	1,500,000
Health and Environmental Control, Department of	721,804	721,804	0	0
Mental Health, Department of	21,450	0	21,450	0
Natural Resources, Department of	41,391,567	31,913,254	7,978,313	1,500,000
Public Service Authority	0	0	0	0
Sea Grant Consortium	354,215	160,000	194,215	0
Transportation, Department of	43,668	36,244	7,424	0
South Dakota	652,055	521,644	130,411	0
Game, Fish and Parks, Department of	0	0	0	0
Transportation, Department of	652,055	521,644	130,411	0
Tennessee	20,000	20,000	0	0
Environment and Conservation, Department of	20,000	20,000	0	0
Transportation, Department of	0	0	0	0
Texas	9,823,374	2,154,344	7,669,030	0
Agriculture, Department of	0	0	0	0
Cancer Prevention and Research Institute	7,014,052	0	7,014,052	0
Environmental Quality, Commission on	0	0	0	0
Health and Human Services Commission	123,000	74,000	49,000	0
Parks and Wildlife, Department of	1,140,319	845,424	294,895	0
Transportation, Department of	1,546,003	1,234,920	311,083	0
Water Development Board	0	0	0	0
Utah	10,361,727	5,411,727	3,450,000	1,500,000
Health, Department of	261,727	261,727	0	0
Natural Resources, Department of	8,000,000	4,000,000	2,500,000	1,500,000
Science Technology and Research, Governor's Office of Economic Development	0	0	0	0
Transportation, Department of	2,100,000	1,150,000	950,000	0

TABLE 15. State agency expenditures for R&D for internal performers, by state, department or agency, and source of funds: FY 2011
(Dollars)

Department or agency	Total	Federal government	State	Other ^a
Vermont	1,543,503	1,043,904	499,599	0
Agriculture, Agency of	1,027,700	577,700	450,000	0
Human Services, Agency of	190,117	190,117	0	0
Transportation, Agency of	325,686	276,087	49,599	0
Virginia	6,567,645	3,421,383	3,106,790	39,472
Agriculture and Consumer Services, Department of	0	0	0	0
Consolidated Lab Services, Division of	614,808	614,808	0	0
Corrections, Department of	919,542	0	919,542	0
Forensic Science, Department of	160,439	4,439	156,000	0
Health, Department of	27,900	27,900	0	0
Innovative Technology, Center for	320,000	320,000	0	0
Marine Resources Commission	0	0	0	0
Natural History, Museum of	569,120	18,629	511,019	39,472
Transportation, Department of	3,955,836	2,435,607	1,520,229	0
Washington	10,245,788	4,741,427	3,903,373	1,600,988
Agriculture, Department of	0	0	0	0
Fish and Wildlife, Department of	7,128,911	3,273,360	2,590,263	1,265,288
Grain Commission	0	0	0	0
Natural Resources, Department of	1,409,200	310,900	902,300	196,000
Potato Commission	49,700	0	0	49,700
Red Raspberry Commission	0	0	0	0
Transportation, Department of	1,522,977	1,157,167	365,810	0
Tree Fruit Research Commission	135,000	0	45,000	90,000
Wine Commission	0	0	0	0
West Virginia	8,130,744	3,702,157	3,741,385	687,202
Agriculture, Department of	151,428	151,428	0	0
Environmental Protection, Department of	507,010	13,694	211,631	281,685
Geological and Economic Survey	3,274,416	719,602	2,399,297	155,517
Higher Education Policy Commission	851,217	391,438	459,779	0
Highways, Department of	2,508,425	1,894,146	364,279	250,000
Justice and Community Services, Division of	10,113	2,442	7,671	0
Natural Resources, Division of	828,135	529,407	298,728	0
Wisconsin	6,126,083	4,499,232	1,318,427	308,424
Agriculture, Trade, and Consumer Protection, Department of	93,569	58,845	34,724	0
Economic Development Corporation	0	0	0	0
Natural Resources, Department of	5,716,730	4,187,760	1,220,546	308,424
Transportation, Department of	315,784	252,627	63,157	0
Wyoming	3,134,016	234,002	2,900,014	0
Agriculture, Department of	0	0	0	0
Environmental Quality, Department of	0	0	0	0
Game and Fish, Department of	561,483	234,002	327,481	0
Geological Survey	2,200,141	0	2,200,141	0
Transportation, Department of	372,392	0	372,392	0
Water Development Office	0	0	0	0
Puerto Rico ^c	400,000	0	400,000	0
Education Council	400,000	0	400,000	0

^a Other includes nonprofit organizations, other state governments, and city, county, regional, township, or other local governments.

^b U.S. total reflects all 50 states and the District of Columbia.

^c Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

NOTE: Internal performers include employees within the same state department or agency in support of an internal R&D project.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
United States ^d	1,261,366,529	416,096,832	845,269,697	457,528,157	310,794,926	76,946,614
Alabama	15,113,917	9,749,394	5,364,523	5,273,041	0	91,482
Conservation and Natural Resources, Department of	2,152,483	1,231,288	921,195	829,713	0	91,482
Forensic Science, Department of	472,892	472,892	0	0	0	0
Geological Survey	3,196,187	3,196,187	0	0	0	0
Marine Environmental Sciences Consortium	4,562,239	4,562,239	0	0	0	0
Transportation, Department of	4,730,116	286,788	4,443,328	4,443,328	0	0
Alaska	9,274,800	7,885,200	1,389,600	1,271,000	93,600	25,000
Fish and Game, Department of	2,223,300	2,123,300	100,000	100,000	0	0
Geological and Geophysical Surveys, Division of	5,656,900	5,631,900	25,000	0	0	25,000
Transportation and Public Facilities, Department of	1,394,600	130,000	1,264,600	1,171,000	93,600	0
Arizona	17,682,315	7,545,171	10,137,144	4,636,405	5,493,477	7,262
Agriculture, Department of	260,322	0	260,322	253,060	0	7,262
Game and Fish Department	4,891,846	4,438,689	453,157	163,488	289,669	0
Geological Survey	1,859,997	1,776,082	83,915	80,257	3,658	0
Health Services, Department of	8,330,000	250,000	8,080,000	3,600,000	4,480,000	0
Transportation, Department of	2,340,150	1,080,400	1,259,750	539,600	720,150	0
Arkansas	14,446,084	5,406,407	9,039,677	8,513,702	525,975	0
Beef Council	80,555	0	80,555	80,555	0	0
Catfish Promotion Board	56,076	0	56,076	56,076	0	0
Corn and Grain Sorghum Promotion Board	495,500	0	495,500	495,500	0	0
Game and Fish Commission	658,590	122,833	535,757	535,757	0	0
Highway and Transportation Department	1,064,332	115,565	948,767	948,767	0	0
Rice Research and Promotion Board	2,727,000	2,727,000	0	0	0	0
Science and Technology Authority	6,948,031	300,009	6,648,022	6,122,047	525,975	0
Soybean Promotion Board	2,141,000	2,141,000	0	0	0	0
Wheat Promotion Board	275,000	0	275,000	275,000	0	0
California	154,216,981	30,126,000	124,090,981	61,104,883	58,915,308	4,070,790
Energy Commission	105,072,000	11,745,000	93,327,000	32,204,000	57,252,000	3,871,000
Food and Agriculture, Department of	2,101,971	0	2,101,971	1,342,883	579,308	179,780
Transportation, Department of	38,136,000	10,214,000	27,922,000	27,108,000	814,000	0
Water Resources, Department of	8,907,010	8,167,000	740,010	450,000	270,000	20,010
Colorado	20,828,274	7,108,498	13,719,776	6,718,767	2,689,910	4,311,099
Economic Development, Office of	7,404,089	0	7,404,089	4,586,589	1,667,500	1,150,000
Natural Resources, Department of	8,622,796	5,323,727	3,299,069	1,209,535	880,000	1,209,534
Public Health and Environment, Department of	2,205,496	5,000	2,200,496	309,414	4,517	1,886,565
Public Safety, Department of	890,000	890,000	0	0	0	0
Transportation, Department of	1,705,893	889,771	816,122	613,229	137,893	65,000
Connecticut	40,065,786	22,561,170	17,504,616	9,659,913	6,732,521	1,112,182
Agricultural Experiment Station	10,263,017	10,263,017	0	0	0	0
Environmental Protection, Department of	8,723,462	6,944,985	1,778,477	653,580	878,693	246,204
Mental Health and Addiction Services, Department of	3,647,105	2,535,935	1,111,170	1,111,170	0	0
Public Health, Department of	13,204,640	322,573	12,882,067	6,975,935	5,853,828	52,304
Transportation, Department of	4,227,562	2,494,660	1,732,902	919,228	0	813,674
Delaware	2,389,720	1,968,736	420,984	409,984	0	11,000
Geological Survey	1,512,415	1,512,415	0	0	0	0
Natural Resources and Environmental Control, Department of	627,305	456,321	170,984	159,984	0	11,000
Transportation, Department of	250,000	0	250,000	250,000	0	0
District of Columbia	696,198	189,691	506,507	506,507	0	0
Health, Department of	503,267	41,760	461,507	461,507	0	0
Transportation, Department of	192,931	147,931	45,000	45,000	0	0

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Florida	120,848,726	50,546,200	70,302,526	39,272,663	30,327,515	702,348
Agriculture and Consumer Services, Department of	11,433,478	3,097,116	8,336,362	5,088,777	3,014,710	232,875
Citrus, Department of	10,145,417	258,000	9,887,417	9,417,944	0	469,473
Environmental Protection, Department of	2,918,473	1,931,252	987,221	811,140	176,081	0
Fish and Wildlife Conservation Commission	47,344,015	45,259,832	2,084,183	2,084,183	0	0
Health, Department of	39,091,799	0	39,091,799	12,064,153	27,027,646	0
Space	325,706	0	325,706	305,706	20,000	0
Transportation, Department of	9,589,838	0	9,589,838	9,500,760	89,078	0
Georgia	8,923,795	3,200,000	5,723,795	5,723,795	0	0
Herty Advanced Materials Development Center	3,200,000	3,200,000	0	0	0	0
Transportation, Department of	5,723,795	0	5,723,795	5,723,795	0	0
Hawaii	14,233,186	3,049,593	11,183,593	5,761,655	5,421,938	0
Agriculture, Department of	414,967	335,006	79,961	73,628	6,333	0
Business, Economic Development and Tourism, Department of	5,825,028	467,423	5,357,605	17,000	5,340,605	0
Land and Natural Resources, Department of	5,320,835	2,163,164	3,157,671	3,082,671	75,000	0
Transportation, Department of	2,672,356	84,000	2,588,356	2,588,356	0	0
Idaho	9,059,568	4,616,645	4,442,923	2,416,028	483,295	1,543,600
Barley Commission	125,531	75,255	50,276	50,276	0	0
Bean Commission	63,752	0	63,752	63,752	0	0
Environmental Quality, Department of	65,370	34,979	30,391	0	30,391	0
Fish and Game, Department of	4,151,342	3,728,696	422,646	422,646	0	0
Potato Commission	830,000	45,000	785,000	600,000	60,000	125,000
Transportation, Department of	1,406,718	177,915	1,228,803	481,699	128,504	618,600
Water Resources, Department of	1,906,300	554,800	1,351,500	365,100	186,400	800,000
Wheat Commission	510,555	0	510,555	432,555	78,000	0
Illinois	16,553,689	1,948,263	14,605,426	9,920,422	1,295,057	3,389,947
Children and Family Services, Department of	6,128,895	0	6,128,895	6,128,895	0	0
Commerce and Economic Opportunity, Department of	190,000	0	190,000	190,000	0	0
Public Health, Department of	2,596,733	0	2,596,733	77,042	1,042,334	1,477,357
State Police	571,928	571,928	0	0	0	0
Transportation, Department of	7,066,133	1,376,335	5,689,798	3,524,485	252,723	1,912,590
Indiana	8,444,832	975,000	7,469,832	7,469,832	0	0
Criminal Justice Institute	450,000	200,000	250,000	250,000	0	0
Economic Development Corporation	678,287	0	678,287	678,287	0	0
Natural Resources, Department of	1,700,000	300,000	1,400,000	1,400,000	0	0
Transportation, Department of	5,616,545	475,000	5,141,545	5,141,545	0	0
Iowa	12,950,176	625,480	12,324,696	10,685,500	295,243	1,343,953
College Student Aid Commission	83,480	83,480	0	0	0	0
Criminal and Juvenile Justice Programs, Division of	22,000	22,000	0	0	0	0
Natural Resources, Department of	7,074,696	0	7,074,696	5,685,500	45,243	1,343,953
Transportation, Department of	5,770,000	520,000	5,250,000	5,000,000	250,000	0
Kansas	6,509,225	1,448,133	5,061,092	4,056,168	0	1,004,924
Transportation, Department of	5,039,914	1,393,133	3,646,781	2,641,857	0	1,004,924
Wheat Commission	1,104,311	0	1,104,311	1,104,311	0	0
Wildlife, Parks, and Tourism, Department of	365,000	55,000	310,000	310,000	0	0
Kentucky	20,410,096	1,635,906	18,774,190	9,534,208	9,239,982	0
Agricultural Policy, Governor's Office of	220,000	0	220,000	220,000	0	0
Budget and Fiscal Management, Office of	4,042,181	0	4,042,181	4,042,181	0	0
Commercialization and Innovation, Department of	9,239,959	100,000	9,139,959	0	9,139,959	0
Energy Policy, Governor's Office for	2,458,700	0	2,458,700	2,458,700	0	0
Environmental Education Council	0	0	0	0	0	0
Fish and Wildlife Resources, Department of	1,987,656	1,518,406	469,250	369,227	100,023	0
Nature Preserves Commission	17,500	17,500	0	0	0	0
Public Health, Department of	2,444,100	0	2,444,100	2,444,100	0	0

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Louisiana	9,165,144	6,523,169	2,641,975	2,469,331	172,644	0
Transportation and Development, Department of	6,642,447	4,809,020	1,833,427	1,784,292	49,135	0
Wildlife and Fisheries, Department of	2,522,697	1,714,149	808,548	685,039	123,509	0
Maine	8,847,471	1,542,846	7,304,625	1,337,600	5,362,419	604,606
Conservation, Department of	383,000	383,000	0	0	0	0
Environmental Protection, Department of	225,000	150,000	75,000	50,000	25,000	0
Marine Resources, Department of	1,370,454	711,502	658,952	76,031	155,540	427,381
State Fire Marshal's Office	3,000	3,000	0	0	0	0
Technology Institute	6,156,711	0	6,156,711	797,607	5,181,879	177,225
Transportation, Department of	709,306	295,344	413,962	413,962	0	0
Maryland	22,825,402	1,962,000	20,863,402	19,900,478	726,000	236,924
Business and Economic Development, Department of	1,300,000	1,300,000	0	0	0	0
Health and Mental Hygiene, Department of	2,175,332	0	2,175,332	2,175,332	0	0
Natural Resources, Department of	247,000	117,000	130,000	130,000	0	0
Technology Development Corporation	15,524,146	0	15,524,146	15,524,146	0	0
Transportation, Department of	3,578,924	545,000	3,033,924	2,071,000	726,000	236,924
Massachusetts	4,884,430	862,331	4,022,099	3,459,409	461,987	100,703
Capital Asset Management, Division of	0	0	0	0	0	0
Environmental Protection, Department of	445,801	161,801	284,000	50,000	234,000	0
Fish and Game, Department of	671,115	571,115	100,000	100,000	0	0
Mental Health, Department of	1,965,502	129,415	1,836,087	1,836,087	0	0
Public Health, Department of	164,987	0	164,987	0	164,987	0
Transportation Planning, Office of	1,637,025	0	1,637,025	1,473,322	63,000	100,703
Michigan	9,469,440	1,688,930	7,780,510	6,780,510	1,000,000	0
Agriculture, Department of	36,910	0	36,910	36,910	0	0
Natural Resources, Department of	4,792,530	1,648,930	3,143,600	3,143,600	0	0
Transportation, Department of	4,640,000	40,000	4,600,000	3,600,000	1,000,000	0
Minnesota	12,212,546	1,507,582	10,704,964	4,857,157	3,750,220	2,097,587
Agriculture, Department of	2,718,439	956,093	1,762,346	498,382	1,130,645	133,319
Forest Resources Council	280,396	43,000	237,396	194,914	42,482	0
Pollution Control Agency	1,036,255	0	1,036,255	45,118	80,019	911,118
Transportation, Department of	8,177,456	508,489	7,668,967	4,118,743	2,497,074	1,053,150
Mississippi	7,168,109	3,933,046	3,235,063	2,000,005	623,983	611,075
Innovative Geospatial Solutions, Enterprise for	3,974,000	1,953,000	2,021,000	1,566,000	455,000	0
Transportation, Department of	1,809,735	595,672	1,214,063	434,005	168,983	611,075
Wildlife, Fisheries, and Parks, Department of	1,384,374	1,384,374	0	0	0	0
Missouri	13,329,841	8,065,733	5,264,108	3,800,408	1,035,245	428,455
Agriculture, Department of	189,947	0	189,947	189,947	0	0
Conservation, Department of	9,143,947	7,136,153	2,007,794	1,644,489	0	363,305
Natural Resources, Department of	338,141	122,557	215,584	215,584	0	0
Transportation, Department of	3,657,806	807,023	2,850,783	1,750,388	1,035,245	65,150
Montana	7,543,860	1,604,601	5,939,259	3,638,002	2,301,257	0
Agriculture, Department of	1,533,814	0	1,533,814	1,533,814	0	0
Commerce, Department of	2,774,601	0	2,774,601	862,315	1,912,286	0
Environmental Quality, Department of	69,066	59,131	9,935	0	9,935	0
Fish, Wildlife, and Parks	1,939,993	1,323,392	616,601	599,675	16,926	0
Natural Resources and Conservation, Department of	17,500	0	17,500	0	17,500	0
Transportation, Department of	1,208,886	222,078	986,808	642,198	344,610	0
Nebraska	4,232,691	327,845	3,904,846	2,477,858	79,213	1,347,775
Agriculture, Department of	232,850	0	232,850	232,850	0	0
Corn Board	344,913	0	344,913	344,913	0	0
Dry Bean Commission	150,762	150,762	0	0	0	0
Grain Sorghum Board	1,988	0	1,988	1,988	0	0
Natural Resources, Department of	2,164,260	173,583	1,990,677	573,689	69,213	1,347,775

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Roads, Department of	986,418	0	986,418	986,418	0	0
Wheat Board	351,500	3,500	348,000	338,000	10,000	0
Nevada	1,377,888	339,516	1,038,372	768,891	151,136	118,345
Transportation, Department of	1,048,465	294,079	754,386	673,229	0	81,157
Wildlife, Department of	329,423	45,437	283,986	95,662	151,136	37,188
New Hampshire	1,804,156	502,616	1,301,540	466,016	639,342	196,182
Agriculture, Markets, and Food, Department of	169,170	0	169,170	71,594	0	97,576
Resources and Economic Development, Department of	625,000	150,000	475,000	0	475,000	0
Transportation, Department of	1,009,986	352,616	657,370	394,422	164,342	98,606
New Jersey	27,939,539	3,407,529	24,532,010	14,725,600	6,207,874	3,598,536
Brain Injury Research, Commission on	2,530,362	207,117	2,323,245	1,354,484	0	968,761
Cancer Research, Commission on	1,200,000	0	1,200,000	1,200,000	0	0
Environmental Protection, Department of	4,305,318	1,523,900	2,781,418	638,687	2,097,731	45,000
Research and Treatment of Autism, Council for	5,563,345	39,556	5,523,789	2,939,014	0	2,584,775
Science and Technology, Commission on	3,695,000	0	3,695,000	0	3,695,000	0
Spinal Cord Research, Commission on	4,075,462	378,951	3,696,511	3,696,511	0	0
Transportation, Department of	6,570,052	1,258,005	5,312,047	4,896,904	415,143	0
New Mexico	1,422,955	560,955	862,000	692,000	50,000	120,000
Transportation, Department of	1,422,955	560,955	862,000	692,000	50,000	120,000
New York	167,231,605	101,863,804	65,367,801	23,423,069	26,686,294	15,258,438
Agriculture and Markets, Department of	3,892,582	2,775,000	1,117,582	882,582	235,000	0
Energy Research and Development Authority	41,029,418	10,598,946	30,430,472	4,779,010	23,428,225	2,223,237
Environmental Conservation, Department of	4,161,101	949,681	3,211,420	1,941,545	234,674	1,035,201
Foundation for Science, Technology and Innovation	52,300,000	36,800,000	15,500,000	1,500,000	2,000,000	12,000,000
Health, Department of	57,919,392	47,726,192	10,193,200	10,193,200	0	0
Transportation, Department of	7,929,112	3,013,985	4,915,127	4,126,732	788,395	0
North Carolina	27,342,380	18,843,326	8,499,054	6,498,590	665,000	1,335,464
Agriculture and Consumer Services, Department of	12,525,716	12,525,716	0	0	0	0
Environment and Natural Resources, Department of	3,551,664	3,197,610	354,054	198,590	0	155,464
Transportation, Department of	11,265,000	3,120,000	8,145,000	6,300,000	665,000	1,180,000
North Dakota	6,352,675	591,770	5,760,905	2,524,028	2,495,714	741,163
Agriculture, Department of	140,464	0	140,464	140,464	0	0
Lignite Research Council	2,098,967	304,909	1,794,058	659,559	1,109,499	25,000
Mineral Resources, Department of	45,000	45,000	0	0	0	0
Oil and Gas Research Program	1,186,820	109,105	1,077,715	182,400	828,815	66,500
Renewable Energy Research Program	979,013	60,000	919,013	319,613	557,400	42,000
Soybean Council	714,023	0	714,023	714,023	0	0
Transportation, Department of	598,349	72,756	525,593	17,930	0	507,663
Wheat Commission	590,039	0	590,039	490,039	0	100,000
Ohio	125,120,668	1,754,417	123,366,251	2,277,508	119,114,473	1,974,270
Air Quality Development Authority	1,120,000	0	1,120,000	1,120,000	0	0
Development, Department of	118,914,375	0	118,914,375	0	118,914,375	0
Mental Health, Department of	721,000	490,000	231,000	231,000	0	0
Natural Resources, Department of	3,253,900	1,011,197	2,242,703	568,101	0	1,674,602
Transportation, Department of	1,111,393	253,220	858,173	358,407	200,098	299,668
Oklahoma	21,226,236	9,250	21,216,986	10,570,542	8,489,233	2,157,211
Center for the Advancement of Science and Technology	15,345,706	0	15,345,706	6,295,430	8,296,798	753,478
Health, Department of	9,250	9,250	0	0	0	0
Sorghum Commission	22,500	0	22,500	12,500	0	10,000
Transportation, Department of	4,132,781	0	4,132,781	2,739,048	0	1,393,733
Wheat Commission	253,434	0	253,434	60,999	192,435	0
Wildlife Conservation, Department of	1,462,565	0	1,462,565	1,462,565	0	0

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Oregon	18,013,730	14,368,928	3,644,802	2,954,420	39,120	651,262
Agriculture, Department of	664,631	0	664,631	489,631	0	175,000
Fish and Wildlife, Department of	9,585,000	9,535,000	50,000	0	0	50,000
Forestry, Department of	354,882	70,181	284,701	256,761	27,940	0
Geology and Mineral Industries, Department of	4,097,576	3,996,254	101,322	101,322	0	0
Transportation, Department of	2,481,963	691,265	1,790,698	1,679,629	11,180	99,889
Watershed Enhancement Board	829,678	76,228	753,450	427,077	0	326,373
Pennsylvania	76,947,795	5,052,858	71,894,937	47,400,670	1,898,934	22,595,333
Agriculture, Department of	755,736	0	755,736	634,417	0	121,319
Community and Economic Development, Department of	6,839,000	0	6,839,000	4,550,000	0	2,289,000
Conservation and Natural Resources, Department of	2,731,005	1,639,317	1,091,688	493,685	13,913	584,090
Environmental Protection, Department of	1,859,108	215,999	1,643,109	1,422,553	134,500	86,056
Fish and Boat Commission	640,326	555,633	84,693	0	0	84,693
Game Commission	2,660,768	1,976,639	684,129	666,228	17,901	0
Health, Department of	58,482,594	0	58,482,594	38,952,419	100,000	19,430,175
Transportation, Department of	2,979,258	665,270	2,313,988	681,368	1,632,620	0
Rhode Island	1,461,239	53,547	1,407,692	1,123,866	283,826	0
Economic Development Corporation	1,109,080	0	1,109,080	825,254	283,826	0
Transportation, Department of	352,159	53,547	298,612	298,612	0	0
South Carolina	36,536,007	32,641,056	3,894,951	3,894,951	0	0
Health and Environmental Control, Department of	133,172	133,172	0	0	0	0
Mental Health, Department of	122,334	21,450	100,884	100,884	0	0
Natural Resources, Department of	32,939,330	31,939,330	1,000,000	1,000,000	0	0
Public Service Authority	185,322	0	185,322	185,322	0	0
Sea Grant Consortium	1,772,246	354,215	1,418,031	1,418,031	0	0
Transportation, Department of	1,383,603	192,889	1,190,714	1,190,714	0	0
South Dakota	3,762,637	722,906	3,039,731	1,808,004	805,819	425,908
Agriculture, Department of	25,000	0	25,000	25,000	0	0
Game, Fish and Parks, Department of	1,638,739	0	1,638,739	1,314,340	24,630	299,769
Transportation, Department of	2,098,898	722,906	1,375,992	468,664	781,189	126,139
Tennessee	1,064,262	0	1,064,262	1,064,262	0	0
Transportation, Department of	1,064,262	0	1,064,262	1,064,262	0	0
Texas	35,163,655	2,813,346	32,350,309	31,590,922	226,414	532,973
Agriculture, Department of	2,319,442	0	2,319,442	2,319,442	0	0
Environmental Quality, Commission on	3,888,189	0	3,888,189	3,778,669	109,520	0
Health and Human Services Commission	123,000	123,000	0	0	0	0
Parks and Wildlife, Department of	1,746,387	1,073,290	673,097	556,203	116,894	0
Transportation, Department of	25,071,272	1,617,056	23,454,216	23,454,216	0	0
Water Development Board	2,015,365	0	2,015,365	1,482,392	0	532,973
Utah	30,812,205	10,150,322	20,661,883	18,961,883	1,700,000	0
Health, Department of	50,322	50,322	0	0	0	0
Natural Resources, Department of	8,000,000	8,000,000	0	0	0	0
Science Technology and Research, Governor's Office of						
Economic Development	20,161,883	0	20,161,883	18,511,883	1,650,000	0
Transportation, Department of	2,600,000	2,100,000	500,000	450,000	50,000	0
Vermont	1,665,079	1,442,023	223,056	168,076	54,980	0
Agriculture, Agency of	865,900	865,900	0	0	0	0
Human Services, Agency of	132,198	132,198	0	0	0	0
Transportation, Agency of	666,981	443,925	223,056	168,076	54,980	0
Virginia	17,495,156	6,744,260	10,750,896	9,697,896	975,000	78,000
Agriculture and Consumer Services, Department of	2,271,833	0	2,271,833	2,263,833	0	8,000
Consolidated Lab Services, Division of	683,917	513,917	170,000	100,000	0	70,000
Corrections, Department of	897,484	897,484	0	0	0	0

TABLE 16. State agency expenditures for R&D, by state, department or agency, and performer: FY 2010
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Forensic Science, Department of	181,813	181,813	0	0	0	0
Health, Department of	46,962	46,962	0	0	0	0
Innovative Technology, Center for	1,480,000	430,000	1,050,000	75,000	975,000	0
Marine Resources Commission	2,441,157	0	2,441,157	2,441,157	0	0
Natural History, Museum of	560,718	560,718	0	0	0	0
Transportation, Department of	8,931,272	4,113,366	4,817,906	4,817,906	0	0
Washington	24,525,701	9,866,316	14,659,385	10,760,146	2,363,586	1,535,653
Agriculture, Department of	328,111	0	328,111	268,339	0	59,772
Fish and Wildlife, Department of	6,881,561	6,813,791	67,770	67,770	0	0
Grain Commission	3,345,600	0	3,345,600	3,345,600	0	0
Natural Resources, Department of	4,035,976	1,056,177	2,979,799	308,000	1,765,918	905,881
Potato Commission	794,391	54,500	739,891	739,891	0	0
Red Raspberry Commission	173,387	0	173,387	168,387	5,000	0
Transportation, Department of	5,402,675	1,461,848	3,940,827	3,348,159	592,668	0
Tree Fruit Research Commission	3,430,000	480,000	2,950,000	2,380,000	0	570,000
Wine Commission	134,000	0	134,000	134,000	0	0
West Virginia	23,867,732	7,094,173	16,773,559	16,309,854	0	463,705
Environmental Protection, Department of	986,278	522,573	463,705	0	0	463,705
Geological and Economic Survey	2,682,942	2,682,942	0	0	0	0
Higher Education Policy Commission	14,258,436	721,822	13,536,614	13,536,614	0	0
Highways, Department of	5,100,000	2,350,000	2,750,000	2,750,000	0	0
Justice and Community Services, Division of	8,277	8,277	0	0	0	0
Natural Resources, Division of	831,799	808,559	23,240	23,240	0	0
Wisconsin	12,435,548	5,060,717	7,374,831	4,645,999	872,523	1,856,309
Agriculture, Trade, and Consumer Protection, Department of	770,721	41,160	729,561	437,561	292,000	0
Economic Development Corporation	1,375,000	0	1,375,000	1,375,000	0	0
Natural Resources, Department of	6,717,528	4,719,109	1,998,419	1,634,298	56,036	308,085
Transportation, Department of	3,572,299	300,448	3,271,851	1,199,140	524,487	1,548,224
Wyoming	5,471,379	3,609,627	1,861,752	1,545,733	48,869	267,150
Agriculture, Department of	176,596	0	176,596	176,596	0	0
Environmental Quality, Department of	150,000	0	150,000	150,000	0	0
Game and Fish, Department of	1,291,150	564,002	727,148	678,279	48,869	0
Geological Survey	2,866,616	2,599,466	267,150	0	0	267,150
Transportation, Department of	687,017	446,159	240,858	240,858	0	0
Water Development Office	300,000	0	300,000	300,000	0	0
Puerto Rico ^e	551,391	360,000	191,391	191,391	0	0
Education Council	551,391	360,000	191,391	191,391	0	0

^a Internal performers include employees within the same state department or agency in support of an internal R&D project.

^b Companies and individuals include individuals under contract for research projects.

^c Other includes federal government; nonprofit organizations; city, county, regional, or other local governments; other departments or agencies within the same state; and other state governments.

^d U.S. total reflects all 50 states and the District of Columbia.

^e Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
United States ^d	1,403,816,235	461,506,205	942,310,030	477,128,278	388,053,537	77,128,215
Alabama	19,684,063	14,250,319	5,433,744	5,308,849	0	124,895
Conservation and Natural Resources, Department of	2,448,043	1,135,367	1,312,676	1,187,781	0	124,895
Forensic Science, Department of	475,402	475,402	0	0	0	0
Geological Survey	3,355,833	3,355,833	0	0	0	0
Marine Environmental Sciences Consortium	8,996,929	8,996,929	0	0	0	0
Transportation, Department of	4,407,856	286,788	4,121,068	4,121,068	0	0
Alaska	11,349,400	9,004,800	2,344,600	2,318,600	0	26,000
Fish and Game, Department of	2,697,600	2,697,600	0	0	0	0
Geological and Geophysical Surveys, Division of	6,084,800	6,051,200	33,600	7,600	0	26,000
Transportation and Public Facilities, Department of	2,567,000	256,000	2,311,000	2,311,000	0	0
Arizona	18,626,577	7,410,362	11,216,215	5,978,122	5,201,363	36,730
Agriculture, Department of	819,771	0	819,771	783,041	0	36,730
Game and Fish Department	4,643,079	4,137,092	505,987	110,774	395,213	0
Geological Survey	2,794,127	1,710,870	1,083,257	1,020,507	62,750	0
Health Services, Department of	8,330,000	250,000	8,080,000	3,600,000	4,480,000	0
Transportation, Department of	2,039,600	1,312,400	727,200	463,800	263,400	0
Arkansas	14,705,327	6,077,854	8,627,473	7,796,498	830,975	0
Beef Council	74,085	0	74,085	74,085	0	0
Catfish Promotion Board	43,648	0	43,648	43,648	0	0
Corn and Grain Sorghum Promotion Board	605,600	0	605,600	605,600	0	0
Game and Fish Commission	680,971	116,250	564,721	515,721	49,000	0
Highway and Transportation Department	927,990	144,978	783,012	783,012	0	0
Rice Research and Promotion Board	2,870,000	2,870,000	0	0	0	0
Science and Technology Authority	6,729,033	335,626	6,393,407	5,611,432	781,975	0
Soybean Promotion Board	2,611,000	2,611,000	0	0	0	0
Wheat Promotion Board	163,000	0	163,000	163,000	0	0
California	149,810,643	38,369,776	111,440,867	60,203,594	49,374,471	1,862,802
Energy Commission	95,975,000	13,129,000	82,846,000	34,071,000	47,050,000	1,725,000
Food and Agriculture, Department of	1,528,667	0	1,528,667	1,134,994	260,471	133,202
Transportation, Department of	37,445,000	10,997,000	26,448,000	24,804,000	1,644,000	0
Water Resources, Department of	14,861,976	14,243,776	618,200	193,600	420,000	4,600
Colorado	18,141,931	6,942,978	11,198,953	5,514,834	1,611,154	4,072,965
Economic Development, Office of	5,479,605	0	5,479,605	3,277,001	1,307,000	895,604
Natural Resources, Department of	7,654,500	5,238,226	2,416,274	1,208,137	0	1,208,137
Public Health and Environment, Department of	1,873,822	1,500	1,872,322	239,195	36,443	1,596,684
Public Safety, Department of	890,000	890,000	0	0	0	0
Transportation, Department of	2,244,004	813,252	1,430,752	790,501	267,711	372,540
Connecticut	39,192,091	23,573,706	15,618,385	9,144,483	5,349,642	1,124,260
Agricultural Experiment Station	10,631,320	10,631,320	0	0	0	0
Environmental Protection, Department of	8,101,784	7,219,560	882,224	535,070	172,135	175,019
Mental Health and Addiction Services, Department of	4,363,990	3,043,830	1,320,160	1,320,160	0	0
Public Health, Department of	11,894,644	258,906	11,635,738	6,392,865	5,177,507	65,366
Transportation, Department of	4,200,353	2,420,090	1,780,263	896,388	0	883,875
Delaware	2,609,902	2,049,018	560,884	499,964	0	60,920
Geological Survey	1,663,179	1,663,179	0	0	0	0
Natural Resources and Environmental Control, Department of	696,723	385,839	310,884	249,964	0	60,920
Transportation, Department of	250,000	0	250,000	250,000	0	0
District of Columbia	1,221,108	220,886	1,000,222	807,731	192,491	0
Health, Department of	956,728	148,997	807,731	807,731	0	0
Transportation, Department of	264,380	71,889	192,491	0	192,491	0

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Florida	150,764,438	48,327,623	102,436,815	48,595,118	53,110,052	731,645
Agriculture and Consumer Services, Department of	11,707,343	3,029,030	8,678,313	4,592,374	3,744,795	341,144
Citrus, Department of	9,445,480	254,000	9,191,480	8,800,979	0	390,501
Environmental Protection, Department of	2,787,307	2,015,890	771,417	700,000	71,417	0
Fish and Wildlife Conservation Commission	44,649,930	43,028,703	1,621,227	1,621,227	0	0
Health, Department of	64,723,630	0	64,723,630	20,560,198	44,163,432	0
Space	5,239,510	0	5,239,510	234,034	5,005,476	0
Transportation, Department of	12,211,238	0	12,211,238	12,086,306	124,932	0
Georgia	11,690,663	3,600,000	8,090,663	8,090,663	0	0
Herty Advanced Materials Development Center	3,600,000	3,600,000	0	0	0	0
Transportation, Department of	8,090,663	0	8,090,663	8,090,663	0	0
Hawaii	13,103,983	3,667,047	9,436,936	3,568,779	5,762,231	105,926
Agriculture, Department of	564,799	384,151	180,648	62,055	12,667	105,926
Business Economic Development and Tourism, Department of	6,020,023	430,459	5,589,564	0	5,589,564	0
Land and Natural Resources, Department of	5,957,794	2,360,494	3,597,300	3,437,300	160,000	0
Transportation, Department of	561,367	491,943	69,424	69,424	0	0
Idaho	9,366,052	4,430,450	4,935,602	2,860,414	397,505	1,677,683
Barley Commission	94,342	50,039	44,303	44,303	0	0
Bean Commission	93,882	0	93,882	93,882	0	0
Environmental Quality, Department of	25,587	3,005	22,582	0	22,582	0
Fish and Game, Department of	4,210,814	3,636,677	574,137	574,137	0	0
Potato Commission	935,000	60,000	875,000	650,000	75,000	150,000
Transportation, Department of	1,580,312	170,629	1,409,683	708,810	23,190	677,683
Water Resources, Department of	1,828,500	510,100	1,318,400	292,000	176,400	850,000
Wheat Commission	597,615	0	597,615	497,282	100,333	0
Illinois	17,207,125	2,049,697	15,157,428	12,033,575	278,320	2,845,533
Children and Family Services, Department of	6,681,163	0	6,681,163	6,681,163	0	0
Public Health, Department of	680,013	0	680,013	0	52,348	627,665
State Police	558,641	558,641	0	0	0	0
Transportation, Department of	9,287,308	1,491,056	7,796,252	5,352,412	225,972	2,217,868
Indiana	6,983,364	975,000	6,008,364	5,853,287	155,077	0
Criminal Justice Institute	450,000	200,000	250,000	250,000	0	0
Economic Development Corporation	833,364	0	833,364	678,287	155,077	0
Natural Resources, Department of	1,700,000	300,000	1,400,000	1,400,000	0	0
Transportation, Department of	4,000,000	475,000	3,525,000	3,525,000	0	0
Iowa	36,992,222	1,260,999	35,731,223	11,108,508	24,582,715	40,000
College Student Aid Commission	92,753	92,753	0	0	0	0
Criminal and Juvenile Justice Programs, Division of	20,246	20,246	0	0	0	0
Economic Development Authority, Energy Office	26,590,826	0	26,590,826	2,437,078	24,153,748	0
Natural Resources, Department of	3,640,397	0	3,640,397	3,446,430	153,967	40,000
Transportation, Department of	6,050,000	550,000	5,500,000	5,225,000	275,000	0
Workforce Development	598,000	598,000	0	0	0	0
Kansas	6,635,626	1,501,433	5,134,193	4,047,781	0	1,086,412
Transportation, Department of	5,002,773	1,436,433	3,566,340	2,479,928	0	1,086,412
Wheat Commission	1,167,853	0	1,167,853	1,167,853	0	0
Wildlife, Parks, and Tourism, Department of	465,000	65,000	400,000	400,000	0	0
Kentucky	20,498,849	2,137,354	18,361,495	10,018,810	8,331,855	10,830
Agricultural Policy, Governor's Office of	45,130	0	45,130	45,130	0	0
Budget and Fiscal Management, Office of	4,425,113	0	4,425,113	4,425,113	0	0
Commercialization and Innovation, Department of	8,409,917	100,000	8,309,917	0	8,309,917	0
Early Childhood Development, Division of	541,000	291,000	250,000	250,000	0	0
Energy Policy, Governor's Office for	2,729,900	0	2,729,900	2,729,900	0	0
Environmental Education Council	37,666	0	37,666	26,836	0	10,830
Fish and Wildlife Resources, Department of	2,111,023	1,727,854	383,169	361,231	21,938	0

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Nature Preserves Commission	26,500	18,500	8,000	8,000	0	0
Public Health, Department of	2,172,600	0	2,172,600	2,172,600	0	0
Louisiana	9,203,635	7,253,894	1,949,741	1,486,680	463,061	0
Transportation and Development, Department of	6,396,052	5,137,074	1,258,978	987,456	271,522	0
Wildlife and Fisheries, Department of	2,807,583	2,116,820	690,763	499,224	191,539	0
Maine	9,918,765	1,883,123	8,035,642	2,334,410	4,986,235	714,997
Agriculture, Department of	72,750	0	72,750	72,750	0	0
Conservation, Department of	380,000	380,000	0	0	0	0
Drug Enforcement Agency	75,000	0	75,000	75,000	0	0
Environmental Protection, Department of	225,000	150,000	75,000	50,000	25,000	0
Marine Resources, Department of	2,127,121	1,070,689	1,056,432	422,189	352,840	281,403
State Fire Marshal's Office	3,000	3,000	0	0	0	0
Technology Institute	6,530,034	0	6,530,034	1,488,045	4,608,395	433,594
Transportation, Department of	505,860	279,434	226,426	226,426	0	0
Maryland	20,084,540	1,928,700	18,155,840	16,995,323	1,060,517	100,000
Business and Economic Development, Department of	1,300,000	1,300,000	0	0	0	0
Health and Mental Hygiene, Department of	2,400,000	0	2,400,000	2,400,000	0	0
Natural Resources, Department of	268,700	83,700	185,000	185,000	0	0
Technology Development Corporation	11,211,823	0	11,211,823	11,211,823	0	0
Transportation, Department of	4,904,017	545,000	4,359,017	3,198,500	1,060,517	100,000
Massachusetts	4,878,927	785,738	4,093,189	3,217,469	775,294	100,426
Capital Asset Management, Division of	0	0	0	0	0	0
Early Education and Care, Department of	486,173	0	486,173	0	486,173	0
Environmental Protection, Department of	259,147	168,147	91,000	15,000	76,000	0
Fish and Game, Department of	583,482	483,482	100,000	100,000	0	0
Mental Health, Department of	1,882,744	134,109	1,748,635	1,748,635	0	0
Public Health, Department of	163,121	0	163,121	0	163,121	0
Transportation Planning, Office of	1,504,260	0	1,504,260	1,353,834	50,000	100,426
Michigan	9,802,873	1,509,097	8,293,776	7,293,776	1,000,000	0
Agriculture, Department of	82,793	0	82,793	82,793	0	0
Natural Resources, Department of	4,595,080	1,484,097	3,110,983	3,110,983	0	0
Transportation, Department of	5,125,000	25,000	5,100,000	4,100,000	1,000,000	0
Minnesota	11,653,327	1,509,585	10,143,742	6,021,682	2,787,678	1,334,382
Agriculture, Department of	1,774,976	782,000	992,976	473,646	389,084	130,246
Forest Resources Council	114,592	40,000	74,592	69,592	5,000	0
Pollution Control Agency	134,502	0	134,502	0	0	134,502
Transportation, Department of	9,629,257	687,585	8,941,672	5,478,444	2,393,594	1,069,634
Mississippi	7,420,851	4,028,133	3,392,718	1,878,150	545,843	968,725
Innovative Geospatial Solutions, Enterprise for	2,686,000	979,000	1,707,000	1,450,000	257,000	0
Transportation, Department of	2,389,770	704,052	1,685,718	428,150	288,843	968,725
Wildlife, Fisheries, and Parks, Department of	2,345,081	2,345,081	0	0	0	0
Missouri	13,658,961	7,546,964	6,111,997	4,103,114	1,701,941	306,942
Agriculture, Department of	32,308	0	32,308	32,308	0	0
Conservation, Department of	8,216,486	6,470,271	1,746,215	1,571,473	0	174,742
Natural Resources, Department of	367,085	158,278	208,807	185,622	23,185	0
Transportation, Department of	5,043,082	918,415	4,124,667	2,313,711	1,678,756	132,200
Montana	6,474,190	1,694,519	4,779,671	3,605,814	1,055,573	118,284
Agriculture, Department of	1,653,768	0	1,653,768	1,653,768	0	0
Commerce, Department of	1,376,063	0	1,376,063	628,154	747,909	0
Environmental Quality, Department of	283,206	87,031	196,175	97,480	23,178	75,517
Fish, Wildlife, and Parks	1,857,865	1,365,003	492,862	477,152	15,710	0
Natural Resources and Conservation, Department of	30,000	0	30,000	0	30,000	0
Transportation, Department of	1,273,288	242,485	1,030,803	749,260	238,776	42,767

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Nebraska	4,061,651	320,392	3,741,259	2,353,836	193,286	1,194,137
Agriculture, Department of	342,385	0	342,385	342,385	0	0
Corn Board	267,123	0	267,123	267,123	0	0
Dry Bean Commission	141,220	141,220	0	0	0	0
Grain Sorghum Board	13,444	0	13,444	13,444	0	0
Natural Resources, Department of	1,770,243	175,172	1,595,071	219,648	181,286	1,194,137
Roads, Department of	1,123,236	0	1,123,236	1,123,236	0	0
Wheat Board	404,000	4,000	400,000	388,000	12,000	0
Nevada	1,868,869	428,607	1,440,262	1,105,620	134,544	200,098
Transportation, Department of	1,393,048	362,976	1,030,072	950,728	0	79,344
Wildlife, Department of	475,821	65,631	410,190	154,892	134,544	120,754
New Hampshire	1,921,421	591,869	1,329,552	508,062	697,146	124,344
Agriculture, Markets, and Food, Department of	40,969	0	40,969	34,912	0	6,057
Resources and Economic Development, Department of	684,000	184,000	500,000	0	500,000	0
Transportation, Department of	1,196,452	407,869	788,583	473,150	197,146	118,287
New Jersey	17,068,781	2,980,802	14,087,979	11,063,123	238,038	2,786,818
Brain Injury Research, Commission on	3,260,413	132,172	3,128,241	2,749,324	0	378,917
Cancer Research, Commission on	350,000	0	350,000	350,000	0	0
Environmental Protection, Department of	1,988,395	1,460,400	527,995	395,525	40,000	92,470
Research and Treatment of Autism, Council for	3,385,611	320,180	3,065,431	750,000	0	2,315,431
Spinal Cord Research, Commission on	2,541,718	180,838	2,360,880	2,360,880	0	0
Transportation, Department of	5,542,644	887,212	4,655,432	4,457,394	198,038	0
New Mexico	1,821,583	494,193	1,327,390	704,390	398,000	225,000
Transportation, Department of	1,821,583	494,193	1,327,390	704,390	398,000	225,000
New York	182,736,305	108,093,556	74,642,749	26,294,743	28,278,301	20,069,705
Agriculture and Markets, Department of	3,554,089	2,775,000	779,089	779,089	0	0
Energy Research and Development Authority	48,057,371	11,551,001	36,506,370	8,790,639	23,818,588	3,897,143
Environmental Conservation, Department of	2,939,284	963,959	1,975,325	726,617	76,146	1,172,562
Foundation for Science, Technology and Innovation	68,000,000	47,400,000	20,600,000	2,500,000	3,100,000	15,000,000
Health, Department of	55,192,779	42,914,417	12,278,362	12,238,362	40,000	0
Transportation, Department of	4,992,782	2,489,179	2,503,603	1,260,036	1,243,567	0
North Carolina	29,611,785	19,478,718	10,133,067	7,985,478	683,000	1,464,589
Agriculture and Consumer Services, Department of	12,773,500	12,773,500	0	0	0	0
Environment and Natural Resources, Department of	5,267,285	3,527,218	1,740,067	1,485,478	0	254,589
Transportation, Department of	11,571,000	3,178,000	8,393,000	6,500,000	683,000	1,210,000
North Dakota	8,072,257	366,294	7,705,963	2,843,755	4,054,335	807,873
Agriculture, Department of	75,710	0	75,710	75,710	0	0
Lignite Research Council	2,790,750	141,250	2,649,500	213,500	2,285,000	151,000
Mineral Resources, Department of	73,500	73,500	0	0	0	0
Oil and Gas Research Program	1,378,125	44,265	1,333,860	207,500	1,071,360	55,000
Renewable Energy Research Program	1,236,475	30,000	1,206,475	416,500	697,975	92,000
Soybean Council	808,649	0	808,649	808,649	0	0
Transportation, Department of	578,559	77,279	501,280	26,407	0	474,873
Wheat Commission	1,130,489	0	1,130,489	1,095,489	0	35,000
Ohio	159,322,228	2,645,393	156,676,835	4,041,268	150,860,239	1,775,328
Air Quality Development Authority	2,034,728	0	2,034,728	2,034,728	0	0
Development, Department of	150,072,744	0	150,072,744	0	150,072,744	0
Mental Health, Department of	721,000	490,000	231,000	231,000	0	0
Natural Resources, Department of	3,711,878	1,944,556	1,767,322	452,110	0	1,315,212
Transportation, Department of	2,781,878	210,837	2,571,041	1,323,430	787,495	460,116
Oklahoma	20,304,740	9,850	20,294,890	11,131,651	6,716,441	2,446,798
Center for the Advancement of Science and Technology	13,052,997	0	13,052,997	5,743,319	6,380,121	929,557
Health, Department of	9,850	9,850	0	0	0	0
Sorghum Commission	22,500	0	22,500	12,500	0	10,000

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Transportation, Department of	4,437,947	0	4,437,947	2,930,706	0	1,507,241
Wheat Commission	514,195	0	514,195	177,875	336,320	0
Wildlife Conservation, Department of	2,267,251	0	2,267,251	2,267,251	0	0
Oregon	20,001,272	17,063,005	2,938,267	2,672,740	54,865	210,662
Agriculture, Department of	582,446	0	582,446	522,446	10,000	50,000
Fish and Wildlife, Department of	11,326,000	11,266,000	60,000	0	0	60,000
Forestry, Department of	478,413	107,203	371,210	335,302	35,908	0
Geology and Mineral Industries, Department of	4,979,303	4,803,055	176,248	176,248	0	0
Transportation, Department of	2,494,162	806,249	1,687,913	1,638,744	8,957	40,212
Watershed Enhancement Board	140,948	80,498	60,450	0	0	60,450
Pennsylvania	71,098,139	5,826,832	65,271,307	38,258,858	4,596,817	22,415,632
Agriculture, Department of	640,671	0	640,671	586,944	0	53,727
Community and Economic Development, Department of	4,700,000	0	4,700,000	3,100,000	0	1,600,000
Conservation and Natural Resources, Department of	2,212,545	1,594,754	617,791	250,981	0	366,810
Environmental Protection, Department of	1,059,451	215,631	843,820	606,312	2,250	235,258
Fish and Boat Commission	781,643	694,905	86,738	0	0	86,738
Game Commission	3,695,614	2,780,122	915,492	915,492	0	0
Health, Department of	54,088,921	0	54,088,921	31,009,324	3,006,498	20,073,099
Transportation, Department of	3,919,294	541,420	3,377,874	1,789,805	1,588,069	0
Rhode Island	1,947,727	80,000	1,867,727	1,381,743	485,984	0
Economic Development Corporation	1,303,377	0	1,303,377	817,393	485,984	0
Transportation, Department of	644,350	80,000	564,350	564,350	0	0
South Carolina	47,795,394	42,532,704	5,262,690	5,262,690	0	0
Health and Environmental Control, Department of	721,804	721,804	0	0	0	0
Mental Health, Department of	122,334	21,450	100,884	100,884	0	0
Natural Resources, Department of	42,392,567	41,391,567	1,001,000	1,001,000	0	0
Public Service Authority	115,338	0	115,338	115,338	0	0
Sea Grant Consortium	2,862,766	354,215	2,508,551	2,508,551	0	0
Transportation, Department of	1,580,585	43,668	1,536,917	1,536,917	0	0
South Dakota	3,629,155	652,055	2,977,100	1,276,971	1,010,240	689,889
Game, Fish and Parks, Department of	1,628,888	0	1,628,888	1,039,008	15,778	574,102
Transportation, Department of	2,000,267	652,055	1,348,212	237,963	994,462	115,787
Tennessee	3,606,726	20,000	3,586,726	3,586,726	0	0
Environment and Conservation, Department of	320,000	20,000	300,000	300,000	0	0
Transportation, Department of	3,286,726	0	3,286,726	3,286,726	0	0
Texas	47,372,367	9,823,374	37,548,993	28,525,530	7,926,989	1,096,474
Agriculture, Department of	1,853,946	0	1,853,946	1,853,946	0	0
Cancer Prevention and Research Institute	15,715,498	7,014,052	8,701,446	1,836,319	6,865,127	0
Environmental Quality, Commission on	1,599,224	0	1,599,224	689,602	909,622	0
Health and Human Services Commission	123,000	123,000	0	0	0	0
Parks and Wildlife, Department of	1,819,498	1,140,319	679,179	526,939	152,240	0
Transportation, Department of	23,851,121	1,546,003	22,305,118	22,305,118	0	0
Water Development Board	2,410,080	0	2,410,080	1,313,606	0	1,096,474
Utah	34,418,764	10,361,727	24,057,037	22,057,037	2,000,000	0
Health, Department of	261,727	261,727	0	0	0	0
Natural Resources, Department of	8,000,000	8,000,000	0	0	0	0
Science Technology and Research, Governor's Office of						
Economic Development	23,557,037	0	23,557,037	21,607,037	1,950,000	0
Transportation, Department of	2,600,000	2,100,000	500,000	450,000	50,000	0
Vermont	1,711,673	1,543,503	168,170	157,692	10,478	0
Agriculture, Agency of	1,027,700	1,027,700	0	0	0	0
Human Services, Agency of	190,117	190,117	0	0	0	0
Transportation, Agency of	493,856	325,686	168,170	157,692	10,478	0

TABLE 17. State agency expenditures for R&D, by state, department or agency, and performer: FY 2011
(Dollars)

Department or agency	All R&D expenditures	Internal performers ^a	External performers			
			Total	Academic	Companies or individuals ^b	Other ^c
Virginia	17,241,804	6,567,645	10,674,159	10,040,064	520,000	114,095
Agriculture and Consumer Services, Department of	2,169,935	0	2,169,935	2,125,840	0	44,095
Consolidated Lab Services, Division of	784,808	614,808	170,000	100,000	0	70,000
Corrections, Department of	919,542	919,542	0	0	0	0
Forensic Science, Department of	160,439	160,439	0	0	0	0
Health, Department of	27,900	27,900	0	0	0	0
Innovative Technology, Center for	1,010,000	320,000	690,000	170,000	520,000	0
Marine Resources Commission	3,130,629	0	3,130,629	3,130,629	0	0
Natural History, Museum of	569,120	569,120	0	0	0	0
Transportation, Department of	8,469,431	3,955,836	4,513,595	4,513,595	0	0
Washington	24,500,489	10,245,788	14,254,701	10,660,239	2,332,462	1,262,000
Agriculture, Department of	190,841	0	190,841	190,841	0	0
Fish and Wildlife, Department of	7,190,560	7,128,911	61,649	61,649	0	0
Grain Commission	3,573,613	0	3,573,613	3,573,613	0	0
Natural Resources, Department of	4,032,000	1,409,200	2,622,800	216,000	1,584,800	822,000
Potato Commission	842,198	49,700	792,498	792,498	0	0
Red Raspberry Commission	225,447	0	225,447	217,447	8,000	0
Transportation, Department of	5,095,830	1,522,977	3,572,853	2,833,191	739,662	0
Tree Fruit Research Commission	3,215,000	135,000	3,080,000	2,640,000	0	440,000
Wine Commission	135,000	0	135,000	135,000	0	0
West Virginia	35,475,338	8,130,744	27,344,594	26,665,810	300,000	378,784
Agriculture, Department of	151,428	151,428	0	0	0	0
Environmental Protection, Department of	885,794	507,010	378,784	0	0	378,784
Geological and Economic Survey	3,274,416	3,274,416	0	0	0	0
Higher Education Policy Commission	24,577,042	851,217	23,725,825	23,725,825	0	0
Highways, Department of	5,583,425	2,508,425	3,075,000	2,900,000	175,000	0
Justice and Community Services, Division of	15,513	10,113	5,400	5,400	0	0
Natural Resources, Division of	987,720	828,135	159,585	34,585	125,000	0
Wisconsin	21,128,936	6,126,083	15,002,853	5,919,133	7,008,379	2,075,341
Agriculture, Trade, and Consumer Protection, Department of	536,004	93,569	442,435	181,635	260,800	0
Economic Development Corporation	7,979,595	0	7,979,595	1,773,595	6,206,000	0
Natural Resources, Department of	8,497,725	5,716,730	2,780,995	2,331,898	195,704	253,393
Transportation, Department of	4,115,612	315,784	3,799,828	1,632,005	345,875	1,821,948
Wyoming	5,419,398	3,134,016	2,285,382	1,945,091	0	340,291
Agriculture, Department of	147,226	0	147,226	147,226	0	0
Environmental Quality, Department of	150,000	0	150,000	150,000	0	0
Game and Fish, Department of	1,775,184	561,483	1,213,701	1,213,701	0	0
Geological Survey	2,540,432	2,200,141	340,291	0	0	340,291
Transportation, Department of	506,556	372,392	134,164	134,164	0	0
Water Development Office	300,000	0	300,000	300,000	0	0
Puerto Rico ^e	537,869	400,000	137,869	137,869	0	0
Education Council	537,869	400,000	137,869	137,869	0	0

^a Internal performers include employees within the same state department or agency in support of an internal R&D project.

^b Companies and individuals include individuals under contract for research projects.

^c Other includes federal government; nonprofit organizations; city, county, regional, or other local governments; other departments or agencies within the same state; and other state governments.

^d U.S. total reflects all 50 states and the District of Columbia.

^e Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
United States ^c	1,261,366,529	73,056,780	216,407,888	322,546,482	294,731,282	247,321,165	107,302,932
Alabama	15,113,917	0	988,806	8,922,103	0	4,730,116	472,892
Conservation and Natural Resources, Department of	2,152,483	0	0	2,152,483	0	0	0
Forensic Science, Department of	472,892	0	0	0	0	0	472,892
Geological Survey	3,196,187	0	988,806	2,207,381	0	0	0
Marine Environmental Sciences Consortium	4,562,239	0	0	4,562,239	0	0	0
Transportation, Department of	4,730,116	0	0	0	0	4,730,116	0
Alaska	9,274,800	687,500	1,359,100	5,833,600	0	1,394,600	0
Fish and Game, Department of	2,223,300	0	0	2,223,300	0	0	0
Geological and Geophysical Surveys, Division of	5,656,900	687,500	1,359,100	3,610,300	0	0	0
Transportation and Public Facilities, Department of	1,394,600	0	0	0	0	1,394,600	0
Arizona	17,682,315	142,816	267,174	6,023,906	8,330,000	2,175,550	742,869
Agriculture, Department of	260,322	142,816	0	117,506	0	0	0
Game and Fish Department	4,891,846	0	0	4,891,846	0	0	0
Geological Survey	1,859,997	0	267,174	849,954	0	0	742,869
Health Services, Department of	8,330,000	0	0	0	8,330,000	0	0
Transportation, Department of	2,340,150	0	0	164,600	0	2,175,550	0
Arkansas	14,446,084	6,643,460	1,736,657	658,590	0	1,064,332	4,343,045
Beef Council	80,555	80,555	0	0	0	0	0
Catfish Promotion Board	56,076	56,076	0	0	0	0	0
Corn and Grain Sorghum Promotion Board	495,500	495,500	0	0	0	0	0
Game and Fish Commission	658,590	0	0	658,590	0	0	0
Highway and Transportation Department	1,064,332	0	0	0	0	1,064,332	0
Rice Research and Promotion Board	2,727,000	2,727,000	0	0	0	0	0
Science and Technology Authority	6,948,031	868,329	1,736,657	0	0	0	4,343,045
Soybean Promotion Board	2,141,000	2,141,000	0	0	0	0	0
Wheat Promotion Board	275,000	275,000	0	0	0	0	0
California	154,216,981	1,057,945	105,072,000	9,169,723	0	38,136,000	781,313
Energy Commission	105,072,000	0	105,072,000	0	0	0	0
Food and Agriculture, Department of	2,101,971	962,945	0	1,128,713	0	0	10,313
Transportation, Department of	38,136,000	0	0	0	0	38,136,000	0
Water Resources, Department of	8,907,010	95,000	0	8,041,010	0	0	771,000
Colorado	20,828,274	826,517	1,464,536	7,142,396	8,527,268	1,930,506	937,051
Economic Development, Office of	7,404,089	330,000	81,332	0	6,992,757	0	0
Natural Resources, Department of	8,622,796	496,517	1,184,306	6,941,973	0	0	0
Public Health and Environment, Department of	2,205,496	0	198,898	42,796	1,534,511	382,240	47,051
Public Safety, Department of	890,000	0	0	0	0	0	890,000
Transportation, Department of	1,705,893	0	0	157,627	0	1,548,266	0
Connecticut	40,065,786	3,259,642	358,778	13,081,012	19,337,597	4,028,757	0
Agricultural Experiment Station	10,263,017	3,259,642	358,778	4,158,745	2,485,852	0	0
Environmental Protection, Department of	8,723,462	0	0	8,723,462	0	0	0
Mental Health and Addiction Services, Department of	3,647,105	0	0	0	3,647,105	0	0
Public Health, Department of	13,204,640	0	0	0	13,204,640	0	0
Transportation, Department of	4,227,562	0	0	198,805	0	4,028,757	0
Delaware	2,389,720	0	0	2,139,720	0	250,000	0
Geological Survey	1,512,415	0	0	1,512,415	0	0	0
Natural Resources and Environmental Control, Department of	627,305	0	0	627,305	0	0	0
Transportation, Department of	250,000	0	0	0	0	250,000	0
District of Columbia	696,198	0	0	0	503,267	192,931	0
Health, Department of	503,267	0	0	0	503,267	0	0
Transportation, Department of	192,931	0	0	0	0	192,931	0
Florida	120,848,726	16,952,501	3,571,447	50,262,488	39,962,706	9,804,294	295,290
Agriculture and Consumer Services, Department of	11,433,478	7,677,991	3,571,447	0	0	0	184,040
Citrus, Department of	10,145,417	9,274,510	0	0	870,907	0	0

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Environmental Protection, Department of	2,918,473	0	0	2,918,473	0	0	0
Fish and Wildlife Conservation Commission	47,344,015	0	0	47,344,015	0	0	0
Health, Department of	39,091,799	0	0	0	39,091,799	0	0
Space	325,706	0	0	0	0	214,456	111,250
Transportation, Department of	9,589,838	0	0	0	0	9,589,838	0
Georgia	8,923,795	0	1,000,000	0	0	7,723,795	200,000
Herty Advanced Materials Development Center	3,200,000	0	1,000,000	0	0	2,000,000	200,000
Transportation, Department of	5,723,795	0	0	0	0	5,723,795	0
Hawaii	14,233,186	505,967	5,825,028	5,229,835	0	2,672,356	0
Agriculture, Department of	414,967	330,967	0	84,000	0	0	0
Business, Economic Development and Tourism, Department of	5,825,028	0	5,825,028	0	0	0	0
Land and Natural Resources, Department of	5,320,835	175,000	0	5,145,835	0	0	0
Transportation, Department of	2,672,356	0	0	0	0	2,672,356	0
Idaho	9,059,568	1,529,838	0	6,123,012	0	1,406,718	0
Barley Commission	125,531	125,531	0	0	0	0	0
Bean Commission	63,752	63,752	0	0	0	0	0
Environmental Quality, Department of	65,370	0	0	65,370	0	0	0
Fish and Game, Department of	4,151,342	0	0	4,151,342	0	0	0
Potato Commission	830,000	830,000	0	0	0	0	0
Transportation, Department of	1,406,718	0	0	0	0	1,406,718	0
Water Resources, Department of	1,906,300	0	0	1,906,300	0	0	0
Wheat Commission	510,555	510,555	0	0	0	0	0
Illinois	16,553,689	0	190,000	0	2,596,733	7,066,133	6,700,823
Children and Family Services, Department of	6,128,895	0	0	0	0	0	6,128,895
Commerce and Economic Opportunity, Department of	190,000	0	190,000	0	0	0	0
Public Health, Department of	2,596,733	0	0	0	2,596,733	0	0
State Police	571,928	0	0	0	0	0	571,928
Transportation, Department of	7,066,133	0	0	0	0	7,066,133	0
Indiana	8,444,832	0	0	1,700,000	0	5,616,545	1,128,287
Criminal Justice Institute	450,000	0	0	0	0	0	450,000
Economic Development Corporation	678,287	0	0	0	0	0	678,287
Natural Resources, Department of	1,700,000	0	0	1,700,000	0	0	0
Transportation, Department of	5,616,545	0	0	0	0	5,616,545	0
Iowa	12,950,176	0	0	7,074,696	0	5,770,000	105,480
College Student Aid Commission	83,480	0	0	0	0	0	83,480
Criminal and Juvenile Justice Programs, Division of	22,000	0	0	0	0	0	22,000
Natural Resources, Department of	7,074,696	0	0	7,074,696	0	0	0
Transportation, Department of	5,770,000	0	0	0	0	5,770,000	0
Kansas	6,509,225	1,104,311	0	365,000	0	5,039,914	0
Transportation, Department of	5,039,914	0	0	0	0	5,039,914	0
Wheat Commission	1,104,311	1,104,311	0	0	0	0	0
Wildlife, Parks, and Tourism, Department of	365,000	0	0	365,000	0	0	0
Kentucky	20,410,096	0	4,256,458	2,005,156	7,371,306	4,042,181	2,734,995
Agricultural Policy, Governor's Office of	220,000	0	220,000	0	0	0	0
Budget and Fiscal Management, Office of	4,042,181	0	0	0	0	4,042,181	0
Commercialization and Innovation, Department of	9,239,959	0	1,577,758	0	4,927,206	0	2,734,995
Energy Policy, Governor's Office for	2,458,700	0	2,458,700	0	0	0	0
Environmental Education Council	0	0	0	0	0	0	0
Fish and Wildlife Resources, Department of	1,987,656	0	0	1,987,656	0	0	0
Nature Preserves Commission	17,500	0	0	17,500	0	0	0
Public Health, Department of	2,444,100	0	0	0	2,444,100	0	0
Louisiana	9,165,144	0	0	2,522,697	0	6,642,447	0
Transportation and Development, Department of	6,642,447	0	0	0	0	6,642,447	0
Wildlife and Fisheries, Department of	2,522,697	0	0	2,522,697	0	0	0

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Maine	8,847,471	1,152,303	5,000	2,527,524	349,014	709,306	4,104,324
Conservation, Department of	383,000	0	0	383,000	0	0	0
Environmental Protection, Department of	225,000	0	5,000	220,000	0	0	0
Marine Resources, Department of	1,370,454	0	0	1,151,440	219,014	0	0
State Fire Marshal's Office	3,000	0	0	0	0	0	3,000
Technology Institute	6,156,711	1,152,303	0	773,084	130,000	0	4,101,324
Transportation, Department of	709,306	0	0	0	0	709,306	0
Maryland	22,825,402	228,000	40,000	390,000	17,699,478	3,167,924	1,300,000
Business and Economic Development, Department of	1,300,000	0	0	0	0	0	1,300,000
Health and Mental Hygiene, Department of	2,175,332	0	0	0	2,175,332	0	0
Natural Resources, Department of	247,000	17,000	40,000	190,000	0	0	0
Technology Development Corporation	15,524,146	0	0	0	15,524,146	0	0
Transportation, Department of	3,578,924	211,000	0	200,000	0	3,167,924	0
Massachusetts	4,884,430	0	0	1,116,916	2,130,489	1,637,025	0
Capital Asset Management, Division of	0	0	0	0	0	0	0
Environmental Protection, Department of	445,801	0	0	445,801	0	0	0
Fish and Game, Department of	671,115	0	0	671,115	0	0	0
Mental Health, Department of	1,965,502	0	0	0	1,965,502	0	0
Public Health, Department of	164,987	0	0	0	164,987	0	0
Transportation Planning, Office of	1,637,025	0	0	0	0	1,637,025	0
Michigan	9,469,440	36,910	0	4,792,530	0	4,640,000	0
Agriculture, Department of	36,910	36,910	0	0	0	0	0
Natural Resources, Department of	4,792,530	0	0	4,792,530	0	0	0
Transportation, Department of	4,640,000	0	0	0	0	4,640,000	0
Minnesota	12,212,546	1,301,382	1,243,965	1,813,748	0	7,853,451	0
Agriculture, Department of	2,718,439	1,258,381	1,243,965	216,093	0	0	0
Forest Resources Council	280,396	43,001	0	237,395	0	0	0
Pollution Control Agency	1,036,255	0	0	1,036,255	0	0	0
Transportation, Department of	8,177,456	0	0	324,005	0	7,853,451	0
Mississippi	7,168,109	0	1,550,000	3,634,374	0	1,883,735	100,000
Innovative Geospatial Solutions, Enterprise for	3,974,000	0	1,550,000	2,250,000	0	74,000	100,000
Transportation, Department of	1,809,735	0	0	0	0	1,809,735	0
Wildlife, Fisheries, and Parks, Department of	1,384,374	0	0	1,384,374	0	0	0
Missouri	13,329,841	189,947	0	9,482,088	0	3,657,806	0
Agriculture, Department of	189,947	189,947	0	0	0	0	0
Conservation, Department of	9,143,947	0	0	9,143,947	0	0	0
Natural Resources, Department of	338,141	0	0	338,141	0	0	0
Transportation, Department of	3,657,806	0	0	0	0	3,657,806	0
Montana	7,543,860	1,850,656	835,942	2,185,884	822,299	917,662	931,417
Agriculture, Department of	1,533,814	1,507,114	0	26,700	0	0	0
Commerce, Department of	2,774,601	326,042	835,942	150,125	531,075	0	931,417
Environmental Quality, Department of	69,066	0	0	69,066	0	0	0
Fish, Wildlife, and Parks	1,939,993	0	0	1,939,993	0	0	0
Natural Resources and Conservation, Department of	17,500	17,500	0	0	0	0	0
Transportation, Department of	1,208,886	0	0	0	291,224	917,662	0
Nebraska	4,232,691	927,985	5,000	2,214,924	97,864	986,918	0
Agriculture, Department of	232,850	232,850	0	0	0	0	0
Corn Board	344,913	271,385	0	25,664	47,864	0	0
Dry Bean Commission	150,762	150,762	0	0	0	0	0
Grain Sorghum Board	1,988	1,988	0	0	0	0	0
Natural Resources, Department of	2,164,260	0	0	2,164,260	0	0	0
Roads, Department of	986,418	0	0	0	0	986,418	0
Wheat Board	351,500	271,000	5,000	25,000	50,000	500	0

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Nevada	1,377,888	0	0	329,423	0	1,048,465	0
Transportation, Department of	1,048,465	0	0	0	0	1,048,465	0
Wildlife, Department of	329,423	0	0	329,423	0	0	0
New Hampshire	1,804,156	219,170	0	100,000	0	1,009,986	475,000
Agriculture, Markets, and Food, Department of	169,170	169,170	0	0	0	0	0
Resources and Economic Development, Department of	625,000	50,000	0	100,000	0	0	475,000
Transportation, Department of	1,009,986	0	0	0	0	1,009,986	0
New Jersey	27,939,539	0	500,000	4,305,318	15,814,169	6,570,052	750,000
Brain Injury Research, Commission on	2,530,362	0	0	0	2,530,362	0	0
Cancer Research, Commission on	1,200,000	0	0	0	1,200,000	0	0
Environmental Protection, Department of	4,305,318	0	0	4,305,318	0	0	0
Research and Treatment of Autism, Council for	5,563,345	0	0	0	5,563,345	0	0
Science and Technology, Commission on	3,695,000	0	500,000	0	2,445,000	0	750,000
Spinal Cord Research, Commission on	4,075,462	0	0	0	4,075,462	0	0
Transportation, Department of	6,570,052	0	0	0	0	6,570,052	0
New Mexico	1,422,955	0	0	0	0	1,422,955	0
Transportation, Department of	1,422,955	0	0	0	0	1,422,955	0
New York	167,231,605	2,117,582	29,571,969	17,193,333	71,023,824	13,024,897	34,300,000
Agriculture and Markets, Department of	3,892,582	1,117,582	0	0	2,775,000	0	0
Energy Research and Development Authority	41,029,418	0	24,571,969	10,282,438	1,079,226	5,095,785	0
Environmental Conservation, Department of	4,161,101	0	0	4,161,101	0	0	0
Foundation for Science, Technology and Innovation	52,300,000	1,000,000	5,000,000	0	12,000,000	0	34,300,000
Health, Department of	57,919,392	0	0	2,749,794	55,169,598	0	0
Transportation, Department of	7,929,112	0	0	0	0	7,929,112	0
North Carolina	27,342,380	12,625,716	100,000	5,076,664	50,000	9,225,000	265,000
Agriculture and Consumer Services, Department of	12,525,716	12,525,716	0	0	0	0	0
Environment and Natural Resources, Department of	3,551,664	0	0	3,551,664	0	0	0
Transportation, Department of	11,265,000	100,000	100,000	1,525,000	50,000	9,225,000	265,000
North Dakota	6,352,675	1,444,526	4,153,800	22,500	0	598,349	133,500
Agriculture, Department of	140,464	140,464	0	0	0	0	0
Lignite Research Council	2,098,967	0	2,045,967	0	0	0	53,000
Mineral Resources, Department of	45,000	0	22,500	22,500	0	0	0
Oil and Gas Research Program	1,186,820	0	1,120,320	0	0	0	66,500
Renewable Energy Research Program	979,013	0	965,013	0	0	0	14,000
Soybean Council	714,023	714,023	0	0	0	0	0
Transportation, Department of	598,349	0	0	0	0	598,349	0
Wheat Commission	590,039	590,039	0	0	0	0	0
Ohio	125,120,668	0	41,236,142	38,137,758	19,731,000	13,111,393	12,904,375
Air Quality Development Authority	1,120,000	0	1,120,000	0	0	0	0
Development, Department of	118,914,375	0	40,000,000	35,000,000	19,500,000	12,000,000	12,414,375
Mental Health, Department of	721,000	0	0	0	231,000	0	490,000
Natural Resources, Department of	3,253,900	0	116,142	3,137,758	0	0	0
Transportation, Department of	1,111,393	0	0	0	0	1,111,393	0
Oklahoma	21,226,236	1,295,705	387,401	1,631,015	5,049,251	3,845,728	9,017,136
Center for the Advancement of Science and Technology	15,345,706	767,983	287,401	168,450	5,049,251	179,811	8,892,810
Health, Department of	9,250	0	0	0	0	0	9,250
Sorghum Commission	22,500	22,500	0	0	0	0	0
Transportation, Department of	4,132,781	251,788	100,000	0	0	3,665,917	115,076
Wheat Commission	253,434	253,434	0	0	0	0	0
Wildlife Conservation, Department of	1,462,565	0	0	1,462,565	0	0	0
Oregon	18,013,730	489,631	175,000	14,867,136	0	2,481,963	0
Agriculture, Department of	664,631	489,631	175,000	0	0	0	0
Fish and Wildlife, Department of	9,585,000	0	0	9,585,000	0	0	0
Forestry, Department of	354,882	0	0	354,882	0	0	0
Geology and Mineral Industries, Department of	4,097,576	0	0	4,097,576	0	0	0

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Transportation, Department of	2,481,963	0	0	0	0	2,481,963	0
Watershed Enhancement Board	829,678	0	0	829,678	0	0	0
Pennsylvania	76,947,795	755,736	0	7,891,207	60,032,594	2,979,258	5,289,000
Agriculture, Department of	755,736	755,736	0	0	0	0	0
Community and Economic Development, Department of	6,839,000	0	0	0	1,550,000	0	5,289,000
Conservation and Natural Resources, Department of	2,731,005	0	0	2,731,005	0	0	0
Environmental Protection, Department of	1,859,108	0	0	1,859,108	0	0	0
Fish and Boat Commission	640,326	0	0	640,326	0	0	0
Game Commission	2,660,768	0	0	2,660,768	0	0	0
Health, Department of	58,482,594	0	0	0	58,482,594	0	0
Transportation, Department of	2,979,258	0	0	0	0	2,979,258	0
Rhode Island	1,461,239	0	0	401,045	776,356	283,838	0
Economic Development Corporation	1,109,080	0	0	332,724	776,356	0	0
Transportation, Department of	352,159	0	0	68,321	0	283,838	0
South Carolina	36,536,007	0	185,322	34,711,576	255,506	1,383,603	0
Health and Environmental Control, Department of	133,172	0	0	0	133,172	0	0
Mental Health, Department of	122,334	0	0	0	122,334	0	0
Natural Resources, Department of	32,939,330	0	0	32,939,330	0	0	0
Public Service Authority	185,322	0	185,322	0	0	0	0
Sea Grant Consortium	1,772,246	0	0	1,772,246	0	0	0
Transportation, Department of	1,383,603	0	0	0	0	1,383,603	0
South Dakota	3,762,637	25,000	0	1,638,739	0	2,098,898	0
Agriculture, Department of	25,000	25,000	0	0	0	0	0
Game, Fish and Parks, Department of	1,638,739	0	0	1,638,739	0	0	0
Transportation, Department of	2,098,898	0	0	0	0	2,098,898	0
Tennessee	1,064,262	0	0	0	0	1,064,262	0
Transportation, Department of	1,064,262	0	0	0	0	1,064,262	0
Texas	35,163,655	3,618,361	0	6,351,022	123,000	25,071,272	0
Agriculture, Department of	2,319,442	2,319,442	0	0	0	0	0
Environmental Quality, Commission on	3,888,189	0	0	3,888,189	0	0	0
Health and Human Services Commission	123,000	0	0	0	123,000	0	0
Parks and Wildlife, Department of	1,746,387	0	0	1,746,387	0	0	0
Transportation, Department of	25,071,272	0	0	0	0	25,071,272	0
Water Development Board	2,015,365	1,298,919	0	716,446	0	0	0
Utah	30,812,205	3,589	7,375,546	6,329,203	12,853,867	2,600,000	1,650,000
Health, Department of	50,322	0	0	0	50,322	0	0
Natural Resources, Department of	8,000,000	0	4,000,000	4,000,000	0	0	0
Science Technology and Research, Governor's Office of Economic Development	20,161,883	3,589	3,375,546	2,329,203	12,803,545	0	1,650,000
Transportation, Department of	2,600,000	0	0	0	0	2,600,000	0
Vermont	1,665,079	490,900	300,000	75,000	132,198	666,981	0
Agriculture, Agency of	865,900	490,900	300,000	75,000	0	0	0
Human Services, Agency of	132,198	0	0	0	132,198	0	0
Transportation, Agency of	666,981	0	0	0	0	666,981	0
Virginia	17,495,156	2,285,378	157,000	3,147,713	611,496	8,931,272	2,362,297
Agriculture and Consumer Services, Department of	2,271,833	2,271,833	0	0	0	0	0
Consolidated Lab Services, Division of	683,917	13,545	0	58,876	611,496	0	0
Corrections, Department of	897,484	0	0	0	0	0	897,484
Forensic Science, Department of	181,813	0	0	0	0	0	181,813
Health, Department of	46,962	0	0	46,962	0	0	0
Innovative Technology, Center for	1,480,000	0	157,000	40,000	0	0	1,283,000
Marine Resources Commission	2,441,157	0	0	2,441,157	0	0	0
Natural History, Museum of	560,718	0	0	560,718	0	0	0
Transportation, Department of	8,931,272	0	0	0	0	8,931,272	0

TABLE 18. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2010
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Washington	24,525,701	8,340,489	0	10,782,537	0	5,402,675	0
Agriculture, Department of	328,111	328,111	0	0	0	0	0
Fish and Wildlife, Department of	6,881,561	0	0	6,881,561	0	0	0
Grain Commission	3,345,600	3,345,600	0	0	0	0	0
Natural Resources, Department of	4,035,976	135,000	0	3,900,976	0	0	0
Potato Commission	794,391	794,391	0	0	0	0	0
Red Raspberry Commission	173,387	173,387	0	0	0	0	0
Transportation, Department of	5,402,675	0	0	0	0	5,402,675	0
Tree Fruit Research Commission	3,430,000	3,430,000	0	0	0	0	0
Wine Commission	134,000	134,000	0	0	0	0	0
West Virginia	23,867,732	0	2,495,817	1,818,077	0	5,100,000	14,453,838
Environmental Protection, Department of	986,278	0	0	986,278	0	0	0
Geological and Economic Survey	2,682,942	0	2,495,817	0	0	0	187,125
Higher Education Policy Commission	14,258,436	0	0	0	0	0	14,258,436
Highways, Department of	5,100,000	0	0	0	0	5,100,000	0
Justice and Community Services, Division of	8,277	0	0	0	0	0	8,277
Natural Resources, Division of	831,799	0	0	831,799	0	0	0
Wisconsin	12,435,548	770,721	0	6,717,528	550,000	3,572,299	825,000
Agriculture, Trade, and Consumer Protection, Department of	770,721	770,721	0	0	0	0	0
Economic Development Corporation	1,375,000	0	0	0	550,000	0	825,000
Natural Resources, Department of	6,717,528	0	0	6,717,528	0	0	0
Transportation, Department of	3,572,299	0	0	0	0	3,572,299	0
Wyoming	5,471,379	176,596	0	4,607,766	0	687,017	0
Agriculture, Department of	176,596	176,596	0	0	0	0	0
Environmental Quality, Department of	150,000	0	0	150,000	0	0	0
Game and Fish, Department of	1,291,150	0	0	1,291,150	0	0	0
Geological Survey	2,866,616	0	0	2,866,616	0	0	0
Transportation, Department of	687,017	0	0	0	0	687,017	0
Water Development Office	300,000	0	0	300,000	0	0	0
Puerto Rico ^d	551,391	0	0	0	0	0	551,391
Education Council	551,391	0	0	0	0	0	551,391

^a Energy category was introduced with the FY 2010 and FY 2011 State Government R&D Survey. Previously, energy-related R&D was reported primarily in the Other and the Environment and natural resources categories.

^b Other functions include, but are not limited to, corrections, criminal justice, education, forensic science, labor, public safety, and social services.

^c U.S. total reflects all 50 states and the District of Columbia.

^d Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
United States ^c	1,403,816,235	74,502,498	256,199,776	336,802,780	314,199,669	265,499,832	156,611,680
Alabama	19,684,063	0	1,279,672	13,521,133	0	4,407,856	475,402
Conservation and Natural Resources, Department of	2,448,043	0	0	2,448,043	0	0	0
Forensic Science, Department of	475,402	0	0	0	0	0	475,402
Geological Survey	3,355,833	0	1,279,672	2,076,161	0	0	0
Marine Environmental Sciences Consortium	8,996,929	0	0	8,996,929	0	0	0
Transportation, Department of	4,407,856	0	0	0	0	4,407,856	0
Alaska	11,349,400	713,500	1,301,000	6,767,900	0	2,567,000	0
Fish and Game, Department of	2,697,600	0	0	2,697,600	0	0	0
Geological and Geophysical Surveys, Division of	6,084,800	713,500	1,301,000	4,070,300	0	0	0
Transportation and Public Facilities, Department of	2,567,000	0	0	0	0	2,567,000	0
Arizona	18,626,577	732,254	1,702,776	5,743,162	8,330,000	1,756,700	361,685
Agriculture, Department of	819,771	732,254	0	87,517	0	0	0
Game and Fish Department	4,643,079	0	0	4,643,079	0	0	0
Geological Survey	2,794,127	0	1,702,776	729,666	0	0	361,685
Health Services, Department of	8,330,000	0	0	0	8,330,000	0	0
Transportation, Department of	2,039,600	0	0	282,900	0	1,756,700	0
Arkansas	14,705,327	7,945,440	3,156,213	680,971	0	927,990	1,994,713
Beef Council	74,085	74,085	0	0	0	0	0
Catfish Promotion Board	43,648	43,648	0	0	0	0	0
Corn and Grain Sorghum Promotion Board	605,600	605,600	0	0	0	0	0
Game and Fish Commission	680,971	0	0	680,971	0	0	0
Highway and Transportation Department	927,990	0	0	0	0	927,990	0
Rice Research and Promotion Board	2,870,000	2,870,000	0	0	0	0	0
Science and Technology Authority	6,729,033	1,578,107	3,156,213	0	0	0	1,994,713
Soybean Promotion Board	2,611,000	2,611,000	0	0	0	0	0
Wheat Promotion Board	163,000	163,000	0	0	0	0	0
California	149,810,643	1,227,206	95,975,000	15,129,525	0	37,445,000	33,912
Energy Commission	95,975,000	0	95,975,000	0	0	0	0
Food and Agriculture, Department of	1,528,667	1,122,206	0	396,149	0	0	10,312
Transportation, Department of	37,445,000	0	0	0	0	37,445,000	0
Water Resources, Department of	14,861,976	105,000	0	14,733,376	0	0	23,600
Colorado	18,141,931	583,117	409,252	7,185,567	6,759,774	2,270,155	934,066
Economic Development, Office of	5,479,605	49,889	75,000	54,056	5,300,660	0	0
Natural Resources, Department of	7,654,500	533,228	307,212	6,814,060	0	0	0
Public Health and Environment, Department of	1,873,822	0	27,040	49,543	1,459,114	294,059	44,066
Public Safety, Department of	890,000	0	0	0	0	0	890,000
Transportation, Department of	2,244,004	0	0	267,908	0	1,976,096	0
Connecticut	39,192,091	3,326,548	553,640	12,517,073	18,783,202	4,011,628	0
Agricultural Experiment Station	10,631,320	3,326,548	553,640	4,226,564	2,524,568	0	0
Environmental Protection, Department of	8,101,784	0	0	8,101,784	0	0	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011

(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Mental Health and Addiction Services, Department of	4,363,990	0	0	0	4,363,990	0	0
Public Health, Department of	11,894,644	0	0	0	11,894,644	0	0
Transportation, Department of	4,200,353	0	0	188,725	0	4,011,628	0
Delaware	2,609,902	0	0	2,359,902	0	250,000	0
Geological Survey	1,663,179	0	0	1,663,179	0	0	0
Natural Resources and Environmental Control, Department of	696,723	0	0	696,723	0	0	0
Transportation, Department of	250,000	0	0	0	0	250,000	0
District of Columbia	1,221,108	0	0	0	956,728	264,380	0
Health, Department of	956,728	0	0	0	956,728	0	0
Transportation, Department of	264,380	0	0	0	0	264,380	0
Florida	150,764,438	15,991,126	4,158,768	47,437,237	65,570,757	15,645,022	1,961,528
Agriculture and Consumer Services, Department of	11,707,343	7,392,473	4,100,132	0	0	0	214,738
Citrus, Department of	9,445,480	8,598,353	0	0	847,127	0	0
Environmental Protection, Department of	2,787,307	0	0	2,787,307	0	0	0
Fish and Wildlife Conservation Commission	44,649,930	0	0	44,649,930	0	0	0
Health, Department of	64,723,630	0	0	0	64,723,630	0	0
Space	5,239,510	300	58,636	0	0	3,433,784	1,746,790
Transportation, Department of	12,211,238	0	0	0	0	12,211,238	0
Georgia	11,690,663	0	1,200,000	0	0	10,290,663	200,000
Herty Advanced Materials Development Center	3,600,000	0	1,200,000	0	0	2,200,000	200,000
Transportation, Department of	8,090,663	0	0	0	0	8,090,663	0
Hawaii	13,103,983	914,799	6,020,023	5,607,794	0	561,367	0
Agriculture, Department of	564,799	544,799	0	20,000	0	0	0
Business, Economic Development and Tourism, Department of	6,020,023	0	6,020,023	0	0	0	0
Land and Natural Resources, Department of	5,957,794	370,000	0	5,587,794	0	0	0
Transportation, Department of	561,367	0	0	0	0	561,367	0
Idaho	9,366,052	1,720,839	0	6,064,901	0	1,580,312	0
Barley Commission	94,342	94,342	0	0	0	0	0
Bean Commission	93,882	93,882	0	0	0	0	0
Environmental Quality, Department of	25,587	0	0	25,587	0	0	0
Fish and Game, Department of	4,210,814	0	0	4,210,814	0	0	0
Potato Commission	935,000	935,000	0	0	0	0	0
Transportation, Department of	1,580,312	0	0	0	0	1,580,312	0
Water Resources, Department of	1,828,500	0	0	1,828,500	0	0	0
Wheat Commission	597,615	597,615	0	0	0	0	0
Illinois	17,207,125	0	0	0	680,013	9,287,308	7,239,804
Children and Family Services, Department of	6,681,163	0	0	0	0	0	6,681,163
Public Health, Department of	680,013	0	0	0	680,013	0	0
State Police	558,641	0	0	0	0	0	558,641
Transportation, Department of	9,287,308	0	0	0	0	9,287,308	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011

(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Indiana	6,983,364	0	0	1,700,000	0	4,074,838	1,208,526
Criminal Justice Institute	450,000	0	0	0	0	0	450,000
Economic Development Corporation	833,364	0	0	0	0	74,838	758,526
Natural Resources, Department of	1,700,000	0	0	1,700,000	0	0	0
Transportation, Department of	4,000,000	0	0	0	0	4,000,000	0
Iowa	36,992,222	0	26,590,826	3,640,397	0	6,050,000	710,999
College Student Aid Commission	92,753	0	0	0	0	0	92,753
Criminal and Juvenile Justice Programs, Division of	20,246	0	0	0	0	0	20,246
Economic Development Authority, Energy Office	26,590,826	0	26,590,826	0	0	0	0
Natural Resources, Department of	3,640,397	0	0	3,640,397	0	0	0
Transportation, Department of	6,050,000	0	0	0	0	6,050,000	0
Workforce Development	598,000	0	0	0	0	0	598,000
Kansas	6,635,626	1,167,853	0	465,000	0	5,002,773	0
Transportation, Department of	5,002,773	0	0	0	0	5,002,773	0
Wheat Commission	1,167,853	1,167,853	0	0	0	0	0
Wildlife, Parks, and Tourism, Department of	465,000	0	0	465,000	0	0	0
Kentucky	20,498,849	45,130	3,372,112	2,137,523	7,136,813	4,425,113	3,382,158
Agricultural Policy, Governor's Office of	45,130	45,130	0	0	0	0	0
Budget and Fiscal Management, Office of	4,425,113	0	0	0	0	4,425,113	0
Commercialization and Innovation, Department of	8,409,917	0	642,212	0	4,964,213	0	2,803,492
Early Childhood Development, Division of	541,000	0	0	0	0	0	541,000
Energy Policy, Governor's Office for	2,729,900	0	2,729,900	0	0	0	0
Environmental Education Council	37,666	0	0	0	0	0	37,666
Fish and Wildlife Resources, Department of	2,111,023	0	0	2,111,023	0	0	0
Nature Preserves Commission	26,500	0	0	26,500	0	0	0
Public Health, Department of	2,172,600	0	0	0	2,172,600	0	0
Louisiana	9,203,635	0	0	2,807,583	0	6,396,052	0
Transportation and Development, Department of	6,396,052	0	0	0	0	6,396,052	0
Wildlife and Fisheries, Department of	2,807,583	0	0	2,807,583	0	0	0
Maine	9,918,765	987,050	5,000	3,728,729	1,082,201	505,860	3,609,925
Agriculture, Department of	72,750	72,750	0	0	0	0	0
Conservation, Department of	380,000	0	0	380,000	0	0	0
Drug Enforcement Agency	75,000	0	0	0	0	0	75,000
Environmental Protection, Department of	225,000	0	5,000	220,000	0	0	0
Marine Resources, Department of	2,127,121	10,000	0	1,871,165	245,956	0	0
State Fire Marshal's Office	3,000	0	0	0	0	0	3,000
Technology Institute	6,530,034	904,300	0	1,257,564	836,245	0	3,531,925
Transportation, Department of	505,860	0	0	0	0	505,860	0
Maryland	20,084,540	451,700	25,000	616,000	13,611,823	4,080,017	1,300,000
Business and Economic Development, Department of	1,300,000	0	0	0	0	0	1,300,000
Health and Mental Hygiene, Department of	2,400,000	0	0	0	2,400,000	0	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011

(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Natural Resources, Department of	268,700	18,700	25,000	225,000	0	0	0
Technology Development Corporation	11,211,823	0	0	0	11,211,823	0	0
Transportation, Department of	4,904,017	433,000	0	391,000	0	4,080,017	0
Massachusetts	4,878,927	0	0	842,629	2,045,865	1,504,260	486,173
Capital Asset Management, Division of	0	0	0	0	0	0	0
Early Education and Care, Department of	486,173	0	0	0	0	0	486,173
Environmental Protection, Department of	259,147	0	0	259,147	0	0	0
Fish and Game, Department of	583,482	0	0	583,482	0	0	0
Mental Health, Department of	1,882,744	0	0	0	1,882,744	0	0
Public Health, Department of	163,121	0	0	0	163,121	0	0
Transportation Planning, Office of	1,504,260	0	0	0	0	1,504,260	0
Michigan	9,802,873	82,793	0	4,595,080	0	5,125,000	0
Agriculture, Department of	82,793	82,793	0	0	0	0	0
Natural Resources, Department of	4,595,080	0	0	4,595,080	0	0	0
Transportation, Department of	5,125,000	0	0	0	0	5,125,000	0
Minnesota	11,653,327	1,387,590	249,201	794,167	0	9,222,369	0
Agriculture, Department of	1,774,976	1,347,590	249,201	178,185	0	0	0
Forest Resources Council	114,592	40,000	0	74,592	0	0	0
Pollution Control Agency	134,502	0	0	134,502	0	0	0
Transportation, Department of	9,629,257	0	0	406,888	0	9,222,369	0
Mississippi	7,420,851	0	1,250,000	3,295,081	0	2,463,770	412,000
Innovative Geospatial Solutions, Enterprise for	2,686,000	0	1,250,000	950,000	0	74,000	412,000
Transportation, Department of	2,389,770	0	0	0	0	2,389,770	0
Wildlife, Fisheries, and Parks, Department of	2,345,081	0	0	2,345,081	0	0	0
Missouri	13,658,961	85,115	0	8,530,764	0	5,043,082	0
Agriculture, Department of	32,308	32,308	0	0	0	0	0
Conservation, Department of	8,216,486	0	0	8,216,486	0	0	0
Natural Resources, Department of	367,085	52,807	0	314,278	0	0	0
Transportation, Department of	5,043,082	0	0	0	0	5,043,082	0
Montana	6,474,190	1,493,635	405,260	2,343,724	848,774	1,168,956	213,841
Agriculture, Department of	1,653,768	1,353,635	0	300,133	0	0	0
Commerce, Department of	1,376,063	140,000	405,260	0	646,962	0	183,841
Environmental Quality, Department of	283,206	0	0	185,726	0	97,480	0
Fish, Wildlife, and Parks	1,857,865	0	0	1,857,865	0	0	0
Natural Resources and Conservation, Department of	30,000	0	0	0	0	0	30,000
Transportation, Department of	1,273,288	0	0	0	201,812	1,071,476	0
Nebraska	4,061,651	977,548	10,000	1,902,385	48,482	1,123,236	0
Agriculture, Department of	342,385	342,385	0	0	0	0	0
Corn Board	267,123	116,499	0	102,142	48,482	0	0
Dry Bean Commission	141,220	141,220	0	0	0	0	0
Grain Sorghum Board	13,444	13,444	0	0	0	0	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011

(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Natural Resources, Department of	1,770,243	0	0	1,770,243	0	0	0
Roads, Department of	1,123,236	0	0	0	0	1,123,236	0
Wheat Board	404,000	364,000	10,000	30,000	0	0	0
Nevada	1,868,869	0	0	475,821	0	1,393,048	0
Transportation, Department of	1,393,048	0	0	0	0	1,393,048	0
Wildlife, Department of	475,821	0	0	475,821	0	0	0
New Hampshire	1,921,421	113,969	0	111,000	0	1,196,452	500,000
Agriculture, Markets, and Food, Department of	40,969	40,969	0	0	0	0	0
Resources and Economic Development, Department of	684,000	73,000	0	111,000	0	0	500,000
Transportation, Department of	1,196,452	0	0	0	0	1,196,452	0
New Jersey	17,068,781	0	0	1,988,395	9,537,742	5,542,644	0
Brain Injury Research, Commission on	3,260,413	0	0	0	3,260,413	0	0
Cancer Research, Commission on	350,000	0	0	0	350,000	0	0
Environmental Protection, Department of	1,988,395	0	0	1,988,395	0	0	0
Research and Treatment of Autism, Council for	3,385,611	0	0	0	3,385,611	0	0
Spinal Cord Research, Commission on	2,541,718	0	0	0	2,541,718	0	0
Transportation, Department of	5,542,644	0	0	0	0	5,542,644	0
New Mexico	1,821,583	0	0	0	0	1,821,583	0
Transportation, Department of	1,821,583	0	0	0	0	1,821,583	0
New York	182,736,305	1,779,089	45,400,532	8,925,684	70,939,954	12,191,046	43,500,000
Agriculture and Markets, Department of	3,554,089	779,089	0	0	2,775,000	0	0
Energy Research and Development Authority	48,057,371	0	37,400,532	3,458,575	0	7,198,264	0
Environmental Conservation, Department of	2,939,284	0	0	2,939,284	0	0	0
Foundation for Science, Technology and Innovation	68,000,000	1,000,000	8,000,000	0	15,500,000	0	43,500,000
Health, Department of	55,192,779	0	0	2,527,825	52,664,954	0	0
Transportation, Department of	4,992,782	0	0	0	0	4,992,782	0
North Carolina	29,611,785	12,878,500	105,000	6,817,285	50,000	9,500,000	261,000
Agriculture and Consumer Services, Department of	12,773,500	12,773,500	0	0	0	0	0
Environment and Natural Resources, Department of	5,267,285	0	0	5,267,285	0	0	0
Transportation, Department of	11,571,000	105,000	105,000	1,550,000	50,000	9,500,000	261,000
North Dakota	8,072,257	2,014,848	5,200,850	15,000	0	578,559	263,000
Agriculture, Department of	75,710	75,710	0	0	0	0	0
Lignite Research Council	2,790,750	0	2,639,750	0	0	0	151,000
Mineral Resources, Department of	73,500	0	58,500	15,000	0	0	0
Oil and Gas Research Program	1,378,125	0	1,273,125	0	0	0	105,000
Renewable Energy Research Program	1,236,475	0	1,229,475	0	0	0	7,000
Soybean Council	808,649	808,649	0	0	0	0	0
Transportation, Department of	578,559	0	0	0	0	578,559	0
Wheat Commission	1,130,489	1,130,489	0	0	0	0	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Ohio	159,322,228	0	47,150,392	38,596,214	13,231,000	17,281,878	43,062,744
Air Quality Development Authority	2,034,728	0	2,034,728	0	0	0	0
Development, Department of	150,072,744	0	45,000,000	35,000,000	13,000,000	14,500,000	42,572,744
Mental Health, Department of	721,000	0	0	0	231,000	0	490,000
Natural Resources, Department of	3,711,878	0	115,664	3,596,214	0	0	0
Transportation, Department of	2,781,878	0	0	0	0	2,781,878	0
Oklahoma	20,304,740	1,608,677	149,201	2,505,761	5,478,209	4,101,968	6,460,924
Center for the Advancement of Science and Technology	13,052,997	811,656	149,201	238,510	5,478,209	0	6,375,421
Health, Department of	9,850	0	0	0	0	0	9,850
Sorghum Commission	22,500	22,500	0	0	0	0	0
Transportation, Department of	4,437,947	260,326	0	0	0	4,101,968	75,653
Wheat Commission	514,195	514,195	0	0	0	0	0
Wildlife Conservation, Department of	2,267,251	0	0	2,267,251	0	0	0
Oregon	20,001,272	532,446	50,000	16,924,664	0	2,494,162	0
Agriculture, Department of	582,446	532,446	50,000	0	0	0	0
Fish and Wildlife, Department of	11,326,000	0	0	11,326,000	0	0	0
Forestry, Department of	478,413	0	0	478,413	0	0	0
Geology and Mineral Industries, Department of	4,979,303	0	0	4,979,303	0	0	0
Transportation, Department of	2,494,162	0	0	0	0	2,494,162	0
Watershed Enhancement Board	140,948	0	0	140,948	0	0	0
Pennsylvania	71,098,139	640,671	0	7,749,253	54,788,921	3,919,294	4,000,000
Agriculture, Department of	640,671	640,671	0	0	0	0	0
Community and Economic Development, Department of	4,700,000	0	0	0	700,000	0	4,000,000
Conservation and Natural Resources, Department of	2,212,545	0	0	2,212,545	0	0	0
Environmental Protection, Department of	1,059,451	0	0	1,059,451	0	0	0
Fish and Boat Commission	781,643	0	0	781,643	0	0	0
Game Commission	3,695,614	0	0	3,695,614	0	0	0
Health, Department of	54,088,921	0	0	0	54,088,921	0	0
Transportation, Department of	3,919,294	0	0	0	0	3,919,294	0
Rhode Island	1,947,727	0	0	590,282	912,363	445,082	0
Economic Development Corporation	1,303,377	0	0	391,014	912,363	0	0
Transportation, Department of	644,350	0	0	199,268	0	445,082	0
South Carolina	47,795,394	92,305	115,338	45,163,028	844,138	1,580,585	0
Health and Environmental Control, Department of	721,804	0	0	0	721,804	0	0
Mental Health, Department of	122,334	0	0	0	122,334	0	0
Natural Resources, Department of	42,392,567	0	0	42,392,567	0	0	0
Public Service Authority	115,338	0	115,338	0	0	0	0
Sea Grant Consortium	2,862,766	92,305	0	2,770,461	0	0	0
Transportation, Department of	1,580,585	0	0	0	0	1,580,585	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011
(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
South Dakota	3,629,155	0	0	1,628,888	0	2,000,267	0
Game, Fish and Parks, Department of	1,628,888	0	0	1,628,888	0	0	0
Transportation, Department of	2,000,267	0	0	0	0	2,000,267	0
Tennessee	3,606,726	0	0	320,000	0	3,286,726	0
Environment and Conservation, Department of	320,000	0	0	320,000	0	0	0
Transportation, Department of	3,286,726	0	0	0	0	3,286,726	0
Texas	47,372,367	2,877,596	0	4,805,152	15,838,498	23,851,121	0
Agriculture, Department of	1,853,946	1,853,946	0	0	0	0	0
Cancer Prevention and Research Institute	15,715,498	0	0	0	15,715,498	0	0
Environmental Quality, Commission on	1,599,224	0	0	1,599,224	0	0	0
Health and Human Services Commission	123,000	0	0	0	123,000	0	0
Parks and Wildlife, Department of	1,819,498	0	0	1,819,498	0	0	0
Transportation, Department of	23,851,121	0	0	0	0	23,851,121	0
Water Development Board	2,410,080	1,023,650	0	1,386,430	0	0	0
Utah	34,418,764	113,336	7,209,348	7,943,186	14,602,894	2,600,000	1,950,000
Health, Department of	261,727	0	0	0	261,727	0	0
Natural Resources, Department of	8,000,000	0	4,000,000	4,000,000	0	0	0
Science Technology and Research, Governor's Office of Economic Development	23,557,037	113,336	3,209,348	3,943,186	14,341,167	0	1,950,000
Transportation, Department of	2,600,000	0	0	0	0	2,600,000	0
Vermont	1,711,673	652,700	300,000	75,000	190,117	493,856	0
Agriculture, Agency of	1,027,700	652,700	300,000	75,000	0	0	0
Human Services, Agency of	190,117	0	0	0	190,117	0	0
Transportation, Agency of	493,856	0	0	0	0	493,856	0
Virginia	17,241,804	2,213,361	118,000	3,829,525	682,506	8,469,431	1,928,981
Agriculture and Consumer Services, Department of	2,169,935	2,169,935	0	0	0	0	0
Consolidated Lab Services, Division of	784,808	43,426	0	58,876	682,506	0	0
Corrections, Department of	919,542	0	0	0	0	0	919,542
Forensic Science, Department of	160,439	0	0	0	0	0	160,439
Health, Department of	27,900	0	0	27,900	0	0	0
Innovative Technology, Center for	1,010,000	0	118,000	43,000	0	0	849,000
Marine Resources Commission	3,130,629	0	0	3,130,629	0	0	0
Natural History, Museum of	569,120	0	0	569,120	0	0	0
Transportation, Department of	8,469,431	0	0	0	0	8,469,431	0
Washington	24,500,489	8,317,099	0	11,087,560	0	5,095,830	0
Agriculture, Department of	190,841	190,841	0	0	0	0	0
Fish and Wildlife, Department of	7,190,560	0	0	7,190,560	0	0	0
Grain Commission	3,573,613	3,573,613	0	0	0	0	0
Natural Resources, Department of	4,032,000	135,000	0	3,897,000	0	0	0
Potato Commission	842,198	842,198	0	0	0	0	0
Red Raspberry Commission	225,447	225,447	0	0	0	0	0

TABLE 19. State agency expenditures for R&D, by state, department or agency, and type of R&D: FY 2011

(Dollars)

Department or agency	Total	Agriculture	Energy ^a	Environment and natural resources	Health	Transportation	Other ^b
Transportation, Department of	5,095,830	0	0	0	0	5,095,830	0
Tree Fruit Research Commission	3,215,000	3,215,000	0	0	0	0	0
Wine Commission	135,000	135,000	0	0	0	0	0
West Virginia	35,475,338	151,428	2,737,372	1,873,514	0	5,583,425	25,129,599
Agriculture, Department of	151,428	151,428	0	0	0	0	0
Environmental Protection, Department of	885,794	0	0	885,794	0	0	0
Geological and Economic Survey	3,274,416	0	2,737,372	0	0	0	537,044
Higher Education Policy Commission	24,577,042	0	0	0	0	0	24,577,042
Highways, Department of	5,583,425	0	0	0	0	5,583,425	0
Justice and Community Services, Division of	15,513	0	0	0	0	0	15,513
Natural Resources, Division of	987,720	0	0	987,720	0	0	0
Wisconsin	21,128,936	536,004	0	10,197,725	1,248,895	4,115,612	5,030,700
Agriculture, Trade, and Consumer Protection, Department of	536,004	536,004	0	0	0	0	0
Economic Development Corporation	7,979,595	0	0	1,700,000	1,248,895	0	5,030,700
Natural Resources, Department of	8,497,725	0	0	8,497,725	0	0	0
Transportation, Department of	4,115,612	0	0	0	0	4,115,612	0
Wyoming	5,419,398	147,226	0	4,765,616	0	506,556	0
Agriculture, Department of	147,226	147,226	0	0	0	0	0
Environmental Quality, Department of	150,000	0	0	150,000	0	0	0
Game and Fish, Department of	1,775,184	0	0	1,775,184	0	0	0
Geological Survey	2,540,432	0	0	2,540,432	0	0	0
Transportation, Department of	506,556	0	0	0	0	506,556	0
Water Development Office	300,000	0	0	300,000	0	0	0
Puerto Rico ^d	537,869	0	0	0	0	0	537,869
Education Council	537,869	0	0	0	0	0	537,869

^a Energy category was introduced with the FY 2010 and FY 2011 State Government R&D Survey. Previously, energy-related R&D was reported primarily in the Other and the Environment and natural resources categories.

^b Other functions include, but are not limited to, corrections, criminal justice, education, forensic science, labor, public safety, and social services.

^c U.S. total reflects all 50 states and the District of Columbia.

^d Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

Appendix A. Technical Notes

The National Science Foundation (NSF) Survey of State Government Research and Development measures the extent of R&D activity performed and funded by each of the nation's 50 state governments, the District of Columbia, and Puerto Rico.¹ State governments play an important role in advancing knowledge—notably, through their support of academic and other extramural researchers and also through their own internal research activities.

State R&D totals can display considerable volatility between the surveys. For example, state agency expenditures are influenced by several national and state-specific factors, and large changes (either positive or negative) are not unusual, especially for discretionary spending items such as R&D. States often will create special funds to support specific research activities for a limited time. These funds often will have a one-time appropriation from the legislature and expire within 2–5 fiscal years; state agencies obligate those funds for specific R&D projects, depending on availability and expiration of funding authority as well as other program-specific and administrative considerations.

Scope of Survey

The survey covered state government departments, agencies, commissions, public authorities, and other entities operating separately or somewhat autonomously from the central state government but over whose activities the state government maintains administrative or fiscal control. Several industry-specific state commissions, which are generally chartered by state legislatures but administered independently, were considered state agencies and are included in the survey's population of interest.

The survey asked about state agencies' expenditures for R&D as of the end of FY 2010 and of FY 2011. Most states have a fiscal-year period that begins 1 July and ends the following 30 June. For example, FY 2011 is the state fiscal period beginning on 1 July 2010 and ending on 30 June 2011. There are, however, four exceptions to the 30 June fiscal-year end: New York (ends 31 March), Texas (ends 31 August), Alabama (ends 30 September), and Michigan (ends 30 September). For comparability, these four states are surveyed with the other 46 states that end on 30 June. The District of Columbia follows the federal government fiscal year, which ends 30 September, while Puerto Rico's fiscal year begins 1 July and ends on 30 June.

The survey excluded state-run colleges and universities, which are included as part of NSF's Higher Education Research and Development (HERD) Survey, as well as state-run laboratories or experiment stations controlled by state universities. It also excluded entities determined to be nonprofit or private, as defined by the U.S. Census Bureau.² Although the population of interest covered all state-run entities except state-run colleges and universities, evidence showed that not all state agencies were involved in R&D activity and so did not need to be surveyed.

Survey Methodology

Using input from potential state coordinators, agency respondents, and R&D experts, survey staff developed a Web-based survey instrument for both the central state coordinators and the state agency respondents. The survey was launched in July 2012 with a letter from the Director of the U.S. Census Bureau to governors asking for each state's participation (see appendix B).

Working with Census Bureau staff, governors' offices identified a state coordinator in each state to assist in collecting data from state agencies. Each coordinator was given a list of agencies in his or her state and asked to add any other state agencies that the coordinator believed could have conducted R&D. The survey was then sent to all agencies with potential R&D, as identified by the coordinators. The final list of agencies surveyed consisted of agencies that reported R&D on previous survey cycles, agencies added

survey was then sent to all agencies with potential R&D, as identified by the coordinators. The final list of agencies surveyed consisted of agencies that reported R&D on previous survey cycles, agencies added by the state coordinator, and agencies surveyed in previous survey cycles that may not have had any R&D but continued to have the potential to perform or fund R&D. State coordinators also were able to remove an agency that was preselected if the agency's mission had changed, the agency had been reorganized, or the agency no longer performed or funded any R&D and would not in the future. Through this process, 25 agencies were removed from the survey population of interest prior to the mailout of the FY 2010 and FY 2011 survey. Of the final count of 472 agencies identified for the FY 2010 and FY 2011 survey, 413 agencies were surveyed in the FY 2009 survey cycle, and 59 agencies were added to the FY 2010 and FY 2011 survey's population of interest by the state coordinators.

Before officially submitting the data for their state, coordinators were asked to perform a final verification of aggregated agency data. All responses, including the initial agency data submissions and final state coordinator verifications, were received via the Web-based survey form or e-mail. Basic logical edit checks, review of respondent comments, and comparisons of data from previous surveys allowed staff to detect data errors and work with state respondents to correct them.

Survey Instrument

The questionnaire consisted of one screening question and five R&D expenditure data questions. The five R&D expenditure questions contained a total of 17 items for each fiscal year surveyed for a total of 34 data items on the survey.

The purpose of the screening question was twofold: (1) to reduce the burden on agency respondents who did not have qualifying R&D expenditures during FY 2010 or FY 2011, and (2) to clarify the scope of the survey for those agencies with R&D expenditure data to report. Respondents who answered "No" to the screening question were not required to complete the remaining questions.

Agencies that answered "Yes" to the screening question were then asked for information about the type of performer—namely how much was expended for internal and external R&D. In the case of internal performers, respondents were asked to provide expenditures by source of funding (e.g., state funds, federal funds, other), whereas in the case of external performers, respondents were asked to identify how much money was provided to academic institutions, companies and individuals, and all other performers to conduct R&D on behalf of the agency for all types of funds (e.g., state funds, federal funds, other).

Additional questions asked respondents to identify how much of the total R&D spending (for both internal and external performers) was considered basic research and how much of their total R&D spending came from federal funds. Further questions asked respondents to identify how much was spent on several different types of research—namely, agriculture, energy, environment and natural resources, health, transportation, or other activities. Finally, state departments and agencies were asked to provide expenditures for construction and acquisition of facilities used primarily for R&D.

The instrument also allowed respondents to provide comments on each question.

Data Limitations and Comparability

State coordinators in Arizona, Indiana, Louisiana, Michigan, Mississippi, Nevada, New Mexico, Ohio, Oklahoma, Tennessee, Texas, Utah, and the District of Columbia did not verify the aggregated agency data. One agency in Louisiana and one agency in New Mexico did not respond to the survey.

Although every effort was made to exclude out-of-scope amounts, it is likely that some reported data included expenditures for non-R&D activities, such as commercialization, environmental testing, or routine monitoring work.

Given that states have comparatively little experience in tracking and measuring R&D specifically, it is likely that some portion of the reported changes reflects measurement and coverage errors. In the case of R&D funds for external performers, some agencies were able to report only obligations made in a given fiscal year and were not able to provide detailed expenditures for each fiscal year.

The current NSF Survey of State Government R&D has been conducted for FY 2006, FY 2007, FY 2009, and FY 2010 and FY 2011.³ Data presented in trend tables in this report are from the most recently completed survey cycle, which canvassed 2 fiscal years (FY 2010 and FY 2011) as part of the same survey cycle. References to prior-year data should be restricted to those published in this report for two reasons: (1) when completing the current-year survey, survey respondents may revise their prior-year data, and (2) NSF reviews data for prior years for consistency with current-year responses and, if necessary, may revise these data in consultation with respondents.

The previous NSF Survey of State Government R&D collected data for FY 1995 data. Prior to that effort, surveys were conducted for FY 1987 and FY 1988, as well as for FYs 1977, 1973, 1972, 1967, 1968, 1965, and 1964. As a result of differences in the survey populations, definitions of covered R&D activities, and collection methods over time, the results of these historical surveys are not comparable with the statistics collected on the FY 2006, FY 2007, FY 2009, and FY 2010 and FY 2011 Survey of State Government R&D.

Total state agency R&D expenditures increased by more than 11% between FY 2010 and FY 2011: 33 states and the District of Columbia reported overall increases, and 17 states plus Puerto Rico reported overall declines. Two states (Iowa and Tennessee) reported combined agency R&D increases of more than 100% from FY 2010 to FY 2011, while New Jersey showed the only combined agency R&D decrease of more than 30%.

Direct comparison of state agency expenditures should also be viewed with caution because states will often reorganize departments and agencies such that some divisions and offices that were part of one agency may be moved to another agency. In other instances, entire departments may be reorganized into newly created departments. Although the FY 2010 and FY 2011 Survey of State Government R&D encountered several instances of these organizational changes in several states, the survey itself is not designed to measure specific changes in state government organization. To account for these and other changes in the data, Census Bureau and NSF staff conducted follow-up calls for agencies with data changes of plus or minus 50% and at least \$1 million between FY 2009 and FY 2011 to ensure the accuracy of the FY 2010 and FY 2011 survey data.

Data specific to state government agencies were first released with the FY 2009 survey results and are also included in the FY 2010 and FY 2011 detailed statistical tables (DSTs). Since the FY 2010 and FY 2011 Survey of State Government R&D collected 2 fiscal years of data at once, some agencies only had qualifying R&D activities in 1 of those 2 years. In these cases, the agency is presented only on the DSTs where the agency had R&D for that specific fiscal year. Specific agency-level data for FY 2006 and FY 2007 are not available.

The data exclude R&D expenditures of states that did not flow through state agencies' budgets. The state totals do not include direct appropriations from state legislatures to colleges and universities. In FY 2011, universities and colleges reported expending \$3.8 billion on separately budgeted R&D activities that were funded from all sources of state and local government support (NSF/NCSES 2012). In FY 2011,

former but not in the latter. Another likely factor is the exclusion of R&D at agricultural experiment stations from the state survey totals because they are generally associated with land-grant colleges and universities and are canvassed on the HERD Survey.⁴

Response Rates

Two response rates were calculated for the FY 2010 and FY 2011 Survey of State Government R&D: one for official data verification at the state level, and one for agency-level responders. All 50 state governments, the District of Columbia, and Puerto Rico participated in the survey; however, 39 out of 52 (75%) state coordinators officially verified the final aggregate state data. The 12 states and the District of Columbia, which did not verify data officially, had some or all agencies submit data. The final agency response was 470 out of 472 agencies (99.6 %); of those agencies that responded, 256 agencies (54.5%) reported having some R&D activity. Table A-1 presents final agency response rates and also counts of agencies that identified themselves as having qualifying R&D expenditures on the FY 2010 and FY 2011 survey.

Given the high agency response rate, no statistical methods were used to account for nonresponding agencies. All state and national totals are aggregates of reported agency data.

Definitions

Basic research is conducted primarily to acquire new knowledge. For example, it can be research without a specific product or process in mind or research to produce a broad base of knowledge for future research.

Construction and acquisition of facilities used primarily for R&D includes major costs for construction and purchase of buildings to be used primarily as R&D facilities; also includes new construction, major renovations, and purchase of land or buildings.

Performers—external are those outside the department or agency who perform R&D under the administrative oversight or control of that department or agency. This may include projects for the department or agency as well as the department's or agency's extramural research programs. External performers include the following:

- **Academic institutions:** Public or private universities and colleges
- **Companies and individuals:** Include those performers under contract for research projects or that received grants for research projects
- **Other:** Nonprofit organizations, including foundations; other departments or agencies within the state; other state governments; county, municipal, township, or other local governments; federal government

Performers—internal are the department's or agency's own employees who perform R&D, which includes R&D performed by those employees and services performed by others in support of an internal R&D project (e.g., lab testing).

Research and development is creative work conducted systematically to (1) extend scientific knowledge, or (2) devise new or improved applications, including materials, products, devices, processes, systems, or services.

Sources and examples of R&D funding include the following:

- **State:** State appropriations and grants, tobacco settlement funds, and state lottery proceeds
- **Federal government:** Grants, contracts, and appropriations from the U.S. government
- **Other:** Grants and contracts from companies, nonprofit organizations (including foundations), other state governments, and city, county, regional, or other local governments

Data Availability

Data from this and other NSF R&D surveys are available at <http://www.nsf.gov/statistics/>

Notes

1. The District of Columbia and Puerto Rico are treated as state equivalents and referred to as states in this report.
2. See chapter 1 of the U.S. Census Bureau's *Government Finance and Employment Classification Manual*: http://www2.census.gov/govs/pubs/classification/2006_classification_manual.pdf.
3. No survey was conducted for state government in FY 2008.
4. Agricultural experiment stations in Connecticut are in the population of interest for the Survey of State Government R&D because they are organized as state agencies and not affiliated with any university system.

Reference

National Science Foundation, National Center for Science and Engineering Statistics (NSF/NCSES). 2012. *Universities Report Highest-Ever R&D Spending of \$65 Billion in FY 2011*. Detailed Statistical Tables NSF 13-325. Arlington VA. Available at <http://www.nsf.gov/statistics/nsf13325/>.

TABLE A-1. Final response rates and agencies reporting R&D to the survey: FY 2010 and FY 2011

Agencies selected	Agencies surveyed	Responses		R&D reported	
		Agencies	Rate (%)	Agencies	Responses (%)
All agencies	472	470	99.6	256	54.5
Preselected	413	411	99.5	243	59.1
Added	59	59	100.0	13	22.0

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, FY 2010 and FY 2011 Survey of State Government R&D.

Appendix B. Survey Materials

- U.S. Census Bureau Director's Letter
- Survey Questionnaire



The Honorable «GOVNAME»
«GOVADDRESS1»
«GOVADDRESS2»
«GOVADDRESS3»
«GOVCITY», «GOVSTATE» «GOVZIP»-«GOVZIP4»

Dear Governor «GOVLAST»:

We are writing to request that you appoint a coordinator for the *Fiscal Year (FY) 2010 and FY 2011 Survey of State Government Research and Development*. The U.S. Census Bureau is collaborating with the National Science Foundation (NSF) to collect research and development (R&D) expenditure information from the 50 states, the District of Columbia, and Puerto Rico. You may recall that your state participated in the FY 2009 survey. Please note that this year the reporting period will cover two fiscal years (FY 2010 and FY 2011) rather than one. Your survey response will be compiled by the Census Bureau and forwarded to NSF, the federal agency charged with collecting and reporting national R&D statistics. These statistics are used to measure states' contributions to our nation's science and technology base, a building block of a strong U.S. economy.

Your state coordinator will have two critical roles. First, we ask the coordinator to confirm the names and contact information for your state departments and agencies that are most likely to contribute to R&D investments. These departments and agencies will receive the web survey questionnaire with five questions about R&D activities, which include both performing and funding R&D. Second, your coordinator serves as the authorizing official for your state's survey response after all departments and agencies complete their survey questionnaires. We are including a copy of the FY 2010/11 survey questionnaire. An electronic copy is available at <http://harvester.census.gov/nsf/> under Survey Questions and Definitions (PDF).

Please contact Ms. Lisa McNelis, Project Manager, for this survey, with your state coordinator selection by emailing Lisa.Ann.McNelis@census.gov or calling 1-800-622-6193. For the FY 2009 survey, «MRMS» «CONTACTNAME» served as your state's survey coordinator.

Thank you in advance for your continuing help to complete a picture of our nation's R&D expenditures by state governments.

A Message From the Director

Enclosures

cc: «CONTACTNAME»



FY 2010 and FY 2011 Survey of State Government R&D Reference Copy Only

Submit your survey responses at:

<http://harvester.census.gov/nsf>

Survey Questions [\(Click here\)](#) **pages 2-6**

Definitions and Examples [\(Click here\)](#) **pages 7-11**

The purpose of this survey is to measure your state's contributions toward scientific and technological advances. The results of this survey will be used to estimate national totals for R&D in conjunction with other data collected by the National Science Foundation from private industry, academic institutions, and the federal government.

The Survey of State Government R&D is conducted by the National Science Foundation with the Department of Commerce, U.S. Census Bureau as the collection agent. Your participation is voluntary.

If you have any questions, please contact:

Lisa McNelis

U.S. Census Bureau

(800) 622-6193

govs.nsf.list@census.gov

Burden Statement

Expires 04/30/2013

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid Office of Management and Budget (OMB) control number. The OMB Control number for this survey is displayed at the top right of the survey "Home" page.

The Time required to complete these responses is estimated to be approximately four hours for the state coordinator and one hour and 45 minutes for agency respondents.

The burden on state coordinators includes the initial identification of department and agency contacts, monitoring of department and agency responses, and final review and verification of state data.

The burden on agency respondents includes the initial collection of data and the entry of data into the Web application.

Send comments about this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden to:

Paperwork Project 0607-0933

U.S. Census Bureau

4700 Silver Hill Road, Stop 1500

Washington, DC 20233-1500

You may e-mail comments to Paperwork@census.gov; use "Paperwork Project 0607-0933" as the subject.

R&D Screener Question

Did your department/agency do ANY of the following during FY 2010 or FY2011?

Your answer will determine whether you continue to Question 1.

FY 2010 is your state's fiscal year ending in 2010.

FY 2011 is your state's fiscal year ending in 2011.

For example, if you are on a July - June fiscal year, Fiscal Year 2010 would be your July 1, 2009 to June 30, 2010 fiscal period.

- Had a division, branch or office devoted to research or development
- Performed research or development activities using department/agency staff
- Funded research or development at another state or local government
- Funded universities or other nonprofit organizations to perform research or development activities
- Funded companies or individuals to perform research or development activities
- Performed or funded other research or development activities not specified above

Yes

No

If you select "No," your state survey coordinator will be notified that your department or agency does not have qualifying R&D activities for this survey.

You may provide comments for each question on the survey website.

R&D Expenditure Questions

Question 1

What were your department/agency R&D expenditures for FY 2010 and FY 2011 by the following types of performers?

- Include R&D from all sources, and report sources separately when your department/agency performs the R&D internally.
- When reporting R&D projects done by external performers, be sure to separately report the internal administrative expenditures associated with the maintenance of those projects.
- Do NOT report expenditures for construction and acquisition of facilities used primarily for R&D; use Question 5.

See [Page 7](#) for definitions and examples.

Internal Performers

- | | |
|---|--|
| <ul style="list-style-type: none"> • R&D performed by your department's/agency's employees • Services performed by others in support of an internal R&D project (e.g., lab testing) • Administration/management of external R&D projects | <p>Examples of expenditures:</p> <ul style="list-style-type: none"> • Salaries • Benefits • Supplies • Travel • Equipment • Indirect Costs • Purchased Services |
|---|--|

Expenditures by Internal Performers		Sources of Expenditures	Examples of Sources
FY 2010	FY 2011		
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	State Funds	State appropriations, state grants, tobacco settlement funds, lottery proceeds
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Federal Funds	Federal awards
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Other Funds	Funds from all other sources, such as nonprofit organizations, companies, or other state/local governments

External Performers

R&D done for your department/agency by:

- Academic institutions
- Companies and individuals
- Others

Examples of expenditures:

- Grants
- Payment for contracted R&D projects
- Reimbursable costs for R&D projects

Exclude pass-through grants for which you have no administrative oversight or control.

Expenditures by External Performers		Source of Expenditures
FY 2010	FY 2011	
Academic Institutions \$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	All funds (federal, state, and other)
Companies and Individuals \$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	All funds (federal, state, and other)
Other \$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	All funds (federal, state, and other)
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Total R&D Expenditures

R&D Expenditure Questions

Question 2 (Subset of Question 1 Total)

How much of your total R&D expenditures reported in Question 1 were for basic research? You may provide an estimate, if necessary.

- **Basic research** is conducted primarily to acquire new knowledge. It can be basic research without a specific product or process in mind, or it can be basic research to produce a broad base of knowledge for future research. (The other two categories of R&D, applied and development, are not reported as separate categories on this survey. Applied research is conducted with a specific, practical objective.)

See [Page 11](#) for examples that compare basic research, applied research, and development.

FY 2010	FY 2011	
\$ <input type="text"/>	\$ <input type="text"/>	Basic research expenditures (if none, enter "0")

*Note: FY 2010 answer should be **less than or equal** to the Total R&D expenditures reported in Question 1. FY 2011 answer should be **less than or equal** to the Total R&D expenditures reported in Question 1. (See the totals you reported for Question 1).*

You may provide comments for each question on the survey website.

R&D Expenditure Questions

Question 3 (Subset of Question 1 Total)

How much of your total R&D expenditures reported in Question 1 were from federal funds? You may provide an estimate, if necessary.

- Include expenditures for both internal and external performers.
- Federal sources include grants, contracts, and appropriations from the United States government.
- **Exclude** any nonfederal matching amounts.

FY 2010	FY 2011	
\$ <input type="text"/>	\$ <input type="text"/>	R&D expenditures from federal funds (if none, enter "0")

*Note: FY 2010 answer should be **less than or equal** to the Total Internal Performers Federal Funds plus External Performers you reported for Question 1. FY 2011 answer should be **less than or equal** to the Total Internal Performers Federal Funds plus External Performers you reported for Question 1. (See the totals you reported for Question 1).*

You may provide comments for each question on the survey website.

R&D Expenditure Questions

Question 4 (breakout of Question 1 Total)

How much of your total R&D expenditures reported in Question 1 were for each type of R&D below?

Expenditures		Type of R&D	Examples
FY 2010	FY 2011		
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Agriculture	Animal health Aquaculture Crop management Food and commodities Forestry
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Energy	Alternative fuels (e.g. ethanol, biofuels) Energy conservation, efficiency Oil and gas Other fossil fuels (e.g. coal, clean-coal, lignite) Renewable energy (e.g., wind, solar)
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Environment and natural resources	Air and water quality Fish, game, and wildlife Geological survey Marine and aquatic environments Parks and preserves Soil and water conservation
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Health	Biomedical research Mental health and addiction Public health
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Transportation	Aviation Highways, roads, and bridges Ports and waterways Public transportation Rail and freight
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Other	R&D in other areas, such as: Corrections Criminal justice Education Forensic science Labor Public safety Social services
\$ <input style="width: 100px; height: 20px;" type="text"/>	\$ <input style="width: 100px; height: 20px;" type="text"/>	Total R&D Expenditures	

*Note: FY 2010 answer should be **less than or equal** to the Total R&D expenditures reported in Question 1. FY 2011 answer should be **less than or equal** to the Total R&D expenditures reported in Question 1. (See the totals you reported for Question 1).*

R&D Expenditure Questions

Question 5 (not included in Question 1 Total)

What were your department/agency R&D expenditures for FY 2010 and FY 2011 for construction and acquisition of facilities used primarily for R&D?

Please include:

- Construction projects
- Major renovations of buildings
- Purchasing land or buildings

See [Page 7](#) for R&D definitions and examples.

FY 2010	FY 2011	Expenditures for construction and acquisition of facilities primarily for R&D (if none, enter "0")
\$ <input type="text"/>	\$ <input type="text"/>	

*Note: The amount you report here **should not be reported in the total in Question 1**, nor in the rest of the questions on this survey. If you have included expenditures for construction and acquisition of facilities used primarily for R&D in any other questions on the survey, please go back and change your answers by removing these expenditures in the other questions.*

You may provide comments for each question on the survey website.

Definitions & Examples

- A. [What does R&D mean?](#)
 - B. [What should be included/excluded in R&D?](#)
 - C. [What makes it R&D?](#)
 - D. [What are sources of R&D funding \(Question 1\)?](#)
 - E. [What does R&D performer mean \(Question 1\)?](#)
 - F. [What expenditures should be included/excluded?](#)
 - G. [What is the definition of Fiscal Year?](#)
 - H. [What is the definition of basic research \(Question 2\)?](#)
 - I. [What is the definition of "construction and acquisition of facilities" \(Question 5\)?](#)
-

A. What does R&D mean?

Research and development (R&D) is creative work conducted systematically to:

- 1) extend scientific knowledge, or
- 2) devise new or improved applications.

Applications can include materials, products, devices, processes, systems, or services.

B. What should be included/excluded in R&D?

<u>R&D includes</u>, but is not limited to, activities that produce:	<u>R&D does NOT include:</u>
<ul style="list-style-type: none"> • Ideas that might be patented • New or improved products or applications • Findings that could be published in academic journals 	<ul style="list-style-type: none"> • Program planning and evaluation • Management studies • Strategic planning • Business development services for new companies • Market research or analysis • Economic / policy / feasibility studies • Routine data collection / dissemination • Information systems • Routine monitoring / testing • General patient services • Marketing products of services • Commercialization (includes promoting/producing the products/services from R&D projects)

Examples of classifying R&D in four situations

Activity	It IS R&D...	It is NOT R&D...
Technical assistance	You hire a technical consultant to test the disease resistance for the new fish species you are developing. (The assistance addresses the uncertainty of the science/technology aspects of the product or service.)	You hire a technical consultant to help you design the graphic design for the package to ship your new fish species when you begin offering it for sale to other states. (The assistance addresses the uncertainty of the marketing/production aspects of the product or service.)
Help for new businesses	You provide funding to new businesses to help them with the costs of building prototypes of products they are developing.	You provide funding for new technology companies to help them acquire basic skills to market their new products.
Consulting	You use a consultant to plan testing of a highway pavement material that your transportation research center is trying to develop.	You use a consultant to help you secure health and safety approval for your new pavement material.
Developing a product from your research	You hire a university research center to test a new type of grass you developed to test whether it will survive actual conditions along the coastline.	You hire a law firm to help you with the process for patenting the new grass that you developed.

C. What makes it R&D?

What makes it R&D	When it is R&D	When it is NOT R&D
<p>R&D is novel.</p> <ul style="list-style-type: none"> It increases our knowledge of the subject. It hasn't been done before. 	<p>You are testing blood samples as part of a research project to find out the side effects of a new cancer treatment.</p>	<p>You are collecting information from samples of patients to estimate the incidence of chicken pox in the state's population.</p> <p>(You are using a standard approach to estimate the spread of chicken pox.)</p>
<p>R&D creates solutions useful to others.</p> <ul style="list-style-type: none"> Others might benefit from the findings. The findings can be generalized to other situations and locations. 	<p>You are testing a pavement on your highways that is currently used only at airports. Other states will want the results.</p>	<p>You are testing pavement on your state's highways to estimate how much you need to budget for pavement replacement over the next five years.</p> <p>(Other states will not benefit from your specific state information.)</p>
<p>The outcome of R&D is uncertain.</p> <ul style="list-style-type: none"> The solution isn't obvious to an expert in that field. 	<p>Your research involves monitoring streams to determine whether a new program is increasing the population of a particular type of fish.</p>	<p>You are monitoring streams as part of plan to implement long-term monitoring for a particular type of fish.</p> <p>(The monitoring plan has already been tested and you are certain of the quality of the plan.)</p>

D. What are sources of R&D funding (Question 1)?

Sources	Examples
State	State appropriations and grants, tobacco settlement funds, state lottery proceeds
Federal	Grants, contracts, and appropriations from the United States government
All other	<p>Grants and contracts from:</p> <ul style="list-style-type: none"> Companies Nonprofit organizations, including foundations Other state governments City, county, regional, or other local governments

E. What does R&D performer mean (Question 1)?

Performers are the people who conduct the R&D.

Internal Performers	Those within your department/agency who perform R&D <ul style="list-style-type: none"> • R&D performed by your department's/agency's employees • Services performed by others in support of an internal R&D project (e.g., lab testing) • Administration/management of external R&D projects
External Performers	Those outside your department/agency who perform R&D under the administrative oversight or control of your department/agency. This may include projects for your department/agency, as well as your extramural research programs.
Academic institutions	Public or private universities and colleges
Companies and individuals	Companies or individuals under contract for research projects or that received grants for research projects
Others	Nonprofit organizations, including foundations Other departments/agencies within your state Other state governments City, county, regional, or other local governments Federal government

F. What expenditures should be included/excluded?

Expenditures are amounts paid for current operations (Questions 1 through 4) and capital outlays (Question 5).

Respondents to this survey will be asked to report expenditures by performer of R&D. Please refer below for guidance on the types of expenditures to report for internal and external performers.

Expenditures for your Department/Agency as Performer (Internal)

Include:	Do NOT include:
<ul style="list-style-type: none"> • Salaries, wages, and benefits • Supplies • Purchased services (e.g. lab testing) • Travel • Indirect or overhead costs for R&D activities • Equipment 	<ul style="list-style-type: none"> • Agency and other fiduciary fund expenditures • Intra-agency transactions • Non-cash/In-kind payments

Expenditures for Academic Institutions, Companies or Individuals, or Others as Performers (External)

Include:	Do NOT include:
<ul style="list-style-type: none"> • Grants • Payments for contracted R&D projects • Reimbursable costs for R&D projects 	<ul style="list-style-type: none"> • Pass-through grants over which you have no administrative oversight or control • Direct appropriations to state universities that are used for R&D activities over which you have no oversight or control. (That information is reported by universities on NSF's Survey of Higher Education Institutions.)

G. What is the definition of Fiscal Year?

Fiscal Year 2010 is your state's fiscal year ending in 2010.

Fiscal Year 2011 is your state's fiscal year ending in 2011.

For example, if you are on a July - June fiscal year, Fiscal Year 2010 would be your July 1, 2009 to June 30, 2010 fiscal period.

H. What is the definition of basic research (Question 2)?

It may be helpful to compare the three components of R&D — basic research, applied research and development. Report all three types of research for Questions 1, 3, 4 and 5. Report only basic research for Question 2.

Below are definitions and examples.

Basic research (Question 2) is conducted primarily to acquire new knowledge. It can be basic research without a specific product or process in mind, or it can be basic research to product a broad base of knowledge for future research.

Applied research is conducted with a specific practical objective.

Development is the systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

Examples		
Basic research	Applied research	Development
You are studying the properties of blood to determine what affects coagulation.	You are conducting research on how a new chicken pox vaccine affects blood coagulation.	You are testing a newly developed chicken pox vaccine with various ages of school children before implementing it statewide.
You are studying the properties of molecules under various heat and cold conditions.	You are conducting research on the properties of particular substances under various heat and cold conditions with the objective of finding longer lasting components for pavement.	You are testing a newly developed pavement under various types of heat and cold conditions prior to using it on your state's highways.
You are studying the heart chambers of various fish species.	You are examining various levels of a toxic substance to determine the maximum safe level for fish in a stream.	You are designing a new system for monitoring a stream that will try out the results of your recent research in a real world situation.

I. What is the definition of “construction and acquisition of facilities” (Question 5)?

Construction and Acquisition of Facilities Used Primarily for R&D includes major costs for construction and purchase of buildings to be primarily used as R&D facilities. Include new construction, major renovations, and purchase of land or buildings.

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