



STATE R&D PROFILE

Oklahoma



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

Performers	Agencies							TOTAL
	DOD	HHS	USDA	NSF	DOE	EPA	other	
Federal Labs	18	0	13	0	2	9	19	60
Industry	35	1	0	1	4	0	1	42
Univs. / Colleges	4	31	9	16	7	1	3	70
FFRDCs *	0	0	0	0	0	0	0	0
Nonprofits	0	16	0	0	0	0	0	16
State / Local Govts.	0	0	0	0	0	1	0	1
Total Oklahoma	57	48	21	17	13	10	22	189
U.S. Total	33,010	18,577	1,830	2,930	6,872	522	12,010	75,751
OK % of U.S.	0.2%	0.3%	1.2%	0.6%	0.2%	1.9%	0.2%	0.2%

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 - Oklahoma

- Oklahoma received \$189 million in federal R&D in FY 2000, 0.2 percent of the national total, which gives it a ranking of 42nd among the 50 states and the District of Columbia. The state is home to 3.5 million people, or 1.2 percent of the total U.S. population (27th in rank). Its gross state product in 2000 was \$92 billion (0.9 percent of the national gross domestic product and 29th among the 50 states and DC; see Facts and Rankings).

- Oklahoma ranks 48th in federal R&D per capita, and receives just \$55 per person, far below the national average of \$269. Oklahoma 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. Oklahoma also participates in the Institutional Development Award (IDeA) program, a program administered by NIH that is designed to foster research in states that have not traditionally received significant levels of competitive funding from NIH.

- Oklahoma's federal R&D funding comes from numerous different agencies. The top funding agency is DOD at \$57 million in FY 2000, followed by HHS (\$48 million), USDA (\$21 million), and NSF (\$17 million; see Table 1 and Chart 1).

- The state's federally funded R&D is divided relatively evenly among three classes of performers, with \$70 million going to universities and colleges, \$60 million to federal labs, and \$42 million to industry (see Chart 2).

- USDA spent a total of \$13 million on R&D at federal labs in Oklahoma in FY 2000. This total includes funding for four units of the agency's Agricultural Research Service, including the Grazinglands Research Laboratory in El Reno, the South Central Agricultural Research Laboratory in Lane, the Plant Science and Water Conservation Research Laboratory in Stillwater, and the Southern Plains Range Research Station in Woodward.

- EPA also spends a large sum at government labs, funding a total of \$9 million for R&D in FY 2000. This funding goes primarily to the agency's Subsurface Protection and Remediation Division in Ada, which focuses its activities on the structure and processes of the subsurface environment.

- Other major labs include the National Severe Storms Laboratory in Norman, a unit of Commerce's National Oceanic and Atmospheric Administration which conducts research to enhance the agency's ability to provide forecasts of severe weather, and the Civil Aeromedical Institute in Oklahoma City, a unit of DOT's Federal Aviation Administration which studies human performance in the aviation environment.

- Slightly more than 40 percent of Oklahoma's federally funded academic R&D comes from HHS, a total of \$31 million. NSF (\$16 million) is also a major contributor to the state's universities and colleges (see Table 2 and Chart 3). More than two-thirds of this money went to the University of Oklahoma.

- The University of Oklahoma is the state's largest academic research institution. The school's R&D expenditures in FY 2000 totaled \$151 million, 71st in the nation (see Table 3). Forty percent of this total came from the federal government, with most of the rest coming from institutional funds. State and local governments were a significant contributor as well, however, at \$15 million.

- Total R&D performance in the state in 2000 was \$661 million, of which \$348 million was funded by industry, double the amount funded by federal sources (see Table 4).

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

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

	HHS	NSF	DOD	USDA	DOE	NASA	other	TOTAL
U Oklahoma (102)	28	11	3	0	2	1	2	47
OK State U (150)	2	4	6	6	1	0	1	20
All Other	1	1	0	2	4	0	0	8
Total Oklahoma	31	16	9	9	7	2	3	76
U.S. Total	10,533	2,475	1,832	564	696	872	557	17,529
OK % of U.S.	0.3%	0.6%	0.5%	1.5%	1.0%	0.2%	0.5%	0.4%

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 Oklahoma 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
U Oklahoma (71)	61	15	9	54	11	151	40.1%
OK State U (105)	25	26	4	33	1	88	28.1%
All Other	8	1	3	1	0	13	61.4%
Total Oklahoma	93	42	17	88	12	252	37.0%
U.S. Total	17,493	2,204	2,178	5,924	2,262	30,062	58.2%
OK % of U.S.	0.5%	1.9%	0.8%	1.5%	0.5%	0.8%	

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 Oklahoma 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	59	--	--	--	--	59
Industry	3	331	--	--	--	334
Universities / Colleges	93	17	88	42	12	252
FFRDCs*	0	--	--	--	--	0
Nonprofits	16	--	--	--	--	16
Total Oklahoma	171	348	88	42	12	661
U.S. Total	66,208	182,622	6,210	2,257	7,320	264,617
OK % of U.S.	0.3%	0.2%	1.4%	1.9%	0.2%	0.2%

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.

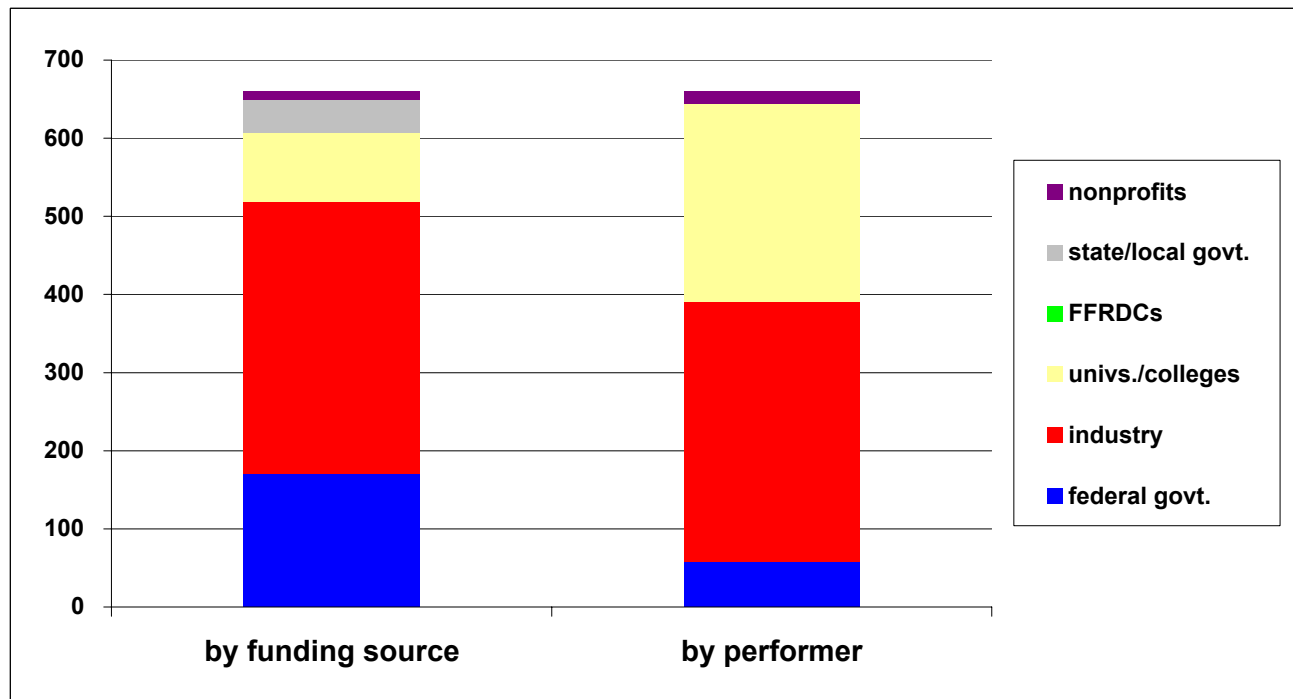
State and local government performance of R&D is not included.

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 Oklahoma by Funding Source and by Performer, 2000
expenditures in millions of dollars



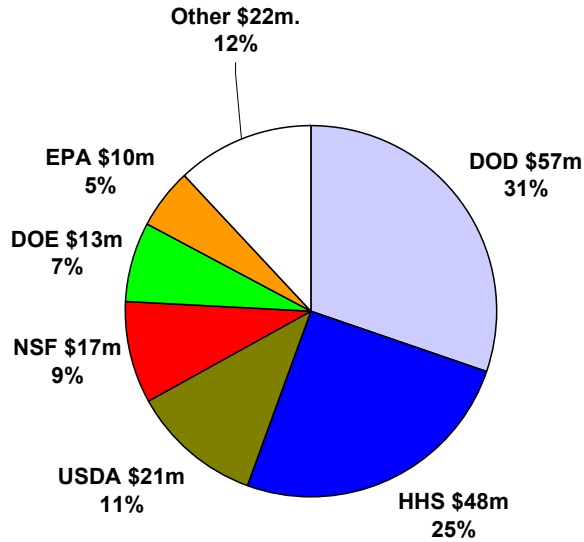
Facts and Rankings for Oklahoma

	OK	U.S.	OK % of U.S.	Rank *
Total Federal R&D	189 million \$ ('00)	75,751	0.2%	42
Population	3.45 million ('00)	282.13	1.2%	27
Federal R&D Per Capita	\$ 55 ('00)	\$ 269	20.4%	48
Total Federal Expenditures	20,613 million \$ ('00)	1,637,170	1.3%	28
Federal R&D / Total Federal	0.9% ('00)	4.6%		48
Total R&D (all funds)	660 million \$ ('00)	264,616	0.2%	37
Total R&D Per Capita	\$ 191 ('00)	\$ 938	20.4%	44
Gross State Product (GSP)	91,773 million \$ ('00)	9,941,552	0.9%	29
GSP Per Capita	\$ 26,576 ('00)	\$ 35,238	75.4%	47
R&D Intensity (R&D / GSP)	0.72% ('00)	2.66%	27.1%	44

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 Oklahoma by Agency
 FY 2000 (obligations in millions of dollars)
 Total: \$189 million

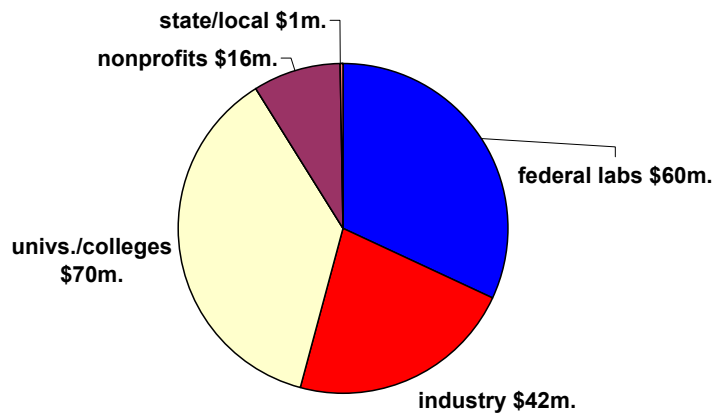


Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
 R&D = conduct of R&D and R&D plant.
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Chart 1.

Federal R&D to Oklahoma by Performer
 FY 2000 (obligations in millions of dollars)
 Total: \$189 million

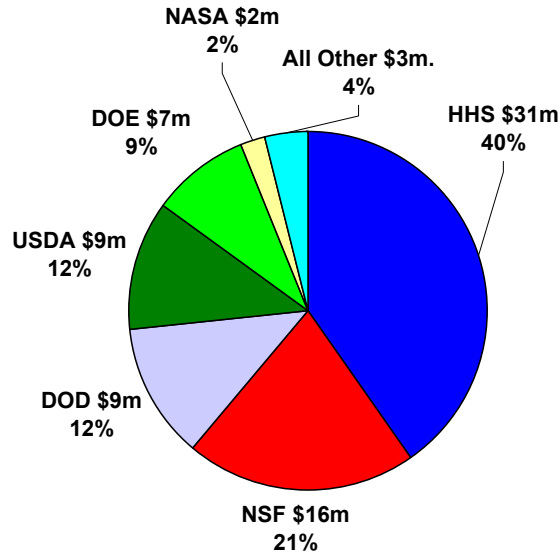


Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
 R&D = conduct of R&D and R&D plant.
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Chart 2.

Federal R&D to Oklahoma Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$76 million

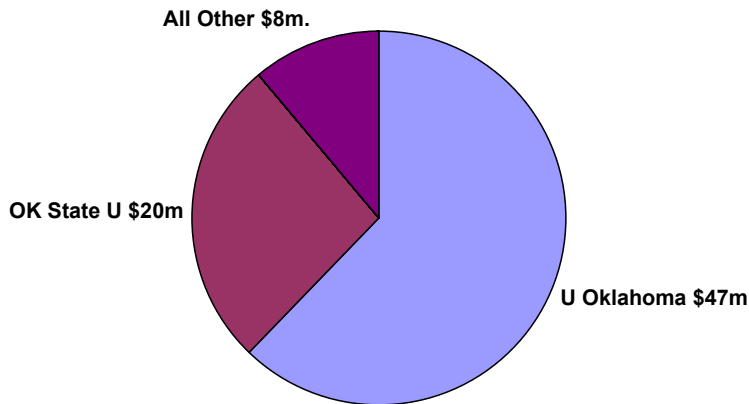


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 3.

Federal R&D to Oklahoma Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$76 million

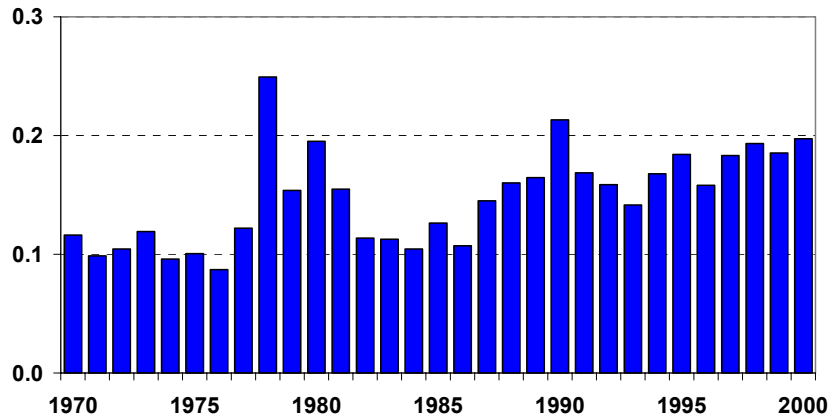


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 4.

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

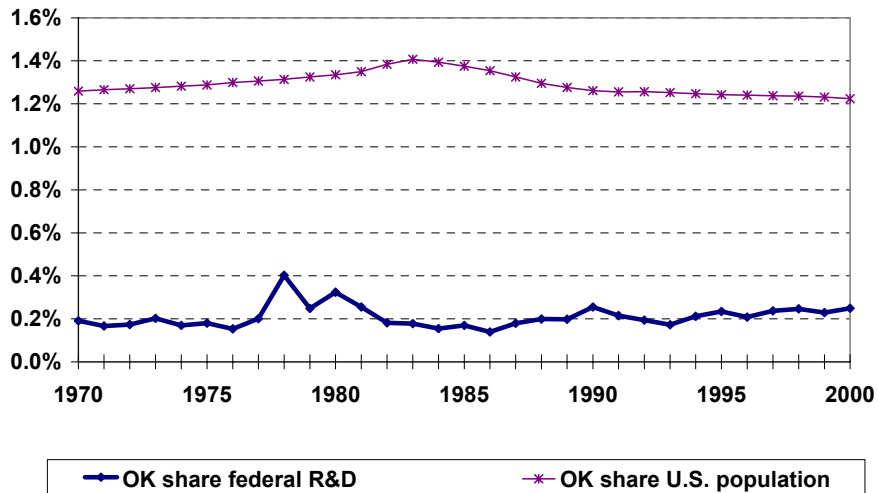


Source: National Science Foundation, Federal Funds for Research and Development Historical Tables, 2002.
R&D = conduct of R&D and R&D plan
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Chart 5.

Oklahoma 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.