



STATE R&D PROFILE

South Dakota



Table 1. Federal R&D to South Dakota by Agency and Performer, Fiscal Year 2000
(obligations in millions of dollars)

Performers	Agencies							TOTAL
	HHS	USDA	NSF	Interior	NASA	DOD	other	
Federal Labs	0	4	0	5	4	0	0	13
Industry	2	0	1	1	0	0	0	5
Univs. / Colleges	8	5	7	0	1	1	0	22
FFRDCs *	0	0	0	0	0	0	0	0
Nonprofits	0	0	0	0	0	0	0	0
State / Local Govts.	0	0	0	0	0	0	0	0
Total South Dakota	11	9	8	7	5	1	1	41
U.S. Total	18,577	1,830	2,930	579	9,714	33,010	9,110	75,751
SD % of U.S.	0.1%	0.5%	0.3%	1.2%	0.1%	0.0%	0.0%	0.1%

Source: National Science Foundation, *Federal Funds for Research and Development Fiscal Years 2000, 2001, and 2002*, 2002.

R&D data are for the 10 largest R&D supporting agencies only.

* Federally Funded Research and Development Centers. Government-owned, contractor-operated laboratories.

R&D = conduct of R&D and R&D plant (facilities and capital equipment).

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This AAAS State R&D Profile is one of a series of reports on the state and regional impacts of federal R&D, produced in cooperation with the AAAS Center for Science, Technology, and Congress from data provided by the National Science Foundation Division of Science Resources Statistics. More information on these reports, summary tables on R&D in the states, current profiles of the other states, and full-color, full-size versions of these charts are all available in the "State and Regional Reports" section of the AAAS R&D Web site (<http://www.aaas.org/spp/rd>). These profiles will be updated annually as new data become available.

AAAS State R&D Profiles – South Dakota

- South Dakota received \$41 million in federal R&D in FY 2000, 0.1 percent of the national total, which gives it a ranking of 50th among the 50 states and the District of Columbia, ahead of only Wyoming. The state is home to 756,000 people, or 0.3 percent of the total U.S. population (46th in rank; see Facts and Rankings).

- South Dakota ranks 49th in federal R&D per capita at \$54 per person, just 20 percent of the national average of \$269.

- South Dakota is a participant in the Experimental Program to Stimulate Competitive Research (EPSCoR) started by NSF to help states that traditionally have been underrepresented as recipients of federal R&D funds to become more competitive in winning federal R&D dollars. The program has expanded to include funding from other federal agencies such as DOE, DOD, USDA, EPA, and NASA.

- The Department of Health and Human Services (HHS) is the largest federal supporter of R&D in South Dakota, sending \$11 million to the state in FY 2000. USDA and NSF come in second and third at \$9 million and \$8 million, respectively (see Table 1 and Chart 1).

- Universities and colleges in South Dakota received \$22 million of federal R&D funding in FY 2000, making them the largest performers of federal R&D in the state (see Table 1 and Chart 2). The largest university recipients were South Dakota State and the University of South Dakota.

- HHS, NSF, and USDA were the largest agency sources for R&D to South Dakota universities and colleges (see Table 2).

- Federal labs are the second largest performers of federal R&D in the state. Interior spent \$5 million on R&D at federal laboratories in South Dakota in FY 2000. Prominent among Interior labs in the state are the South Dakota Cooperative Fish and Wildlife Research Unit in Brookings, the South Dakota District Office of Water Resources in Rapid City and the Earth Resources Observation Systems Data Center and the Yankton Field Research Station in Sioux Falls. USDA and NASA also have federal labs in the state.

- Industrial firms spent \$28 million of their own funds on R&D in the state in 2000 (see Table 4 and accompanying chart). Including federal R&D funds, industrial firms performed the majority of the state's total R&D with \$44 million in 2000 out of a total state portfolio of \$85 million. The state's industrial R&D sector is still relatively small compared to other states, however; in the U.S. as a whole, industry funds two-thirds and performs three-quarters of all R&D.

- Federal R&D funding to South Dakota remained consistently below the \$50 million mark over the period FY 1970-2000 (see Chart 5). Additionally, the state has consistently received a smaller share of the federal R&D portfolio than its share of the U.S. population (see Chart 6).

Click on the charts to view or download full-size color PDF versions of these charts.

**Table 2. Federal R&D to South Dakota Universities and Colleges,
Fiscal Year 2000**
(obligations in millions of dollars)

	HHS	NSF	USDA	DOD	Int	NASA	other	TOTAL
SD State U	1	1	5	1	1	0	0	9
U South Dakota	7	0	0	0	0	0	0	8
SD School Mines	0	3	0	1	0	0	0	4
All Other	0	3	0	0	0	0	0	4
Total South Dakota	8	7	5	1	1	1	0	24
U.S. Total	10,533	2,475	564	1,832	88	872	1,165	17,529
SD % of U.S.	0.1%	0.3%	0.9%	0.1%	1.4%	0.1%	0.0%	0.1%

Source: National Science Foundation, *Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 2000*, 2002.

Figures may differ from other tables because of differing survey methods.

Figures in parentheses denote national rank among universities and colleges in federal R&D funds received.

R&D = conduct of R&D and R&D plant (facilities and capital equipment).

**Table 3. Total R&D Expenditures at South Dakota Universities and Colleges
by Source of Funds, Fiscal Year 2000**
(expenditures in millions of dollars)

	Federal	State/ Local	Industry	Institutional Funds	All Other	TOTAL R&D	Federal / Total R&D
SD State U	7	6	0	2	1	17	44.4%
SD School Mines	4	0	0	1	0	6	71.9%
U South Dakota	2	0	0	1	2	5	43.9%
Total South Dakota	14	7	0	4	3	27	50.1%
U.S. Total	17,493	2,204	2,178	5,924	2,262	30,062	58.2%
SD % of U.S.	0.1%	0.3%	0.0%	0.1%	0.1%	0.1%	

Source: National Science Foundation, *Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2000*, 2002.

These data differ significantly from the federal R&D data for the following reasons:

1/ data are from performer surveys rather than funding sources; 2/ data are in expenditures rather than obligations; and 3/ R&D in this survey does not include R&D facilities.

Figures in parentheses denote national rank among universities and colleges in total R&D performed.

Table 4. Total R&D (all funding sources) in South Dakota by Funding Source and Performer, 2000
(expenditures in millions of dollars)

Performers	Funding Sources					Total
	Federal Government	Industry	Univs./ Colleges	State / Local Government	Nonprofits	
Federal Labs	13	--	--	--	--	13
Industry	16	28	--	--	--	44
Universities / Colleges	14	0	4	7	3	27
FFRDCs*	0	--	--	--	--	0
Nonprofits	0	--	--	--	--	0
Total South Dakota	43	28	4	7	3	85
U.S. Total	66,208	182,622	6,210	2,257	7,320	264,617
SD % of U.S.	0.1%	0.0%	0.1%	0.3%	0.0%	0.0%

Source: National Science Foundation, 2002.

* Federally Funded Research and Development Centers. Government-owned, contractor-operated laboratories. FFRDCs operated by universities/colleges and nonprofits only. Industry FFRDCs are included under industry.

Industry funding of nonprofit R&D is not included in state data, but is included in national totals.

Industry funding of industry R&D includes all non-federal funding of industry-performed R&D.

Nonprofit support for nonprofits is not included in state data, but is included in national totals.

Nonfederal support for FFRDCs and nonprofits are not included.

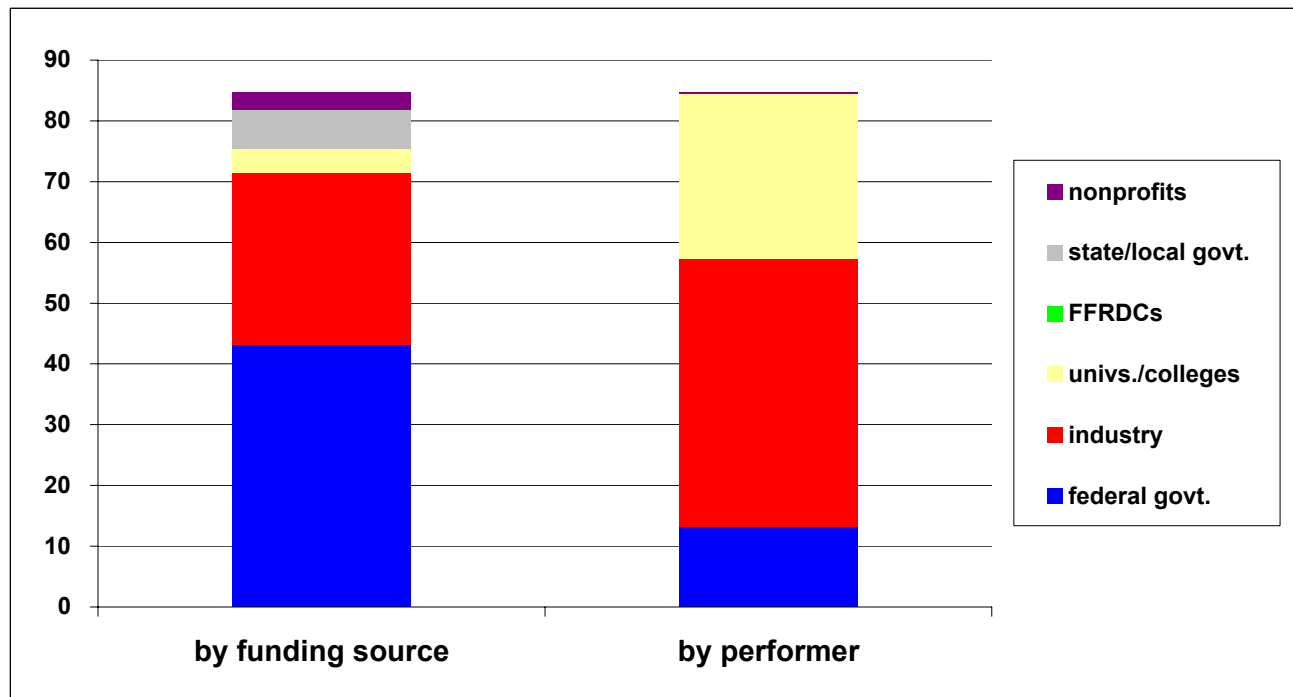
State and local government performance of R&D is not included.

Conduct of R&D only (R&D facilities and capital equipment excluded).

These data differ significantly from the federal R&D data for the following reasons:

1/ data are for calendar year 2000 rather than FY 2000; 2/ data are from performer surveys rather than funding sources; and 3/ data are in expenditures rather than obligations.

Chart. Total R&D in South Dakota by Funding Source and by Performer, 2000
expenditures in millions of dollars



Facts and Rankings for South Dakota

	SD	U.S.	SD % of U.S.	Rank *
Total Federal R&D	41 million \$ ('00)	75,751	0.1%	50
Population	0.76 million ('00)	282.13	0.3%	46
Federal R&D Per Capita	\$ 54 ('00)	\$ 269	20.1%	49
Total Federal Expenditures	5,138 million \$ ('00)	1,637,170	0.3%	47
Federal R&D / Total Federal	0.8% ('00)	4.6%		51
Total R&D (all funds)	85 million \$ ('00)	264,616	0.0%	50
Total R&D Per Capita	\$ 112 ('00)	\$ 938	11.9%	51
Gross State Product (GSP)	23,192 million \$ ('00)	9,941,552	0.2%	47
GSP Per Capita	\$ 30,697 ('00)	\$ 35,238	87.1%	34
R&D Intensity (R&D / GSP)	0.37% ('00)	2.66%	13.9%	50

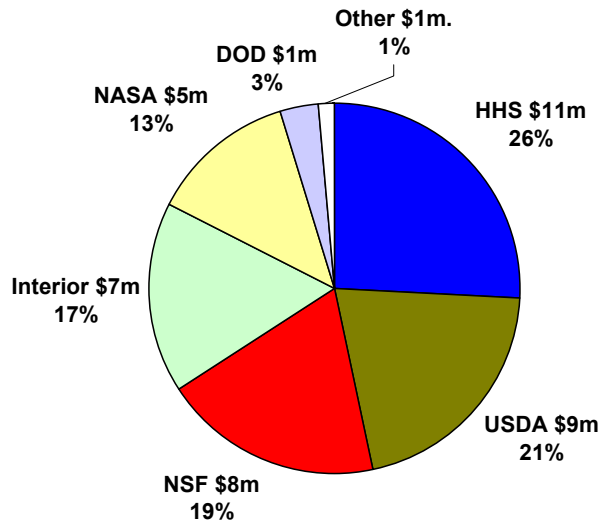
Source: Federal R&D: National Science Foundation, *Federal Funds for Research and Development: Fiscal Years 2000, 2001, and 2002* and other data, 2002; Population: U.S. Bureau of the Census; Federal Expenditures: U.S. Bureau of the Census, *Federal Expenditures by State for Fiscal Year 2000, 2001*; GSP: U.S. Department of Commerce, Bureau of Economic Analysis.

* - Rank among 50 states and District of Columbia.

Federal R&D to South Dakota by Agency

FY 2000 (obligations in millions of dollars)

Total: \$41 million



Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
R&D = conduct of R&D and R&D plant.
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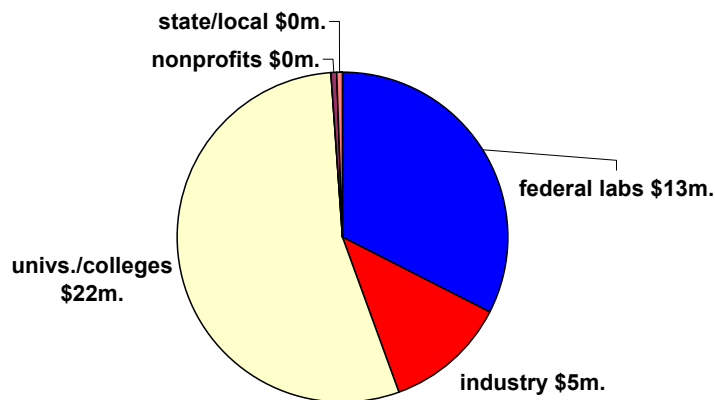


Chart 1.

Federal R&D to South Dakota by Performer

FY 2000 (obligations in millions of dollars)

Total: \$41 million

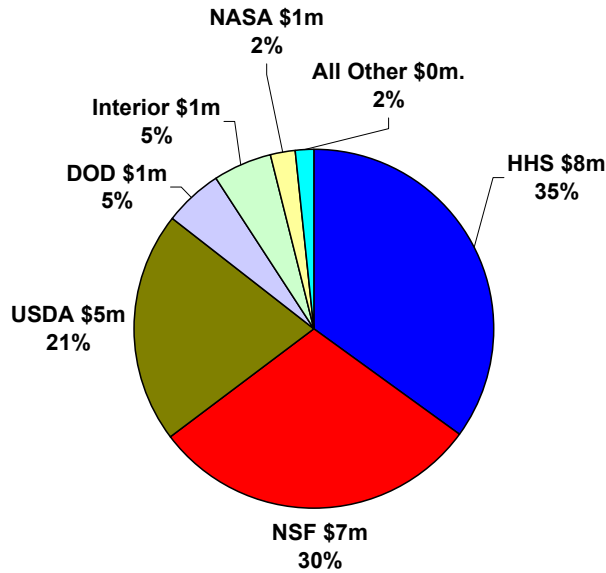


Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
R&D = conduct of R&D and R&D plant.
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Chart 2.

Federal R&D to South Dakota Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$24 million

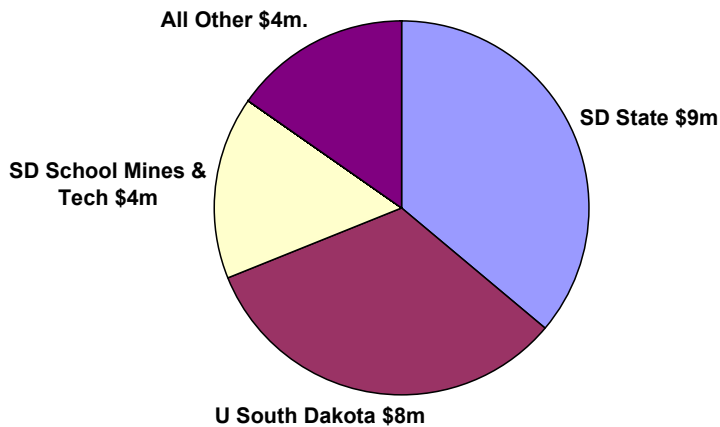


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 3.

Federal R&D to South Dakota Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$24 million

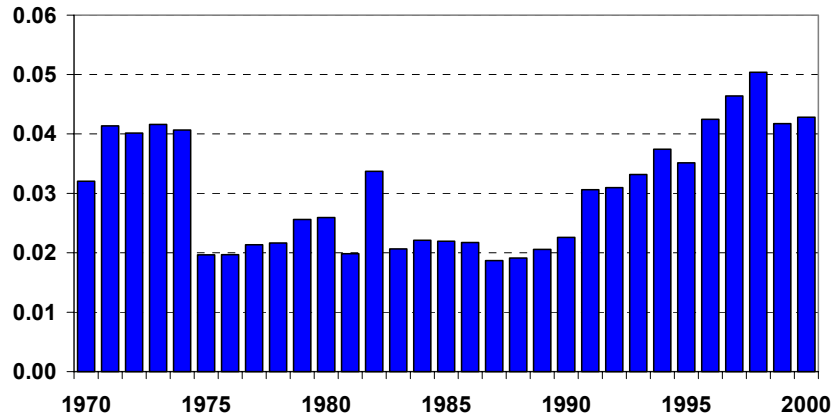


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 4.

Federal R&D to South Dakota, FY 1970-2000
(billions of constant FY 2002 dollars)

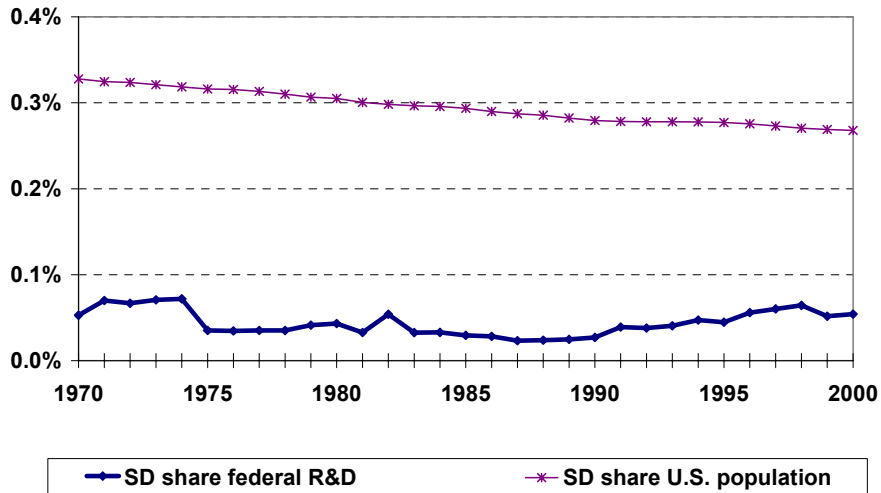


Source: National Science Foundation, Federal Funds for Research and Development Historical Tables, 2002.
R&D = conduct of R&D and R&D plan
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Chart 5.

South Dakota share of federal R&D, FY 1970-2000
(percent of total federal R&D)



Source: National Science Foundation, Federal Funds for Research and Development Historical Tables, 2002.
R&D = conduct of R&D and R&D plan.
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Chart 6.