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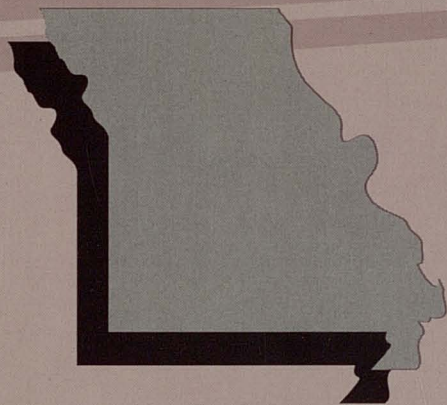
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Comparative Funding of the Missouri Agricultural Experiment Station



Perspectives on
Agriculture, Food and
Natural Resources

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Missouri Agricultural Experiment Station Special Report 493

Perspectives on Agriculture, Food and Natural Resources

This special report is one of a series (listed below) prepared for a project of the Missouri Agricultural Experiment Station (AES).

The project, called "Perspectives on Agriculture, Food and Natural Resources," was designed to identify and describe trends in Missouri Agriculture and Rural Missouri and to assess the implications of changes that are occurring. A purpose was to assist the AES in establishing priorities and planning programs.

These reports provide background information on the future economic, social, political and technical environment for agriculture. A second series of reports, now being developed, examines the challenges and opportunities facing selected industries and identifies some of the research needed to help Missouri agriculture achieve its potential.

LIST OF PUBLICATIONS:

- SR486 The Social and Economic Organization of Missouri Agriculture, 1964–1992
- SR487 The State of Rural Missouri
- SR488 The Status and Potential of Missouri Agriculture
- SR489 Selected Characteristics of the Missouri Horticulture Industry
- SR490 The Status of Selected Natural Resources in Missouri
- SR491 Missouri's Food Processing Industry
- SR492 10-Year Agricultural Outlook
- SR493 Comparative Funding of the Missouri Agricultural Experiment Station

Comparative Funding of the Missouri Agricultural Experiment Station

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UMC, Department of Agricultural Economics

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This report examines the various sources of funding for the Missouri Agricultural Experiment Station (MOAES) since 1970. Trends in the amount of funding received from each source are identified. Missouri trends are compared with funding levels for state agricultural experiment stations in other states. Information is presented regarding Missouri's rank both nationally and within the North Central Region with respect to levels of state agricultural experiment station funding obtained from each source.

There are five sources of funding for state agricultural experiment stations (SAES):

1. State Appropriations: In some states the SAES is a line item in the state budget. In Missouri and some other states, SAES funding is a component of the university budget and funding levels are determined by university administrators.
2. Federal Funds: There are three categories of federal funds provided to SAES.
 - a. Cooperative State Research Service (CSRS). The Hatch Act of 1887 established "Hatch Funds" to be provided for support of SAES on a formula basis to be matched by state funding. In addition there are various other federal funding programs allocated by formula.
 - b. U.S. Department of Agriculture contracts, grants and cooperative agreements (USDA/CGCA): These are funds received by SAES for a variety of cooperative research activities with the USDA.
 - c. Other federal: Funds received by SAES for grants, contracts and cooperative agreements with research agencies of the federal government other than the USDA.
3. Product Sales: SAES receives some income from sale of products produced on land operated by the experiment station. In some cases this will also include fee income if the SAES is involved in providing a service or regulatory activity. For example, the MOAES is responsible for the state fertilizer inspection service and receives fee income from this activity, which is included in the sales income for MOAES.
4. Industry: Industry sources of funds include unrestricted gifts and research grants and contracts.
5. Other: Funds received from sources other than those listed above.

Table 1 shows the sources of funding for the Missouri Agricultural Experiment Station for selected years since 1970. Table 2 shows the national ranking of the MOAES regarding funding level by category for those same years. Over the 1970–1993 period the MOAES rank with respect to state funding declined from 17th to 32nd (Table 2). The MOAES national rank in total funding declined from 17th to 25th over the same period. The MOAES ranking with respect to industry funding sources increased from 31st to 17th over this period.

The annual growth rate in total MOAES funding decreased from 5.3 percent during the 1980s to less than 2 percent during the 1990–93 period (Table 3).

In 1993 Missouri ranked 17th nationally with respect to the total value of agricultural products marketed. However, Missouri ranked 32nd nationally in the amount of state funding provided to the state agricultural experiment station and 25th in total funding for the SAES.

State funding remains the most important source of funding for the MOAES. However, state funding as a share of total funding has decreased from 48.6 percent to 38.5 percent since 1970 (Table 4). Industry and other sources have become increasingly important sources of funding for the MOAES.

Over the past 23 years, total funding for the MOAES increased 362 percent, compared with 512 percent for the 50-state average, 525 percent for the top 10 states and 500 percent for the North Central Region.

Over the past 23 years, increases in state funding for the MOAES have averaged about 55 percent of increases in state funding to SAES in the North Central Region and the 50-state average. In the North Central Region, only South Dakota provides less state funding to the SAES than does Missouri (Table 5).

Table 1:**Sources of Funding for Missouri Agricultural Experiment Station**

Source	1970	1980	1990	1993
State appropriations	3,169	7,035	10,397	11,632
Federal:				
Total CSRS	1,539	3,602	6,195	7,702
USDA/CGCA	210	537	174	1,168
Other federal	401	1,058	2,142	1,733
Total federal	2,150	5,197	8,511	10,603
Industry	94	441	1,716	2,326
Product sales	959	1,862	2,995	3,072
Other	150	718	1,976	2,552
Total funding	6,522	15,253	25,595	30,185

Table 2:**National Ranking for Missouri Agricultural Experiment Station by Sources of Funding**

Source	1970	1980	1990	1993
State appropriations	17	27	32	32
Federal:				
Total CSRS	10	15	11	8
USDA/CGCA	11	20	38	19
Other federal	NA	NA	6	8
Total federal	15	19	20	19
Industry	31	27	21	17
Product sales	7	13	13	13
Other	15	15	17	22
Total funding	17	24	26	25

NA = not available

Table 3:**Missouri Agricultural Experiment Station Annual Growth Rate of Funding by Source**

Source	Annual Growth Rate		
	1970-1980 (%)	1980-1990 (%)	1990-1993 (%)
State appropriations	8.3	4.0	3.8
Total federal	9.5	5.1	7.6
Industry	16.7	14.6	10.7
Product sales	6.9	4.9	0.8
Total other	17.0	10.7	8.9
Total AES	4.7	5.3	1.7

Table 4:**Sources of Funding, Missouri Agricultural Experiment Station, 1970, 1980, 1990 and 1993**

Source	Percent of Total			
	1970	1980	1990	1993
State appropriations	48.6	46.1	40.6	38.5
Total federal	33.0	34.1	33.3	35.1
Industry	1.4	2.9	6.7	7.7
Product sales	14.7	12.2	11.7	10.2
Other	2.3	4.7	7.7	8.5
Total funding	100.0	100.0	100.0	100.0

Table 5:**State Appropriations for SAES, North Central Region (\$1,000)
and Rank Within Region 1970, 1980, 1990 and 1993**

State	1970		1980		1990		1993	
	Approp	Rank	Approp	Rank	Approp	Rank	Approp	Rank
Missouri	3,169	9	7,035	11	10,397	11	11,632	11
Michigan	3,881	5	11,808	4	21,137	3	22,476	5
Wisconsin	4,401	2	12,063	3	21,983	2	27,556	2
Minnesota	3,432	7	16,731	1	32,315	1	31,253	1
Ohio	4,751	1	14,533	2	20,197	4	18,649	8
Indiana	3,063	10	9,585	5	19,842	6	22,122	6
Illinois	4,077	3	7,465	10	14,011	9	14,172	9
Iowa	3,792	6	8,710	9	18,660	7	24,992	3
North Dakota	2,056	11	8,888	8	11,341	10	13,308	10
South Dakota	1,867	12	3,581	12	5,872	12	6,783	12
Nebraska	3,228	8	8,892	7	17,885	8	24,537	4
Kansas	3,985	4	9,512	6	19,893	5	21,501	7

Sources of Funding for Missouri Agricultural Experiment Station 1970, 1980, 1990 and 1993

- State funding is the largest source of funds for the MOAES. However, state funding accounted for only 38.5 percent of total funding in 1993 compared with 48.6 percent in 1970.
- Federal funding has remained at 33–35 percent of total MOAES funding over the 1970–1993 period.
- The declining share of funding provided by the state has been partially filled by increases in industry's share from 1.4 percent to 7.7 percent over this period.
- The “other” category has also become an increasingly important source of funding for the MOAES.

Figure 1A:

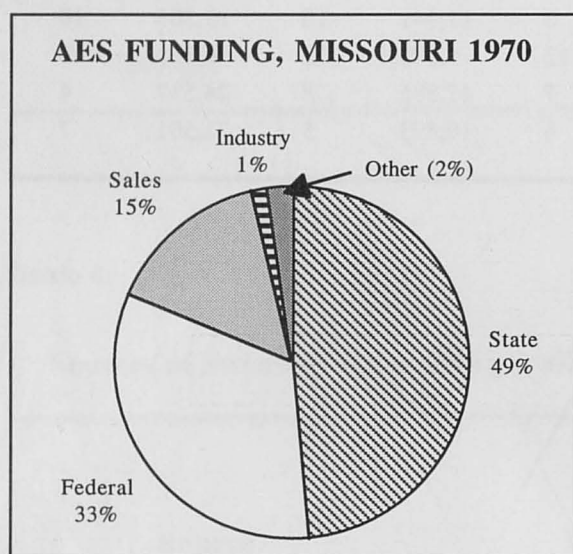


Figure 1B:

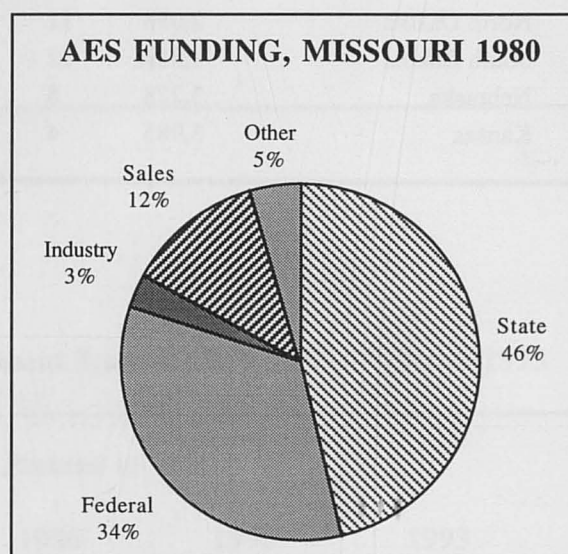


Figure 1C:

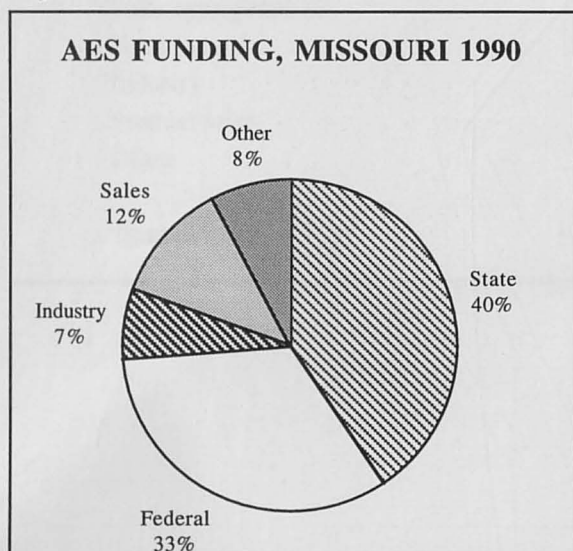


Figure 1D:

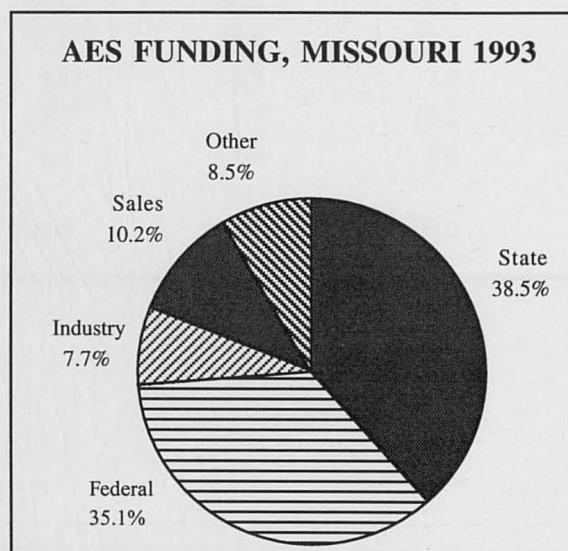


Figure 2:

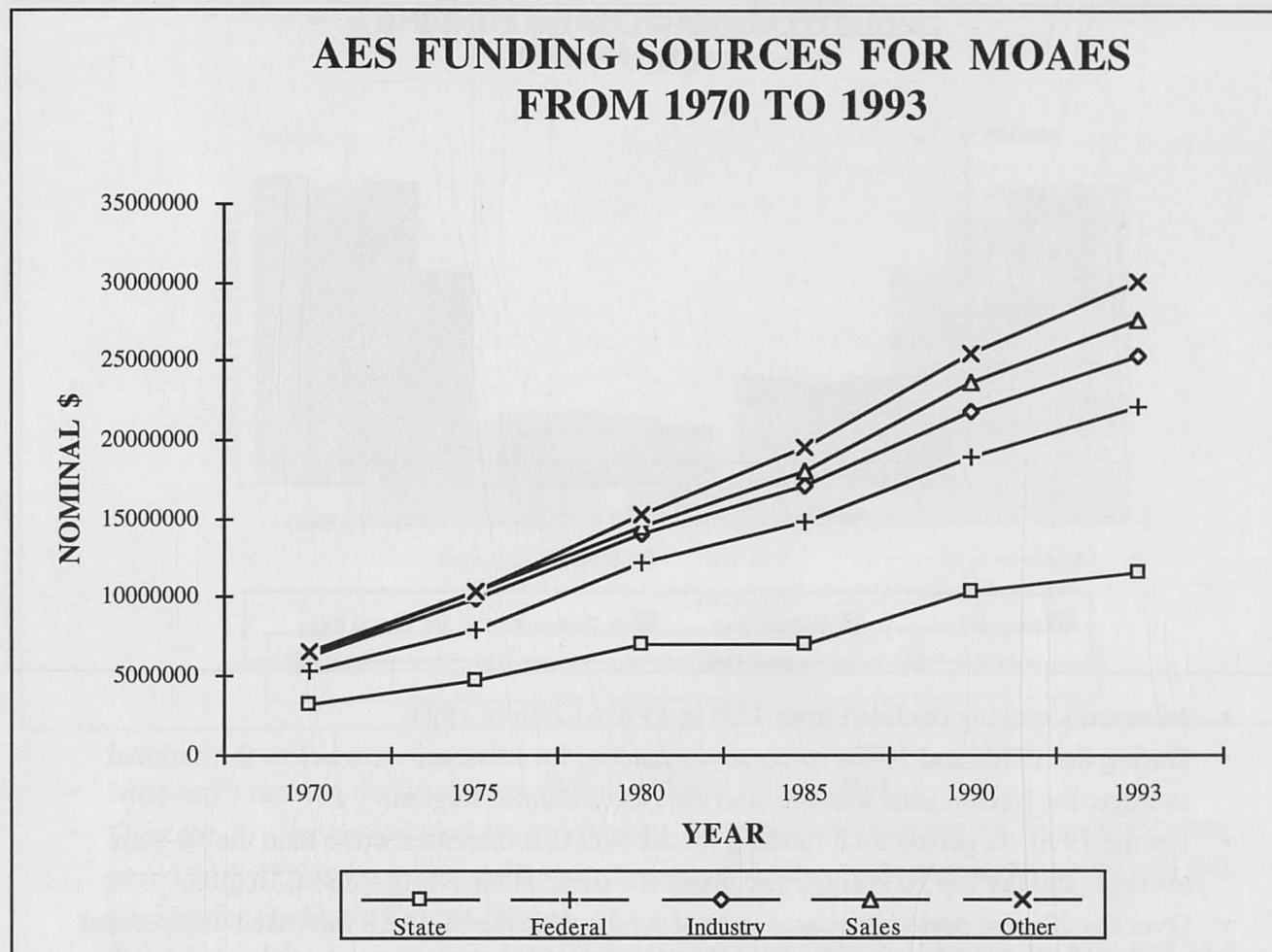
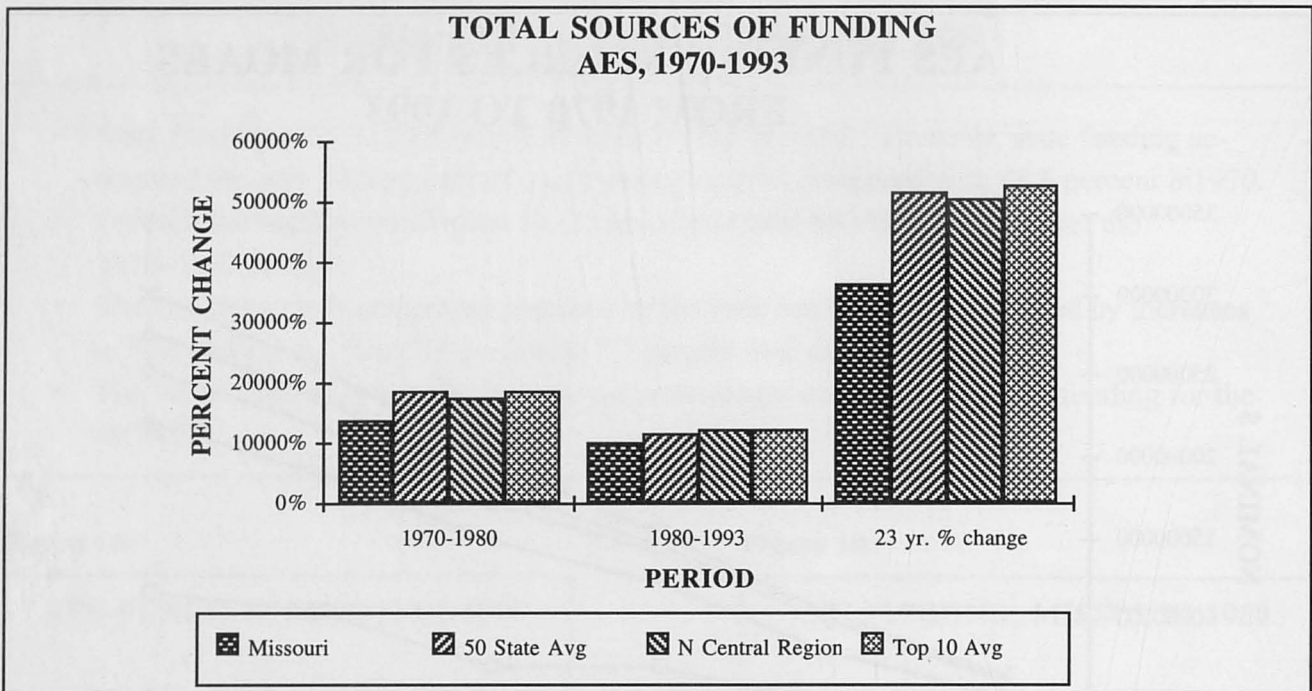


Table 6:

Annual Growth Rates by Source of Funds 1970-1993	
Source	Percent
State	6.2
Total federal	7.7
Industry	25.7
Product sales	6.6
Total other	19.6
Total	7.1

- All sources of funding increased over the 1970-1993 period.
- State appropriations increased 367 percent over the 1970-1993 period. State appropriations also showed the smallest annual growth rate, increasing on average only 6.2 percent.
- Federal funding increased 493 percent in nominal terms from 1970-1983.
- Industry funding and total other showed the highest rate of increase over the period.

Figure 3:



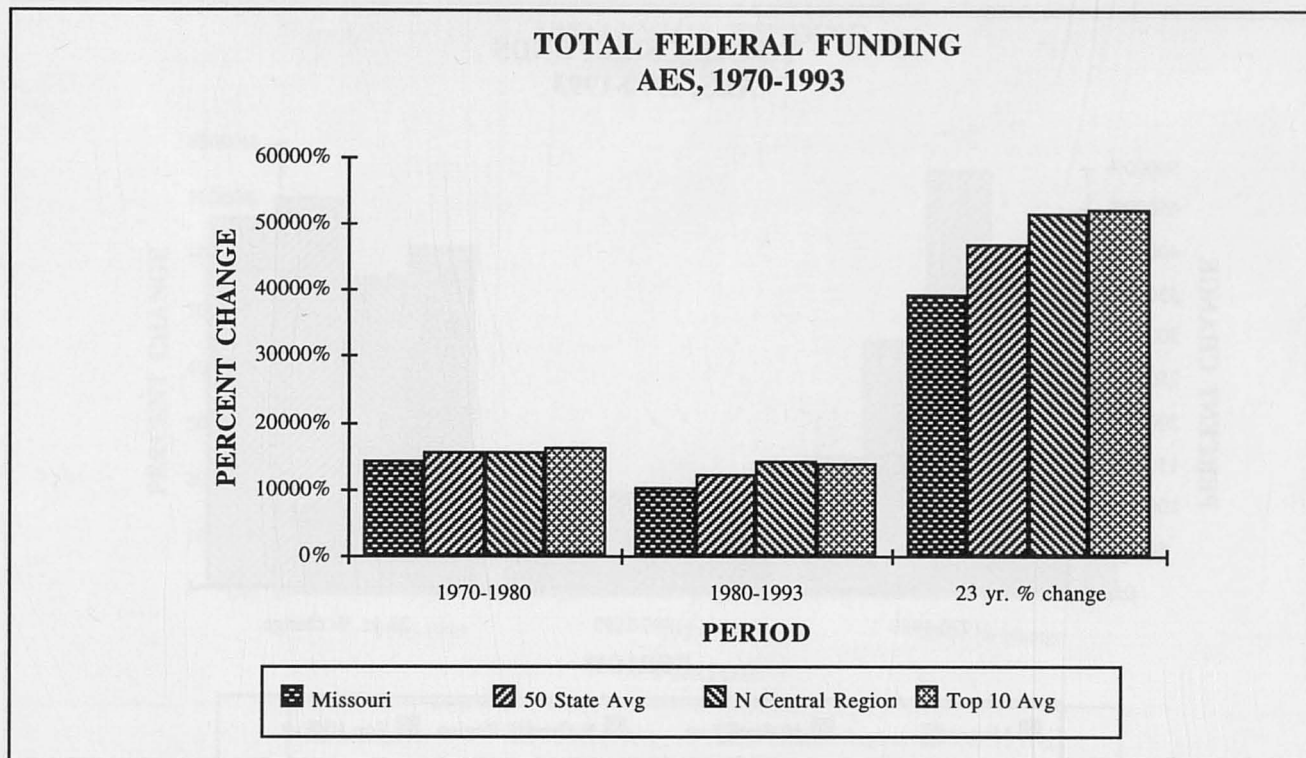
- Missouri's ranking declined from 17th in 1970 to 25th in 1993.
- During the 1970s and 1980s increases in funding for Missouri were below the national average, the top ten state average, and the North Central Region.
- For the 1990-93 period total funding for the MOAES increased more than the 50-state average, and the top 10 average and about the same as the North Central Region.
- Over the 23-year period increases in total funding for the MOAES increased 362 percent compared with 512 percent for the 50-state average, 525 percent of the top 10 states and .500 percent for the North Central Region.

Table 7:

Total All Sources of AES Funding: (1970-1993)											
Nominal Dollars (000s)											
Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	6,522	17	15,253	133	24	25,595	68	26	30,185	25	362
50-State Avg.	5,582		15,892	184		31,511	98		34,186		512
North Central Region State Avg.	7,072		19,178	171		37,028	93		42,475		501
Top 10 State Avg.	11,942		33,678	182		70,760	110		74,676		525

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 4:



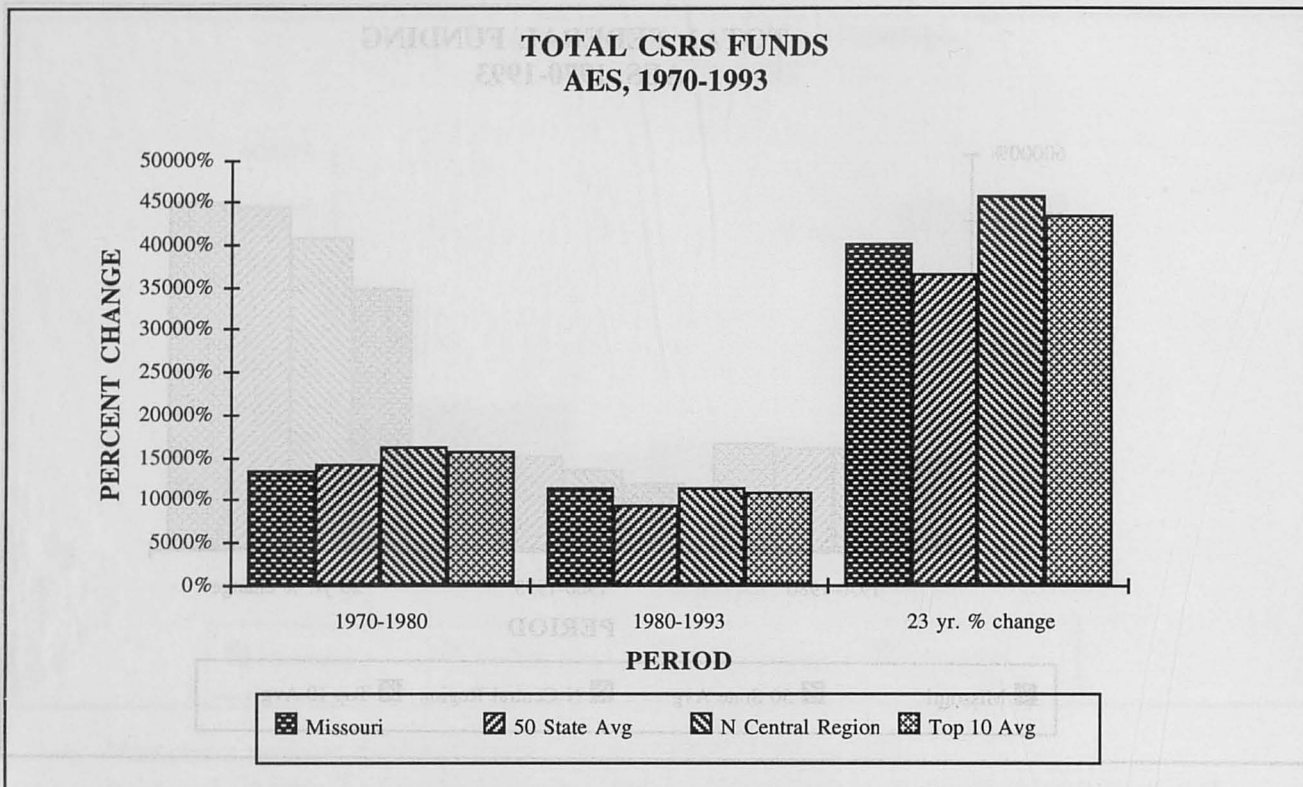
- Missouri's ranking declined from 15th in 1970 to 19th in 1993.
- Over the 23-year period total federal funding for the MOAES increased 393 percent compared with 472 percent for the 50-state average, 525 percent for the top ten states and 442 percent for the North Central Region.
- Total federal funding accounted for 33 percent of total 1970 funding for the AES and 35.1 percent of total funding in 1993.

Table 8:

Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	2,150	15	5,197	142	19	8,511	64	20	10,603	393	19
50-State Avg.	1,759		4,490	155		8,193	82		10,065	472	
North Central Region State Avg.	3,479		9,279	156		16,474	110		18,885	442	
Top 10 State Avg.	3,591		9,442	163		18,596	97		22,432	525	

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 5:



- Missouri's ranking rose from 19th in 1970 to 8th in 1993.
- Increases in total CSRS funding to the MOAES over the 23-year period increased 400 percent, which is above the 50-state average but below increases received by the top ten states and the North Central Region.
- CSRS funding for the MOAES is significant: comprising 16.8 percent of total funding in 1970 and 15.1 percent in 1993.

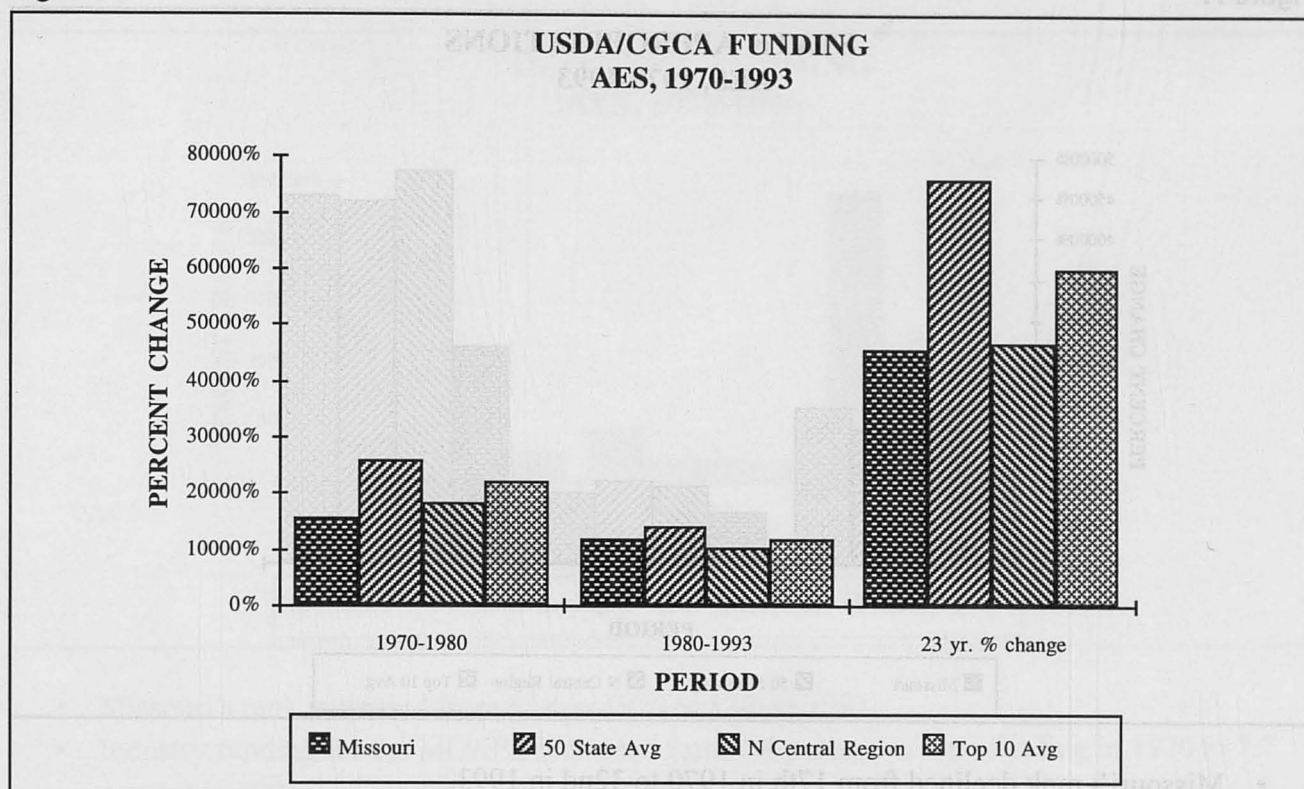
Table 9:

Total CSRS Funds for AES: For 50 States (1970-1993)
Nominal Dollars (000s)

Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	1,539	10	3,602	134	15	6,195	72	11	7,702	8	400
50 State Avg.	1,097		2,661	142		4,326	63		5,110		365
North Central Region State Avg.	1,291		3,380	162		6,284	86		7,172		455
Top 10 State Avg.	1,771		4,551	157		8,250	81		9,442		433

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 6:



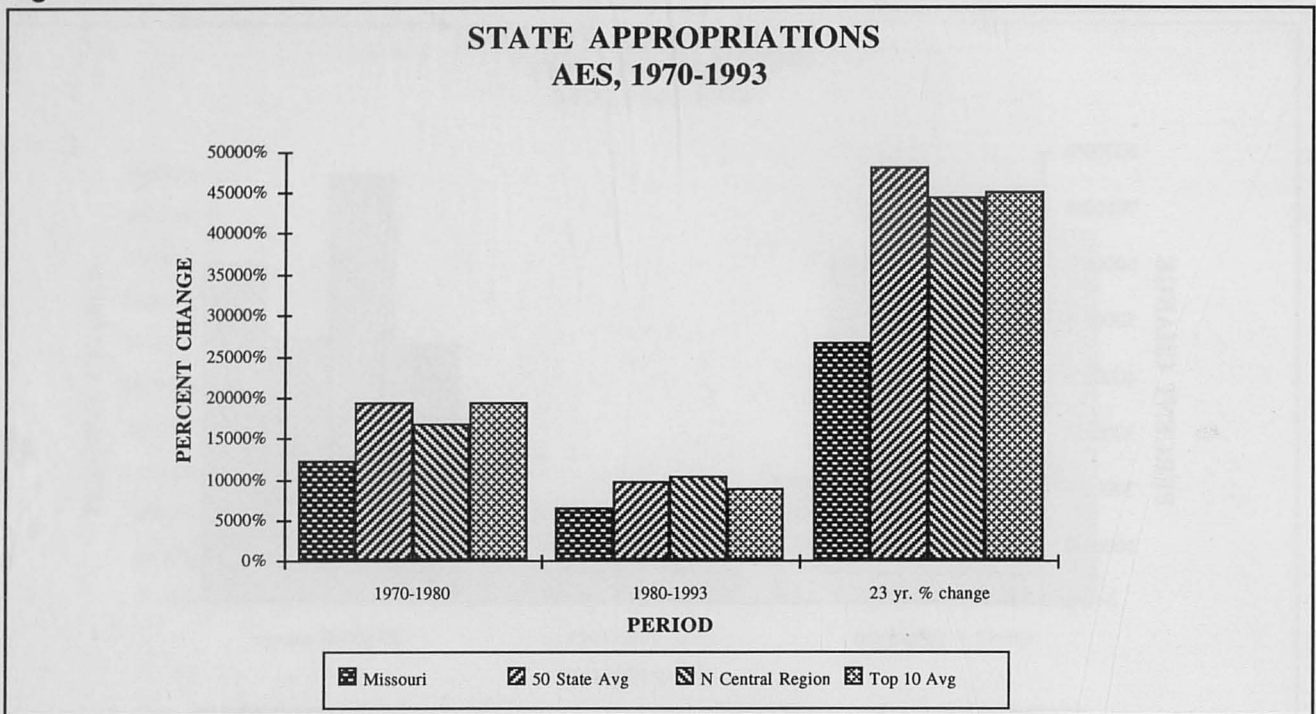
- Missouri's ranking declined from 11th in 1970 to 38th in 1990 but increased to 19th in 1993.
- The 23-year increase in Missouri (456 percent) is similar to the increases in other North Central states (469 percent) but considerably below increases in the 50-state average (718 percent) and the top 10 states (600 percent).

Table 10:

Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	210	11	537	156	20	174	68	38	1,168	19	456
50-State Avg.	136		488	259		989	103		1,168		758
North Central Region State Avg.	216		609	181		1,226	101		1,230		469
Top 10 State Avg.	399		1,273	219		2,703	112		2,795		600

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 7:



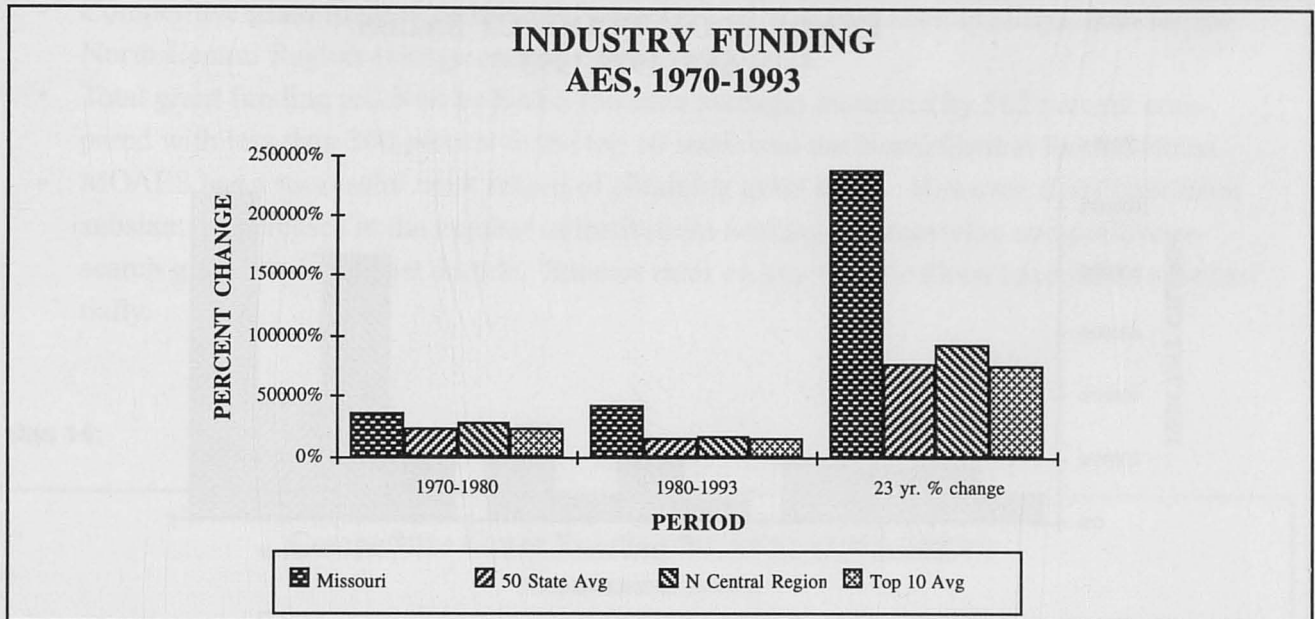
- Missouri's rank declined from 17th in 1970 to 32nd in 1993.
- In the North Central Region, only South Dakota provides less funding to the SAES than does Missouri.
- Over the past 25 years increases in state funding for the MOAES have averaged about 55 percent of increases in state funding to SAES in the North Central Region and the 50-state average.
- State funding is the largest source of funds for the MOAES: comprising 38.5 percent of total funding in 1993 compared with 48.6 percent in 1970.

Table 11:

State Appropriations for AES: For 50 States (1970-1993)											
Nominal Dollars (000s)											
Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	3,169	17	7,035	122	27	10,397	48	32	11,632	32	267
50-State Avg.	3,024		8,842	192		17,306	96		17,533		480
North Central Region State Avg.	3,479		9,279	167		16,464	78		18,885		443
Top 10 State Avg.	7,239		21,215	193		40,703	92		39,840		450

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 8:



- Missouri's rank increased from 31st in 1970 to 17th in 1993.
- Industry funding for the MOAES increased from 1.4 percent of total funding in 1970 to 7.7 percent in 1993.
- Increases in industry funding for the MOAES exceeded increases in the 50-state average, the top 10 states, and the North Central Region.
- Industry funding for the MOAES increased 24.7 fold over the 1970–1993 period compared with a 5.5 fold increase in the North Central Region.
- Industry funding has increased more rapidly than any other source of funds for the MOAES.

Table 12:

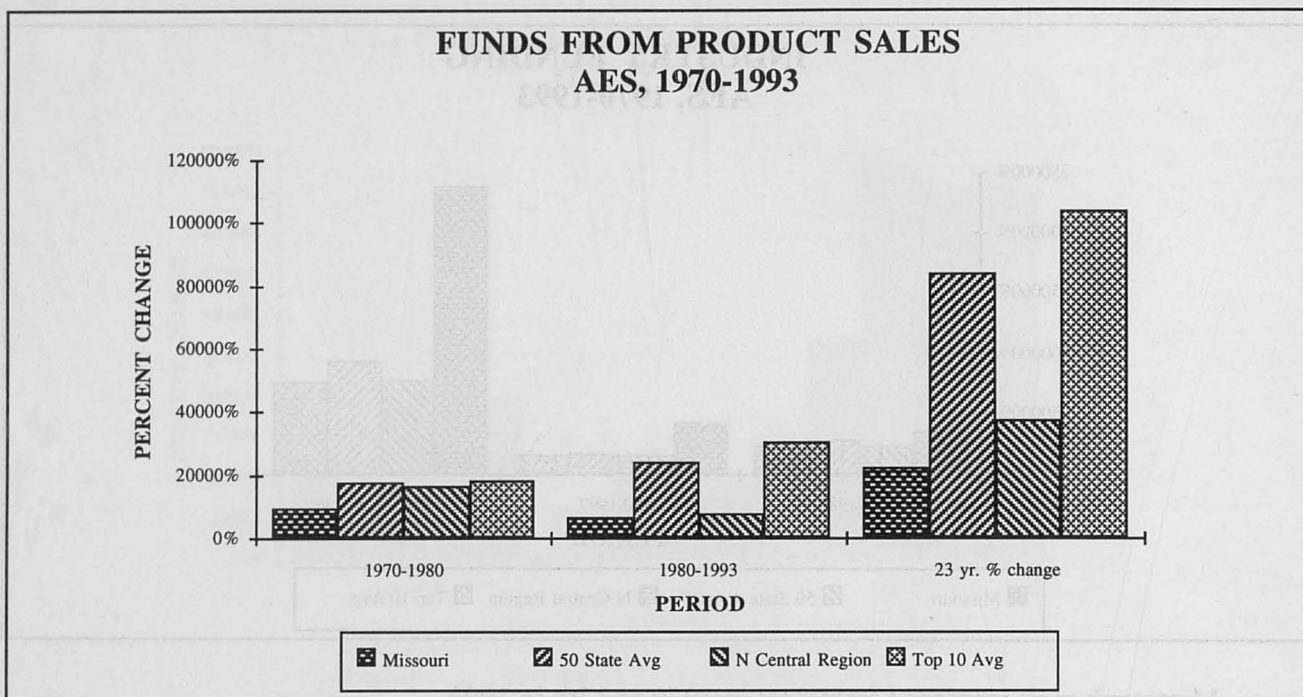
Funds from Industry for AES: For 50 States (1970–1993)

Nominal Dollars (000s)

Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	94	31	441	369	27	1,716	289	21	2,326	17	2,474
50-State Avg.	273		917	236		2,276	148		2,367		867
North Central Region State Avg.	1,291		3,380	285		6,284	126		7,172		556
Top 10 State Avg.	822		2,782	239		7,028	153		7,014		853

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

Figure 9:



- Missouri's rank dropped from 7th to 13th over the 1970–1993 period.
- Product sales accounted for 10.2 percent of MOAES funding in 1993 compared with 14.7 percent in 1970.
- Increases in product sales for the MOAES have been considerably below increases in the 50-state average and the top 10 states.

Table 13:

Avg./State	1970	1970 Mo. Rank	1980	10 Yr. % Chg.	1980 Mo. Rank	1990	10 Yr. % Chg.	1990 Mo. Rank	1993	1993 Mo. Rank	23 Yr. % Chg.
Missouri	959	7	1,862	94	13	2,995	61	13	3,072	13	220
50-State Avg.	389		1,081	178		1,814	68		3,647		837
North Central Region State Avg.	216		609	167		1,226	51		1,230		569
Top 10 State Avg.	1,277		3,593	181		5,407	50		14,506		1,135

North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

- Missouri has been in the top 10 national rankings since 1985.
- Competitive grant funding received by Missouri has increased slightly slower than for the North Central Region average and the other top 10 states.
- Total grant funding received by SAES (50 state average) increased by 562 percent compared with less than 300 percent in the top 10 states and the North Central Region states.
- MOAES has a successful track record of obtaining grant funds. However, there have been substantial increases in the number of institutions seeking and receiving competitive research grants over the past decade. Success rates on grant applications have fallen substantially.

Table 14:

Competitive Grant Funding for AES: (1985–1993*)							
Nominal Dollars (000s)							
Avg./State	1985	Mo. Rank	1990	Mo. Rank	1993	Mo. Rank	% Change
Missouri	349	7	797	6	1,150	8	216
50-State Avg.	157		406		1,039		562
North Central**	232		623		901		288
Region State Avg.							
Top 10 State Avg.	518		1,311		1,972		280

* Data not available before 1980.

** North Central Region states are Minnesota, Iowa, Wisconsin, Michigan, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Missouri

The following table shows the number of...
 Total grant funding received...
 period will be the 200 period in the top 10 states...
 MIAFF has a successful track record of...
 substantial success in the number of...
 search to identify the best...

Table 14

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Alabama																						
Arizona																						
Arkansas																						
California																						
Colorado																						
Connecticut																						
Delaware																						
Florida																						
Georgia																						
Idaho																						
Illinois																						
Indiana																						
Iowa																						
Kansas																						
Kentucky																						
Louisiana																						
Maine																						
Maryland																						
Massachusetts																						
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Montana																						
Nebraska																						
Nevada																						
New Hampshire																						
New Jersey																						
New Mexico																						
New York																						
North Carolina																						
North Dakota																						
Ohio																						
Oklahoma																						
Oregon																						
Pennsylvania																						
Rhode Island																						
South Carolina																						
South Dakota																						
Tennessee																						
Texas																						
Utah																						
Vermont																						
Virginia																						
Washington																						
West Virginia																						
Wisconsin																						
Wyoming																						

Year	Federal	State	Local	Private	Other	Total	Source
1940	1000	2000	500	100	50	3550	Missouri Agricultural Experiment Station
1941	1050	2100	550	110	55	3765	Missouri Agricultural Experiment Station
1942	1100	2200	600	120	60	3980	Missouri Agricultural Experiment Station
1943	1150	2300	650	130	65	4295	Missouri Agricultural Experiment Station
1944	1200	2400	700	140	70	4610	Missouri Agricultural Experiment Station
1945	1250	2500	750	150	75	4925	Missouri Agricultural Experiment Station
1946	1300	2600	800	160	80	5260	Missouri Agricultural Experiment Station
1947	1350	2700	850	170	85	5605	Missouri Agricultural Experiment Station
1948	1400	2800	900	180	90	5970	Missouri Agricultural Experiment Station
1949	1450	2900	950	190	95	6345	Missouri Agricultural Experiment Station
1950	1500	3000	1000	200	100	6700	Missouri Agricultural Experiment Station
1951	1550	3100	1050	210	105	7065	Missouri Agricultural Experiment Station
1952	1600	3200	1100	220	110	7450	Missouri Agricultural Experiment Station
1953	1650	3300	1150	230	115	7845	Missouri Agricultural Experiment Station
1954	1700	3400	1200	240	120	8260	Missouri Agricultural Experiment Station
1955	1750	3500	1250	250	125	8695	Missouri Agricultural Experiment Station
1956	1800	3600	1300	260	130	9150	Missouri Agricultural Experiment Station
1957	1850	3700	1350	270	135	9625	Missouri Agricultural Experiment Station
1958	1900	3800	1400	280	140	10120	Missouri Agricultural Experiment Station
1959	1950	3900	1450	290	145	10635	Missouri Agricultural Experiment Station
1960	2000	4000	1500	300	150	11170	Missouri Agricultural Experiment Station
1961	2050	4100	1550	310	155	11725	Missouri Agricultural Experiment Station
1962	2100	4200	1600	320	160	12300	Missouri Agricultural Experiment Station
1963	2150	4300	1650	330	165	12895	Missouri Agricultural Experiment Station
1964	2200	4400	1700	340	170	13510	Missouri Agricultural Experiment Station
1965	2250	4500	1750	350	175	14145	Missouri Agricultural Experiment Station
1966	2300	4600	1800	360	180	14800	Missouri Agricultural Experiment Station
1967	2350	4700	1850	370	185	15475	Missouri Agricultural Experiment Station
1968	2400	4800	1900	380	190	16170	Missouri Agricultural Experiment Station
1969	2450	4900	1950	390	195	16885	Missouri Agricultural Experiment Station
1970	2500	5000	2000	400	200	17620	Missouri Agricultural Experiment Station
1971	2550	5100	2050	410	205	18375	Missouri Agricultural Experiment Station
1972	2600	5200	2100	420	210	19150	Missouri Agricultural Experiment Station
1973	2650	5300	2150	430	215	19945	Missouri Agricultural Experiment Station
1974	2700	5400	2200	440	220	20760	Missouri Agricultural Experiment Station
1975	2750	5500	2250	450	225	21595	Missouri Agricultural Experiment Station
1976	2800	5600	2300	460	230	22450	Missouri Agricultural Experiment Station
1977	2850	5700	2350	470	235	23325	Missouri Agricultural Experiment Station
1978	2900	5800	2400	480	240	24220	Missouri Agricultural Experiment Station
1979	2950	5900	2450	490	245	25135	Missouri Agricultural Experiment Station
1980	3000	6000	2500	500	250	26070	Missouri Agricultural Experiment Station
1981	3050	6100	2550	510	255	27025	Missouri Agricultural Experiment Station
1982	3100	6200	2600	520	260	28000	Missouri Agricultural Experiment Station
1983	3150	6300	2650	530	265	29095	Missouri Agricultural Experiment Station
1984	3200	6400	2700	540	270	30210	Missouri Agricultural Experiment Station
1985	3250	6500	2750	550	275	31345	Missouri Agricultural Experiment Station
1986	3300	6600	2800	560	280	32500	Missouri Agricultural Experiment Station
1987	3350	6700	2850	570	285	33675	Missouri Agricultural Experiment Station
1988	3400	6800	2900	580	290	34870	Missouri Agricultural Experiment Station
1989	3450	6900	2950	590	295	36085	Missouri Agricultural Experiment Station
1990	3500	7000	3000	600	300	37320	Missouri Agricultural Experiment Station
1991	3550	7100	3050	610	305	38575	Missouri Agricultural Experiment Station
1992	3600	7200	3100	620	310	39850	Missouri Agricultural Experiment Station
1993	3650	7300	3150	630	315	41145	Missouri Agricultural Experiment Station
1994	3700	7400	3200	640	320	42460	Missouri Agricultural Experiment Station
1995	3750	7500	3250	650	325	43795	Missouri Agricultural Experiment Station
1996	3800	7600	3300	660	330	45150	Missouri Agricultural Experiment Station
1997	3850	7700	3350	670	335	46525	Missouri Agricultural Experiment Station
1998	3900	7800	3400	680	340	47920	Missouri Agricultural Experiment Station
1999	3950	7900	3450	690	345	49335	Missouri Agricultural Experiment Station
2000	4000	8000	3500	700	350	50770	Missouri Agricultural Experiment Station
2001	4050	8100	3550	710	355	52225	Missouri Agricultural Experiment Station
2002	4100	8200	3600	720	360	53700	Missouri Agricultural Experiment Station
2003	4150	8300	3650	730	365	55195	Missouri Agricultural Experiment Station
2004	4200	8400	3700	740	370	56710	Missouri Agricultural Experiment Station
2005	4250	8500	3750	750	375	58245	Missouri Agricultural Experiment Station
2006	4300	8600	3800	760	380	59800	Missouri Agricultural Experiment Station
2007	4350	8700	3850	770	385	61375	Missouri Agricultural Experiment Station
2008	4400	8800	3900	780	390	62970	Missouri Agricultural Experiment Station
2009	4450	8900	3950	790	395	64585	Missouri Agricultural Experiment Station
2010	4500	9000	4000	800	400	66220	Missouri Agricultural Experiment Station
2011	4550	9100	4050	810	405	67875	Missouri Agricultural Experiment Station
2012	4600	9200	4100	820	410	69550	Missouri Agricultural Experiment Station
2013	4650	9300	4150	830	415	71245	Missouri Agricultural Experiment Station
2014	4700	9400	4200	840	420	72960	Missouri Agricultural Experiment Station
2015	4750	9500	4250	850	425	74695	Missouri Agricultural Experiment Station
2016	4800	9600	4300	860	430	76450	Missouri Agricultural Experiment Station
2017	4850	9700	4350	870	435	78225	Missouri Agricultural Experiment Station
2018	4900	9800	4400	880	440	80020	Missouri Agricultural Experiment Station
2019	4950	9900	4450	890	445	81835	Missouri Agricultural Experiment Station
2020	5000	10000	4500	900	450	83670	Missouri Agricultural Experiment Station

Appendixes

Data Tables for AES Funding Sources by States

Table 15:

Total Agricultural Experiment Station Funding for the 50 States (1970–1993)
Nominal Dollars (000s)

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	5,529	23	15,115	25	29,981	23	32,043	24	112%
ALASKA	665	50	3,021	46	3,940	49	4,484	49	48%
ARIZONA	4,809	26	14,435	26	34,172	17	38,875	16	169%
ARKANSAS	5,279	25	15,813	22	28,739	24	33,116	23	109%
CALIFORNIA	30,635	1	75,084	1	141,894	1	145,616	1	94%
COLORADO	2,648	37	17,257	20	25,291	27	28,369	27	64%
CONNECTICUT	3,961	29	4,652	40	10,704	41	11,137	41	139%
DELAWARE	1,160	46	3,029	45	7,612	44	9,533	42	215%
FLORIDA	12,760	3	40,725	2	87,008	2	88,126	3	116%
GEORGIA	6,828	14	22,913	10	49,186	10	50,064	11	118%
HAWAII	3,537	32	7,962	35	20,270	31	22,010	33	176%
IDAHO	2,408	38	8,328	34	15,293	35	17,850	35	114%
ILLINOIS	7,880	11	16,250	21	32,285	21	37,530	17	131%
INDIANA	8,746	6	23,658	9	44,437	12	48,628	12	106%
IOWA	8,588	8	21,839	13	55,073	6	58,263	7	167%
KANSAS	7,694	12	20,766	14	38,187	14	41,512	15	100%
KENTUCKY	3,842	30	11,339	31	19,241	33	23,387	31	106%
LOUISIANA	7,635	13	21,971	12	32,844	20	36,687	19	67%
MAINE	1,909	41	5,618	39	11,980	38	12,257	40	118%
MARYLAND	3,623	31	6,644	37	19,859	32	19,186	34	189%
MASSACHUSETTS	2,177	40	3,773	44	9,290	42	8,623	43	129%
MICHIGAN	8,077	10	22,793	11	51,433	9	52,654	9	131%
MINNESOTA	6,205	19	25,392	7	52,448	8	58,478	6	130%
MISSISSIPPI	3,972	28	20,114	15	37,366	15	35,320	22	76%
MISSOURI	6,522	17	15,253	24	25,595	26	30,185	25	98%
MONTANA	3,101	35	8,576	33	14,542	37	15,913	36	86%
NEBRASKA	8,523	9	24,550	8	40,107	13	52,489	10	114%
NEVADA	1,404	45	3,885	43	7,375	45	8,370	45	115%
NEW HAMPSHIRE	914	49	2,118	50	4,223	48	4,667	48	120%
NEW JERSEY	5,452	24	13,989	27	16,517	34	22,921	32	64%
NEW MEXICO	1,855	43	4,027	42	11,737	39	13,788	39	242%
NEW YORK	13,470	2	34,452	3	70,757	4	56,345	8	64%
NORTH CAROLINA	10,033	4	32,257	4	66,301	5	63,495	5	97%
NORTH DAKOTA	3,250	34	13,483	29	21,428	30	25,661	30	90%
OHIO	6,563	16	19,835	18	34,035	18	35,624	21	80%
OKLAHOMA	4,276	27	10,078	32	24,060	28	28,437	26	182%
OREGON	6,490	18	20,038	16	32,862	19	42,355	14	111%
PENNSYLVANIA	6,652	15	13,685	28	36,784	16	36,538	20	167%
RHODE ISLAND	1,098	47	2,719	47	3,485	50	2,959	50	9%
SOUTH CAROLINA	3,038	36	12,119	30	26,715	25	25,886	29	114%
SOUTH DAKOTA	3,263	33	6,342	38	11,704	40	14,986	38	136%
TENNESSEE	5,545	22	15,571	23	23,793	29	27,477	28	76%
TEXAS	9,901	5	31,562	5	80,478	3	101,599	2	222%
UTAH	2,240	39	7,462	36	14,973	36	15,900	37	113%
VERMONT	988	48	2,257	49	4,653	47	5,303	47	135%
VIRGINIA	5,968	20	19,913	17	45,072	11	42,358	13	113%
WASHINGTON	5,548	21	19,052	19	32,088	22	37,261	18	96%
WEST VIRGINIA	1,905	42	4,213	41	7,806	43	8,395	44	99%
WISCONSIN	8,682	7	26,191	6	53,022	7	69,696	4	166%
WYOMING	1,829	44	2,472	48	6,915	46	6,961	46	182%
TOTALS	279,077		794,590		1,575,560		1,709,317		115%
50 STATE AVG.	5,582		15,892		31,511		34,186		115%
TOP 10 STATE AVG.	11,942		33,678		70,760		74,676		122%
NORTH CENTRAL REGION AVG.	7,072		19,178		37,028		42,475		121%

Table 16:

Total Federal Funding for Agricultural Experiment Stations for the 50 States (1970–1993)
Nominal Dollars (000s)

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	1,857	17	4,189	24	5,996	26	7,587	25	81%
ALASKA	398	49	855	49	1,192	49	1,872	47	119%
ARIZONA	1,310	29	3,751	25	9,084	18	12,948	12	245%
ARKANSAS	1,537	23	3,718	26	6,532	24	8,439	24	127%
CALIFORNIA	7,194	1	17,541	1	27,928	1	37,587	1	114%
COLORADO	868	39	9,435	4	11,855	10	14,647	10	55%
CONNECTICUT	1,219	32	1,427	44	2,776	42	3,828	41	168%
DELAWARE	536	48	1,044	48	1,410	47	1,903	46	82%
FLORIDA	1,450	27	5,430	16	13,617	8	16,834	8	210%
GEORGIA	2,023	16	4,714	21	7,960	23	9,694	23	106%
HAWAII	878	38	1,707	41	6,199	25	6,043	33	254%
IDAHO	629	44	1,955	38	3,964	37	5,451	34	179%
ILLINOIS	2,591	11	5,292	18	9,324	16	12,032	15	127%
INDIANA	3,291	5	7,602	6	13,055	9	14,546	11	91%
IOWA	2,882	9	7,485	7	20,116	4	19,206	6	157%
KANSAS	1,790	20	4,337	22	9,135	17	10,151	21	134%
KENTUCKY	1,527	24	3,637	28	4,645	33	7,426	26	104%
LOUISIANA	1,520	25	2,933	30	4,481	34	4,955	36	69%
MAINE	761	42	2,618	32	3,482	39	4,537	38	73%
MARYLAND	1,272	31	1,877	40	4,921	32	7,147	27	281%
MASSACHUSETTS	770	41	1,882	39	3,205	41	3,765	43	100%
MICHIGAN	3,020	7	6,965	9	21,290	3	20,855	5	199%
MINNESOTA	2,193	14	6,282	12	9,325	15	11,330	17	80%
MISSISSIPPI	1,807	19	4,806	20	8,498	21	10,292	20	114%
MISSOURI	2,150	15	5,197	19	8,511	20	10,603	19	104%
MONTANA	915	35	2,382	34	4,480	35	4,154	39	74%
NEBRASKA	1,696	22	4,326	23	10,511	12	12,912	13	198%
NEVADA	632	43	1,228	45	2,205	44	2,971	44	142%
NEW HAMPSHIRE	561	46	1,174	47	1,588	46	1,604	48	37%
NEW JERSEY	1,341	28	3,018	29	3,976	36	6,887	28	128%
NEW MEXICO	857	40	1,629	42	3,323	40	4,595	37	182%
NEW YORK	3,431	3	11,937	2	19,913	5	22,998	4	93%
NORTH CAROLINA	3,868	2	8,216	5	17,245	7	18,464	7	125%
NORTH DAKOTA	910	36	2,248	35	5,287	29	6,873	29	206%
OHIO	1,812	18	5,302	17	7,969	22	9,818	22	85%
OKLAHOMA	1,732	21	3,695	27	5,437	28	6,561	32	78%
OREGON	2,684	10	7,070	8	10,301	13	15,139	9	114%
PENNSYLVANIA	2,431	12	5,631	15	9,955	14	11,421	16	103%
RHODE ISLAND	583	45	1,616	43	1,283	48	1,298	49	-20%
SOUTH CAROLINA	1,300	30	2,612	33	5,114	31	6,661	30	155%
SOUTH DAKOTA	881	37	2,045	37	2,605	43	3,818	42	87%
TENNESSEE	3,010	8	6,137	13	5,277	30	6,660	31	9%
TEXAS	3,117	6	6,477	10	17,802	6	28,544	3	341%
UTAH	1,086	33	2,736	31	5,879	27	5,133	35	88%
VERMONT	543	47	1,217	46	1,858	45	2,870	45	136%
VIRGINIA	2,426	13	6,424	11	11,371	11	12,422	14	93%
WASHINGTON	1,516	26	5,667	14	9,006	19	10,899	18	92%
WEST VIRGINIA	1,063	34	2,174	36	3,537	38	3,935	40	81%
WISCONSIN	3,417	4	11,690	3	23,137	2	30,048	2	157%
WYOMING	647	43	1,188	47	3,006	43	3,110	45	162%
TOTALS	87,932		224,518		409,627		503,257		124%
50 STATE AVG.	1,759		4,490		8,193		10,065		124%
TOP 10 STATE AVG.	3,591		9,442		18,596		22,432		138%
NORTH CENTRAL REGION AVG.	2,222		5,681		11,904		13,715		141%

Table 17:

Total CSRS Funds for Agricultural Experiment Stations for the 50 States (1970–1993)
Nominal Dollars (000s)

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	1,495	14	3,236	18	4,254	21	5,139	24	59%
ALASKA	343	49	838	49	1,192	48	1,364	47	63%
ARIZONA	725	35	1,542	40	2,614	35	3,309	33	115%
ARKANSAS	1,399	19	3,118	20	5,538	14	6,339	17	103%
CALIFORNIA	1,746	4	4,980	3	10,618	2	13,787	1	177%
COLORADO	868	30	2,131	29	3,145	32	2,726	40	28%
CONNECTICUT	601	42	1,385	42	2,107	41	2,697	41	95%
DELAWARE	441	46	1,014	45	1,249	46	1,313	48	29%
FLORIDA	912	28	2,460	26	5,561	13	6,677	14	171%
GEORGIA	1,689	5	3,696	13	5,409	15	6,040	18	63%
HAWAII	498	45	1,008	46	3,256	30	3,667	31	264%
IDAHO	617	40	1,730	35	2,324	39	2,633	42	52%
ILLINOIS	1,544	9	3,959	10	5,738	12	7,542	10	91%
INDIANA	1,456	17	3,758	12	5,320	17	5,540	21	47%
IOWA	1,508	13	4,372	7	13,329	1	10,017	4	129%
KANSAS	1,021	25	2,596	23	4,628	19	5,454	22	110%
KENTUCKY	1,527	11	3,582	16	4,619	20	5,965	19	67%
LOUISIANA	1,199	22	2,542	24	3,692	27	3,843	30	51%
MAINE	707	37	1,562	39	2,487	36	2,933	37	88%
MARYLAND	787	32	1,866	32	2,407	38	3,593	32	93%
MASSACHUSETTS	770	33	1,683	36	2,861	33	2,967	36	76%
MICHIGAN	1,445	18	3,894	11	9,439	3	11,743	2	202%
MINNESOTA	1,356	20	3,992	9	5,361	16	6,492	15	63%
MISSISSIPPI	1,477	15	3,402	17	6,514	10	7,335	11	116%
MISSOURI	1,539	10	3,602	15	6,195	11	7,702	8	114%
MONTANA	632	38	1,576	38	2,010	43	2,987	35	90%
NEBRASKA	1,007	26	2,627	22	4,046	25	6,972	13	165%
NEVADA	432	48	937	47	1,428	45	1,456	46	55%
NEW HAMPSHIRE	561	43	1,168	43	1,588	44	1,604	44	37%
NEW JERSEY	811	31	2,066	30	3,240	31	4,284	28	107%
NEW MEXICO	608	41	1,587	37	2,124	40	2,770	39	75%
NEW YORK	1,648	8	4,438	6	7,286	5	8,313	6	87%
NORTH CAROLINA	2,219	1	5,172	1	7,061	7	7,159	12	38%
NORTH DAKOTA	719	36	1,765	34	3,604	28	4,560	26	158%
OHIO	1,684	6	4,639	5	6,928	8	7,574	9	63%
OKLAHOMA	1,111	24	2,470	25	4,095	23	4,595	25	86%
OREGON	873	29	2,300	28	3,867	26	5,735	20	149%
PENNSYLVANIA	1,892	3	4,807	4	6,823	9	8,277	7	72%
RHODE ISLAND	438	47	900	48	1,128	49	1,256	49	40%
SOUTH CAROLINA	1,290	21	2,409	27	3,460	29	3,865	29	60%
SOUTH DAKOTA	763	34	1,819	33	2,478	37	2,840	38	56%
TENNESSEE	1,660	7	3,619	14	4,830	18	5,439	23	50%
TEXAS	2,092	2	5,009	2	7,081	6	10,509	3	110%
UTAH	624	39	1,419	41	2,028	42	2,083	43	47%
VERMONT	543	44	1,070	44	1,240	47	1,532	45	43%
VIRGINIA	1,458	16	3,229	19	4,063	24	4,385	27	36%
WASHINGTON	1,125	23	2,718	21	4,228	22	6,400	16	135%
WEST VIRGINIA	950	27	2,028	31	2,755	34	3,046	34	50%
WISCONSIN	1,519	12	4,146	8	7,422	4	8,953	5	116%
WYOMING	540	#N/A	1,165	#N/A	1,651	#N/A	2,085	#N/A	79%
TOTALS	54,869		133,031		216,321		255,496		92%
50 STATE AVG.	1,097		2,661		4,326		5,110		92%
TOP 10 STATE AVG.	1,771		4,551		8,250		9,442		107%
NORTH CENTRAL REGION AVG.	1,291		3,380		6,284		7,172		112%

Table 18:

**Total USDA/CGCA Funding for Agricultural Experiment Stations for the 50 States
(1970-1993) Nominal Dollars (000s)**

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	47	35	434	24	648	25	1,160	20	167%
ALASKA	55	29	0	45	0	45	0	46	-
ARIZONA	128	18	1,051	8	2,070	7	2,074	9	97%
ARKANSAS	70	25	164	35	531	27	1,287	18	685%
CALIFORNIA	815	1	2,457	1	1,996	8	3,017	3	23%
COLORADO	0	45	1,194	4	1,849	11	3,595	2	201%
CONNECTICUT	29	38	3	44	44	43	347	40	11467%
DELAWARE	20	39	16	43	77	42	252	41	1475%
FLORIDA	257	9	868	10	2,074	6	2,049	11	136%
GEORGIA	196	12	556	18	1,025	17	1,482	17	167%
HAWAII	34	37	135	37	294	35	441	37	227%
IDAHO	12	42	28	41	1,269	16	1,790	13	6293%
ILLINOIS	180	15	443	23	609	26	807	27	82%
INDIANA	386	5	666	17	747	23	2,466	5	270%
IOWA	315	8	1,496	2	3,614	3	2,053	10	37%
KANSAS	181	14	454	21	456	30	669	32	47%
KENTUCKY	0	45	0	45	0	45	857	25	-
LOUISIANA	121	19	194	29	267	36	420	38	116%
MAINE	54	30	718	15	391	32	541	35	-25%
MARYLAND	50	32	0	45	1,563	14	0	46	-
MASSACHUSETTS	0	45	169	33	78	41	442	36	162%
MICHIGAN	333	7	1,142	6	2,297	5	1,635	14	43%
MINNESOTA	180	15	1,353	3	1,692	13	2,555	4	89%
MISSISSIPPI	52	31	926	9	773	22	1,879	12	103%
MISSOURI	210	11	537	20	174	38	1,168	19	118%
MONTANA	94	22	173	31	375	33	207	43	20%
NEBRASKA	405	4	779	14	4,264	2	2,343	8	201%
NEVADA	65	26	169	33	0	45	97	44	-43%
NEW HAMPSHIRE	0	45	0	45	0	45	0	46	-
NEW JERSEY	63	27	229	28	115	39	20	45	-91%
NEW MEXICO	87	23	0	45	777	21	1,115	22	-
NEW YORK	349	6	1,167	5	1,765	12	1,524	16	31%
NORTH CAROLINA	438	3	807	13	2,351	4	2,420	6	200%
NORTH DAKOTA	62	28	150	36	685	24	824	26	449%
OHIO	43	36	181	30	255	37	623	33	244%
OKLAHOMA	85	24	552	19	435	31	702	30	27%
OREGON	48	34	375	25	1,294	15	1,526	15	307%
PENNSYLVANIA	103	21	319	26	830	20	1,148	21	260%
RHODE ISLAND	11	43	25	42	0	45	0	46	-100%
SOUTH CAROLINA	10	44	239	27	970	18	700	31	193%
SOUTH DAKOTA	49	33	171	32	13	44	211	42	23%
TENNESSEE	18	40	51	39	109	40	366	39	618%
TEXAS	473	2	835	12	4,414	1	5,066	1	507%
UTAH	133	17	453	22	955	19	739	28	63%
VERMONT	0	45	30	40	480	29	1,095	23	3550%
VIRGINIA	184	13	1,071	7	1,969	10	2,356	7	120%
WASHINGTON	108	20	857	11	1,978	9	912	24	6%
WEST VIRGINIA	13	41	82	38	502	28	556	34	578%
WISCONSIN	215	10	676	16	369	34	726	29	7%
WYOMING	23	#N/A	0	45	18	#N/A	119	#N/A	-
TOTALS	6,804		24,395		49,461		58,381		139%
50 STATE AVG.	136		488		989		1,168		139%
TOP 10 STATE AVG.	399		1,273		2,703		2,795		120%
NORTH CENTRAL REGION AVG.	216		609		1,226		1,230		102%

Table 19:

State Appropriations for Agricultural Experiment Stations for the 50 States (1970–1993)
Nominal Dollars (000s)

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	2,052	31	6,702	28	17,040	23	16,698	24	149%
ALASKA	249	49	2,165	40	2,733	46	2,344	47	8%
ARIZONA	2,782	21	8,338	24	19,423	17	18,917	17	127%
ARKANSAS	2,432	26	10,481	13	17,520	21	18,706	18	78%
CALIFORNIA	21,329	1	51,593	1	99,036	1	86,199	1	67%
COLORADO	1,506	33	5,894	30	7,715	35	8,390	35	42%
CONNECTICUT	2,485	24	3,132	39	7,051	37	4,068	42	30%
DELAWARE	419	46	1,463	46	4,175	42	5,145	41	252%
FLORIDA	9,842	2	31,779	2	60,896	2	59,335	2	87%
GEORGIA	3,079	18	16,689	6	37,962	4	35,826	4	115%
HAWAII	2,448	25	5,826	31	11,757	30	13,293	30	128%
IDAHO	1,383	38	4,711	33	9,030	34	9,993	34	112%
ILLINOIS	4,077	9	7,465	26	14,011	29	14,172	28	90%
INDIANA	3,063	20	9,585	16	19,842	14	22,122	12	131%
IOWA	3,792	13	8,710	23	18,660	18	24,997	8	187%
KANSAS	3,985	10	9,512	17	19,893	12	21,501	14	126%
KENTUCKY	2,223	28	7,702	25	14,585	26	17,298	22	125%
LOUISIANA	6,056	4	15,052	7	19,892	13	22,863	10	52%
MAINE	793	42	1,686	43	5,720	41	5,829	40	246%
MARYLAND	2,073	29	4,323	35	14,198	28	10,678	33	147%
MASSACHUSETTS	1,387	36	1,615	44	3,904	44	2,916	45	81%
MICHIGAN	3,881	12	11,808	11	21,137	10	22,476	11	90%
MINNESOTA	3,432	15	16,731	5	32,315	6	31,253	6	87%
MISSISSIPPI	1,432	34	10,815	12	19,645	15	16,121	26	49%
MISSOURI	3,169	17	7,035	27	10,397	32	11,632	32	65%
MONTANA	1,384	37	3,216	38	6,967	38	7,337	37	128%
NEBRASKA	3,228	16	8,892	19	17,885	19	24,537	9	176%
NEVADA	600	44	2,105	41	4,004	43	3,807	43	81%
NEW HAMPSHIRE	282	48	821	49	2,384	47	2,829	46	245%
NEW JERSEY	3,489	14	8,723	22	9,122	33	11,687	31	34%
NEW MEXICO	889	41	1,870	42	7,129	36	7,997	36	328%
NEW YORK	8,665	3	14,829	8	26,653	7	18,967	16	28%
NORTH CAROLINA	4,926	5	19,992	3	37,360	5	33,919	5	70%
NORTH DAKOTA	2,056	30	8,888	20	11,341	31	13,308	29	50%
OHIO	4,751	6	14,533	9	20,197	11	18,649	19	28%
OKLAHOMA	2,272	27	4,456	34	14,612	25	17,138	23	285%
OREGON	2,713	22	9,853	14	17,044	22	20,030	15	103%
PENNSYLVANIA	3,882	11	6,442	29	19,486	16	18,142	20	182%
RHODE ISLAND	392	47	885	48	2,183	48	1,581	49	79%
SOUTH CAROLINA	1,409	35	9,508	18	17,775	20	16,316	25	72%
SOUTH DAKOTA	1,865	32	3,581	37	5,872	40	6,783	39	89%
TENNESSEE	1,374	39	5,712	32	14,229	27	15,958	27	179%
TEXAS	4,361	8	18,885	4	44,247	3	51,911	3	175%
UTAH	1,032	40	3,690	36	6,500	39	7,059	38	91%
VERMONT	430	45	934	47	1,809	49	1,746	48	87%
VIRGINIA	2,591	23	9,808	15	25,436	8	21,633	13	121%
WASHINGTON	3,075	19	8,879	21	15,694	24	18,028	21	103%
WEST VIRGINIA	640	43	1,491	45	3,123	45	3,332	44	123%
WISCONSIN	4,401	7	12,063	10	21,983	9	27,556	7	128%
WYOMING	1,131	#N/A	1,217	#N/A	3,741	#N/A	3,648	#N/A	200%
TOTALS	151,207		442,085		865,313		876,670		98%
50 STATE AVG.	3,024		8,842		17,306		17,533		98%
TOP 10 STATE AVG.	7,239		21,215		40,703		39,840		88%
NORTH CENTRAL REGION AVG.	3,479		9,279		16,474		18,885		104%

Table 20:

**Funds from Products Sales for Agricultural Experiment Stations for the 50 States
(1970-1993) Nominal Dollars (000s)**

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	1,278	4	3,310	4	4,288	5	4,339	7	31%
ALASKA	0	43	0	39	0	37	0	40	-
ARIZONA	187	24	367	26	2,044	18	1,779	20	385%
ARKANSAS	923	8	290	29	0	37	0	40	-100%
CALIFORNIA	7	38	291	28	898	25	1,296	25	345%
COLORADO	274	18	816	20	3,560	7	3,282	12	302%
CONNECTICUT	25	36	94	33	0	37	4	39	-96%
DELAWARE	91	30	287	30	306	33	640	27	123%
FLORIDA	843	9	743	21	0	37	0	40	-100%
GEORGIA	838	10	0	39	0	37	0	40	-
HAWAII	6	40	0	39	519	31	531	30	-
IDAHO	104	29	310	27	724	26	491	31	58%
ILLINOIS	599	12	2,006	11	3,099	11	3,857	8	92%
INDIANA	1,429	2	3,733	2	4,192	6	4,516	6	21%
IOWA	1,042	5	1,106	16	1,851	20	4,615	4	317%
KANSAS	1,323	3	3,427	3	5,796	4	5,510	3	61%
KENTUCKY	0	43	0	39	0	37	1,348	24	-
LOUISIANA	46	34	2,707	7	3,238	9	3,415	11	26%
MAINE	181	25	457	23	522	30	371	33	-19%
MARYLAND	157	27	381	25	647	28	567	29	49%
MASSACHUSETTS	0	43	26	35	531	29	394	32	1415%
MICHIGAN	256	22	990	18	1,862	19	2,899	14	193%
MINNESOTA	14	37	0	39	3,307	8	4,567	5	-
MISSISSIPPI	581	13	2,310	8	2,617	14	1,586	21	-31%
MISSOURI	959	7	1,862	13	2,995	13	3,072	13	65%
MONTANA	559	14	2,004	12	1,393	22	1,360	23	-32%
NEBRASKA	3,098	1	10,197	1	9,008	1	11,158	2	9%
NEVADA	83	31	186	31	378	32	865	26	365%
NEW HAMPSHIRE	37	35	123	32	252	34	234	34	90%
NEW JERSEY	0	43	0	39	0	37	45	38	-
NEW MEXICO	55	33	23	36	143	36	213	35	826%
NEW YORK	506	15	2,925	6	8,512	3	2,226	16	-24%
NORTH CAROLINA	269	19	961	19	1,340	23	1,561	22	62%
NORTH DAKOTA	124	28	1,194	15	2,560	15	2,228	15	87%
OHIO	0	43	0	39	2,497	16	1,868	19	-
OKLAHOMA	1	42	1,089	17	1,850	21	159	36	-85%
OREGON	250	23	1,555	14	2,379	17	2,157	17	39%
PENNSYLVANIA	0	43	0	39	0	37	0	40	-
RHODE ISLAND	73	32	39	34	0	37	0	40	-100%
SOUTH CAROLINA	330	17	0	39	0	37	0	40	-
SOUTH DAKOTA	356	16	0	39	3,093	12	3,772	9	-
TENNESSEE	1,040	6	3,186	5	3,166	10	3,416	10	7%
TEXAS	805	11	2,048	10	9,002	2	99,311	1	4749%
UTAH	7	38	489	22	235	35	158	37	-68%
VERMONT	3	41	3	37	0	37	0	40	-100%
VIRGINIA	261	20	2	38	0	37	0	40	-100%
WASHINGTON	261	20	2,088	9	1,205	24	1,942	18	-7%
WEST VIRGINIA	175	26	447	24	686	27	571	28	28%
WISCONSIN	0	43	0	39	0	37	0	40	-
WYOMING	0	43	0	39	0	37	15	#N/A	-
TOTALS	19,456		54,072		90,695		182,338		237%
50 STATE AVG.	389		1,081		1,814		3,647		237%
TOP 10 STATE AVG.	1,277		3,593		5,407		14,506		304%
NORTH CENTRAL REGION AVG.	835		2,229		3,359		3,954		77%

Table 21:

Funds from Industry for Agricultural Experiment Stations for the 50 States (1970–1993)
Nominal Dollars (000s)

State	1970	1970 Rank	1980	1980 Rank	1990	1990 Rank	1993	1993 Rank	1980-1993 % Change
ALABAMA	137	25	397	29	1,009	29	722	35	82%
ALASKA	0	43	0	44	15	44	21	47	-
ARIZONA	237	18	792	20	910	32	2,016	20	155%
ARKANSAS	214	21	515	23	1,843	19	2,030	19	294%
CALIFORNIA	1,580	1	4,948	1	12,980	1	19,369	1	291%
COLORADO	0	43	128	36	358	40	1,461	25	1041%
CONNECTICUT	82	32	0	44	158	41	255	43	-
DELAWARE	33	36	127	37	683	35	841	32	562%
FLORIDA	507	12	2,068	6	8,095	4	3,851	8	86%
GEORGIA	483	13	278	33	504	37	762	34	174%
HAWAII	156	24	138	35	0	46	126	45	-9%
IDAHO	218	19	844	19	1,163	26	1,291	26	53%
ILLINOIS	383	14	1,092	14	4,223	9	4,781	6	338%
INDIANA	526	10	1,500	11	3,792	10	4,785	5	219%
IOWA	873	3	4,538	2	9,850	2	9,445	3	108%
KANSAS	547	9	3,432	4	1,627	22	1,641	23	-52%
KENTUCKY	0	43	0	44	11	45	710	36	-
LOUISIANA	9	40	1,010	17	2,550	14	2,353	16	133%
MAINE	95	30	370	30	966	31	975	31	164%
MARYLAND	53	35	63	42	0	46	96	46	52%
MASSACHUSETTS	10	39	76	40	1,200	25	1,289	27	1596%
MICHIGAN	737	5	1,851	7	4,432	8	3,195	11	73%
MINNESOTA	324	16	1,464	12	2,700	13	3,529	10	141%
MISSISSIPPI	67	33	487	26	1,953	18	3,802	9	681%
MISSOURI	94	31	441	27	1,716	21	2,326	17	427%
MONTANA	164	23	644	21	715	34	493	41	-23%
NEBRASKA	174	22	904	18	1,561	23	1,634	24	81%
NEVADA	0	43	119	38	363	39	570	38	379%
NEW HAMPSHIRE	6	41	0	44	0	46	0	48	-
NEW JERSEY	601	7	1,072	15	1,318	24	396	42	-63%
NEW MEXICO	31	37	504	24	385	38	560	39	11%
NEW YORK	519	11	1,528	9	4,890	7	2,279	18	49%
NORTH CAROLINA	105	29	1,404	13	2,411	15	2,845	12	103%
NORTH DAKOTA	116	28	538	22	632	36	802	33	49%
OHIO	0	43	0	44	2,346	16	4,138	7	-
OKLAHOMA	217	20	490	25	1,051	28	1,944	22	297%
OREGON	724	6	417	28	2,004	17	2,524	15	505%
PENNSYLVANIA	336	15	1,019	16	2,949	12	2,667	13	162%
RHODE ISLAND	6	41	62	43	0	46	0	48	-100%
SOUTH CAROLINA	0	43	0	44	3,312	11	2,536	14	-
SOUTH DAKOTA	121	26	251	34	96	43	496	40	98%
TENNESSEE	120	27	344	31	799	33	1,070	29	211%
TEXAS	1,293	2	4,151	3	9,426	3	1,213	28	-71%
UTAH	67	33	343	32	1,801	20	1,962	21	472%
VERMONT	0	43	104	39	987	30	687	37	561%
VIRGINIA	295	17	1,526	10	5,132	6	5,025	4	229%
WASHINGTON	575	8	1,660	8	1,118	27	1,041	30	-37%
WEST VIRGINIA	15	38	64	41	134	42	185	44	189%
WISCONSIN	762	4	2,120	5	7,456	5	11,414	2	438%
WYOMING	13	#N/A	7	#N/A	169	#N/A	188	#N/A	2586%
TOTALS	13,625		45,830		113,793		118,341		158%
50 STATE AVG.	273		917		2,276		2,367		158%
TOP 10 STATE AVG.	822		2,782		7,028		7,014		152%
NORTH CENTRAL REGION AVG.	394		1,515		3,430		4,060		168%

Table 22:

**Competitive Grant Funding for Agricultural Experiment Stations for the 50 States
(1985, 1990, 1993) Nominal Dollars (000s)**

State	1985	1990	1993
ALABAMA	81	75	446
ALASKA	0	0	19
ARIZONA	212	592	982
ARKANSAS	82	116	183
CALIFORNIA	1,428	4,054	5,420
COLORADO	85	181	0
CONNECTICUT	29	68	154
DELEWARE	2	0	0
FLORIDA	383	1,127	1,409
GEORGIA	56	238	444
HAWAII	10	76	159
IDAHO	2	71	298
ILLINOIS	199	618	1,294
INDIANA	454	492	488
IOWA	117	570	784
KANSAS	305	475	932
KENTUCKY	0	14	542
LOUISIANA	17	84	74
MAINE	94	173	153
MARYLAND	186	11	452
MASSACHUSETTS	190	594	263
MICHIGAN	201	970	1,312
MINNESOTA	48	462	477
MISSISSIPPI	44	55	251
MISSOURI	349	797	1,150
MONTANA	48	44	408
NEBRASKA	207	283	700
NEVADA	120	326	266
NEW HAMPSHIRE	0	120	0
NEW JERSEY	0	97	808
NEW MEXICO	22	123	182
NEW YORK	713	1,296	2,337
NORTH CAROLINA	336	576	911
NORTH DAKOTA	31	146	290
OHIO	93	605	417
OKLAHOMA	180	238	358
OREGON	407	623	1,096
PENNSYLVANIA	41	412	617
RHODE ISLAND	0	0	0
SOUTH CAROLINA	13	3	268
SOUTH DAKOTA	0	104	223
TENNESSEE	30	389	468
TEXAS	205	531	1,979
UTAH	123	176	211
VERMONT	0	0	34
VIRGINIA	0	0	0
WASHINGTON	105	294	681
WEST VIRGINIA	0	10	205
WISCONSIN	592	19,457	2,744
WYOMING	0	39	353
TOTALS	7,840	20,302	51,937



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