



STATE R&D PROFILE

New Mexico



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

Performers	Agencies							TOTAL
	DOE	DOD	HHS	NASA	NSF	USDA	other	
Federal Labs	19	273	3	18	0	11	4	328
Industry	1	193	4	28	1	0	3	230
Univs. / Colleges	16	22	49	7	16	5	1	117
FFRDCs *	1,395	136	14	0	0	0	5	1,550
Nonprofits	14	5	3	0	1	0	4	27
State / Local Govts.	0	0	0	0	0	0	1	1
Total New Mexico	1,445	628	74	54	19	15	17	2,253
U.S. Total	6,872	33,010	18,577	9,714	2,930	1,830	2,818	75,751
NM % of U.S.	21.0%	1.9%	0.4%	0.6%	0.7%	0.8%	0.6%	3.0%

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 – New Mexico

- New Mexico received \$2.3 billion in federal R&D in FY 2000, 3.0 percent of the national total, which gives it a ranking of 11th among the 50 states and the District of Columbia. The state receives federal R&D far out of proportion to its size: the state is home to 1.8 million people, or 0.6 percent of the total U.S. population (36th in rank). Its gross state product in 2000 was \$54 billion (0.5 percent of the national gross domestic product and 38th among the 50 states and DC; see Facts and Rankings).

- New Mexico ranks 3rd in federal R&D per capita at a lofty \$1,237 per person, more than 400 percent of the national average of \$269.

- New Mexico 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. New Mexico 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.

- DOE is by far the largest federal supporter of R&D in New Mexico, sending \$1.4 billion to the state in FY 2000. DOD comes in second at \$628 million; HHS and NASA come in third and fourth at \$74 million and \$54 million, respectively (see Table 1 and Chart 1).

- The most noteworthy components of the federal R&D portfolio in New Mexico are two FFRDCs sponsored by DOE. FFRDCs are the largest recipient of federal R&D funds flowing to New Mexico, accounting for nearly 69 percent of the state's federal R&D portfolio (see Table 1 and Chart 2). New Mexico is the only state where FFRDCs are the leading performers of federal R&D. The Sandia National Laboratories (SNL), located in Albuquerque, are operated by Sandia Corporation, a subsidiary of Lockheed Martin. SNL's activities focus on the implementation of U.S. nuclear weapons policies by conducting R&D on nuclear weapons, arms control and weapons safety – focusing specifically on the design of all non-nuclear components of U.S. nuclear weapons. The Los Alamos National Laboratory (LANL), located in Los Alamos, are operated by the University of California. LANL's activities continue to highlight its historical emphasis on nuclear weapons research, though its scope of activities has broadened. DOE's Stockpile Stewardship Program, in which LANL is the leading performer, works to ensure that the U.S. nuclear stockpile is safe and reliable by using leading-edge technologies ranging from large-scale computing to hydrodynamic testing. Together, they received \$1.6 billion in federal R&D in FY 2000, split nearly equally between the two.

- Federal labs are the second largest recipient of federal funds flowing to New Mexico, constituting nearly 15 percent of the federal R&D portfolio in the state in FY 2000. The most prominent facility in this category is the White Sands Missile Range, a unit of DOD. Under the operational control of the U.S. Army Test and Evaluation Command, White Sands is a multiservice test range that supports the development of missiles for the Army, Navy, Air Force, NASA and other governmental agencies.

- Universities and colleges received 5 percent of federal R&D funding to New Mexico in FY 2000 (\$117 million; see Table 1 and Chart 2). Slightly more than 70 percent of this money went to the University of New Mexico.

- Most federal funding at universities and colleges is provided by HHS, which directed \$45 million to New Mexico's higher education institutions (see Table 2 and Chart 3). With a total of \$87 million from all agencies, the University of New Mexico ranked 64th nationwide among colleges and universities in federal R&D support. The University of New Mexico relied on federal funds for more 75 percent of its R&D funding in FY 2000 (see Table 3).

- Total R&D performance in New Mexico was \$3.1 billion in 2000, \$2.8 billion of which was funded by the federal government (see Table 4). This amount dwarfed the contribution of industry, which funded only \$232 million in R&D in 2000. By contrast, in the nation as a whole industrial firms funded two-thirds and performed three-quarters of all U.S. R&D.

- Because of the DOE FFRDCs in the state, R&D is a major part of the New Mexico economy. R&D was 5.68 percent of the state's economy in 2000, second only to Michigan's 5.81 percent among the states and more than double the national ratio of 2.66 percent.

- Federal R&D to the state has fluctuated greatly because of changing DOD and DOE missions, especially the relative importance of nuclear weapons R&D to the nation's defense strategy. Not surprisingly, federal R&D to New Mexico peaked at the height of the Cold War in the mid 1980s, reaching \$4 billion in today's dollars. The end of the Cold War brought about significant downsizing of R&D activity at Los Alamos, Sandia, and the DOD labs, and now federal R&D is a little over half the peak funding level (see Chart 5). After bottoming out in FY 1998, the flow of federal R&D dollars has been increasing again in recent years as DOE's Stockpile Stewardship program to use scientific methods to replace nuclear testing has gained importance. While New Mexico's share of federal R&D has declined to the 3 percent level after exceeding 5 percent during the Cold War, the state still pulls in a far greater 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 New Mexico Universities and Colleges,
Fiscal Year 2000**
(obligations in millions of dollars)

	HHS	DOD	NSF	DOE	NASA	USDA	other	TOTAL
U New Mexico (64)	41	24	11	4	5	0	1	87
NM State U (137)	3	9	3	1	1	5	1	23
NM Inst of Mining (193)	0	3	2	3	0	0	0	9
All Other	1	0	0	0	1	0	0	2
Total New Mexico	45	36	17	8	7	5	3	121
U.S. Total	10,533	1,832	2,475	696	872	564	557	17,529
NM % of U.S.	0.4%	2.0%	0.7%	1.2%	0.8%	0.9%	0.5%	0.7%

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 New Mexico 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 of New Mexico (82)	100	2	2	25	4	134	75.0%
NM State U (112)	57	8	3	10	1	80	71.6%
NM Inst Mining (186)	9	2	6	6	0	24	36.6%
All Other	9	0	0	0	0	9	99.0%
Total New Mexico	175	12	12	42	6	246	71.1%
U.S. Total	17,493	2,204	2,178	5,924	2,262	30,062	58.2%
NM % of U.S.	1.0%	0.5%	0.5%	0.7%	0.3%	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 New Mexico 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	321	--	--	--	--	321
Industry **	937	221	--	--	--	1,158
Universities / Colleges	175	12	42	12	6	246
FFRDCs*	1,333	--	--	--	--	1,333
Nonprofits	27	--	--	--	--	27
Total New Mexico	2,793	232	42	12	6	3,085
U.S. Total	66,208	182,622	6,210	2,257	7,320	264,617
NM % of U.S.	4.2%	0.1%	0.7%	0.5%	0.1%	1.2%

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.

** Imputed division of industry performance by funding source based on other data.

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.

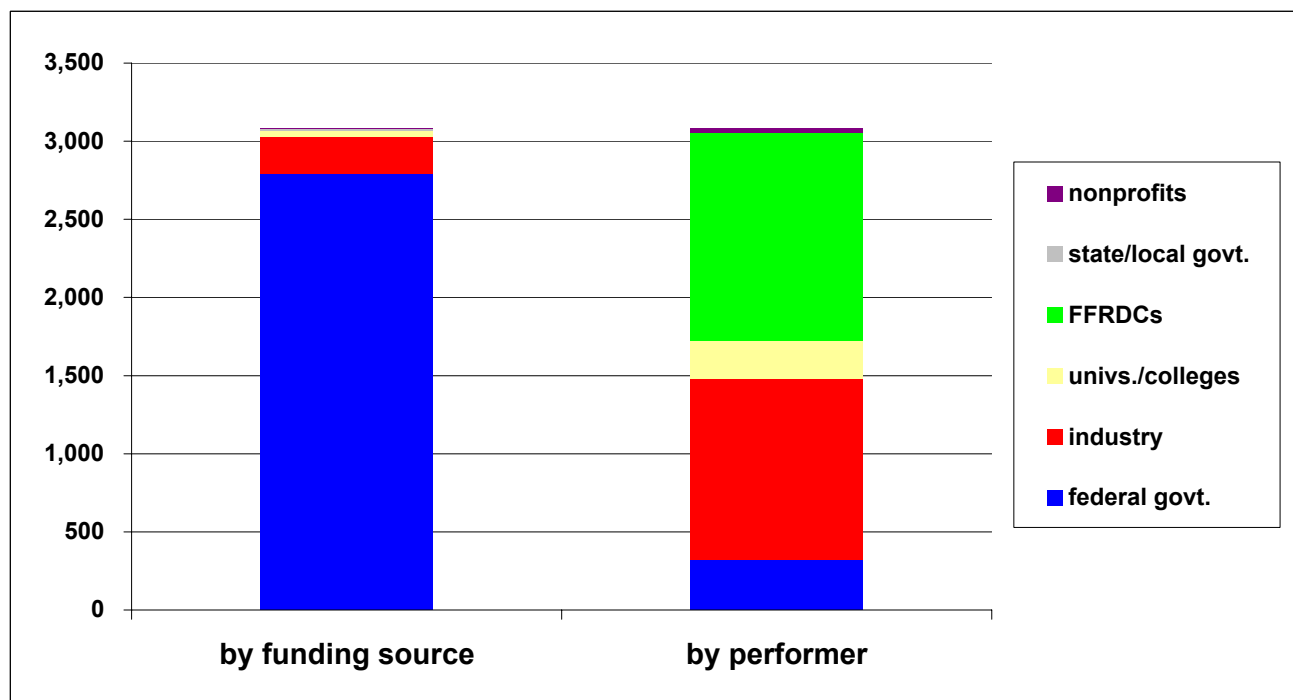
State and local government performance of R&D is not included.

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



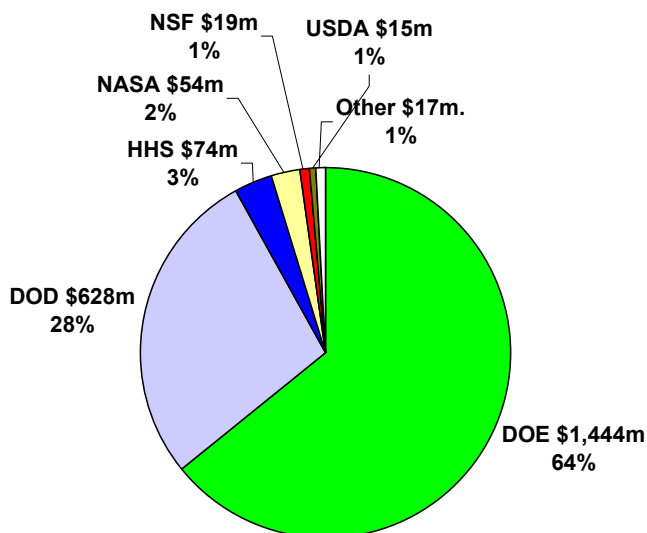
Facts and Rankings for New Mexico

	NM		U.S.	NM % of U.S.	Rank *
Total Federal R&D	2,253 million \$ ('00)		75,751	3.0%	11
Population	1.82 million ('00)		282.13	0.6%	36
Federal R&D Per Capita	\$ 1,237 ('00)		\$ 269	459.9%	3
Total Federal Expenditures	14,470 million \$ ('00)		1,637,170	0.9%	35
Federal R&D / Total Federal	15.6% ('00)		4.6%		2
Total R&D (all funds)	3,085 million \$ ('00)		264,616	1.2%	20
Total R&D Per Capita	\$ 1,694 ('00)		\$ 938	180.6%	6
Gross State Product (GSP)	54,364 million \$ ('00)		9,941,552	0.5%	38
GSP Per Capita	\$ 29,849 ('00)		\$ 35,238	84.7%	39
R&D Intensity (R&D / GSP)	5.68% ('00)		2.66%	213.5%	2

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 New Mexico by Agency
 FY 2000 (obligations in millions of dollars)
 Total: \$2.3 billion

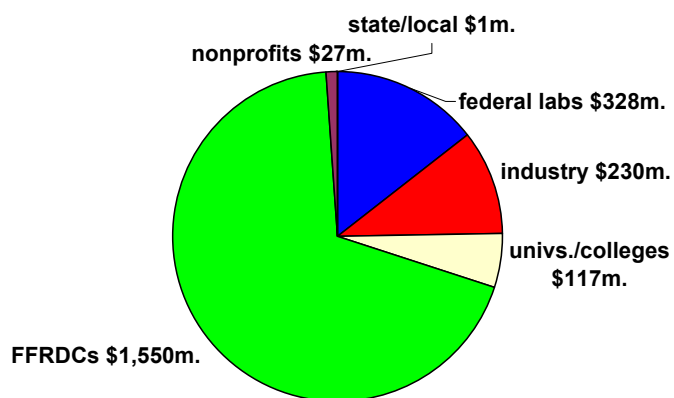


Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
 R&D = conduct of R&D and R&D plant.
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Chart 1.

Federal R&D to New Mexico by Performer
 FY 2000 (obligations in millions of dollars)
 Total: \$2.3 billion

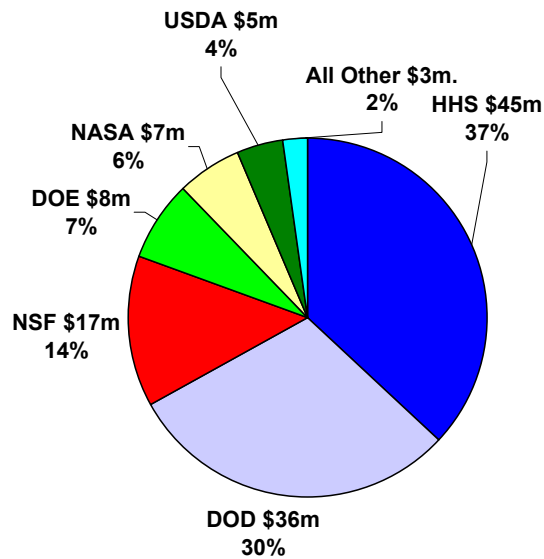


Source: National Science Foundation, Federal Funds for Research and Development, Fiscal Years 2000, 2001, and 2002, 2002.
 R&D = conduct of R&D and R&D plant.
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Chart 2.

Federal R&D to New Mexico Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$121 million

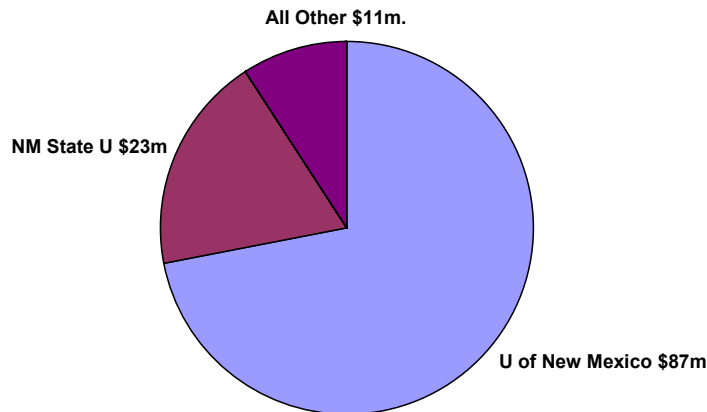


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 3.

Federal R&D to New Mexico Universities and Colleges
 FY 2000 (obligations in millions of dollars)
 Total: \$121 million

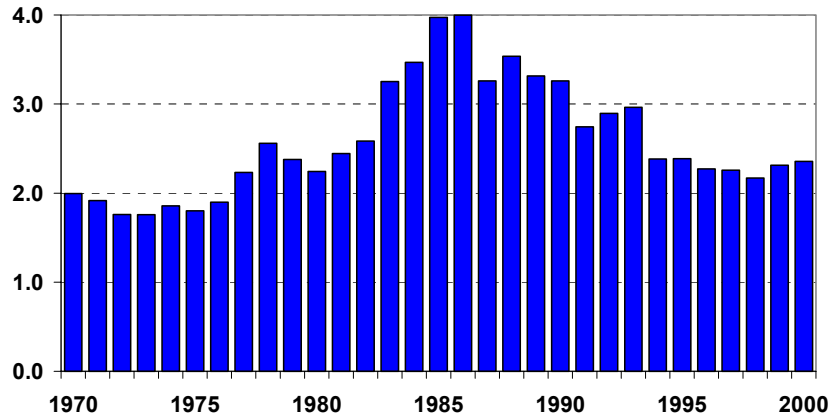


Source: National Science Foundation, *Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, FY 2000, 2002.*
 R&D = conduct of R&D and R&D plant.
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Chart 4.

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

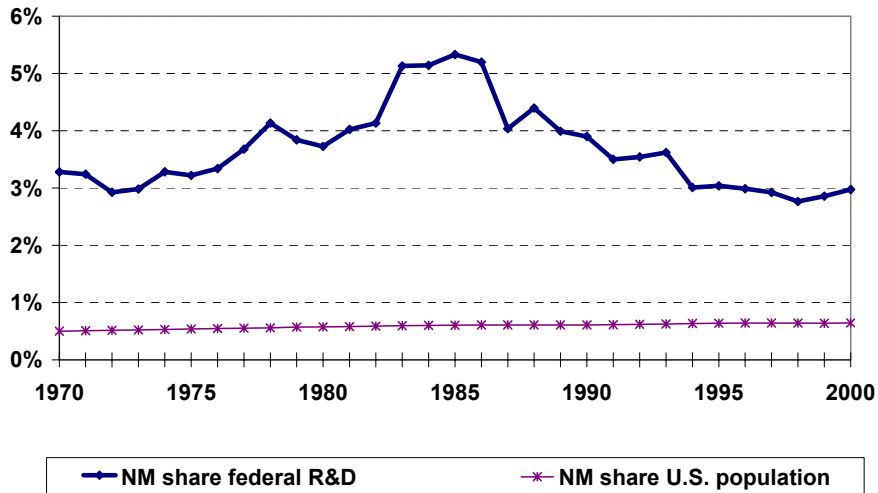


Source: National Science Foundation, Federal Funds for Research and Development Historical Tables, 2002.
R&D = conduct of R&D and R&D plant
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Chart 5.

New Mexico 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 plant.
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Chart 6.