

## Funding the 1890 Institutions

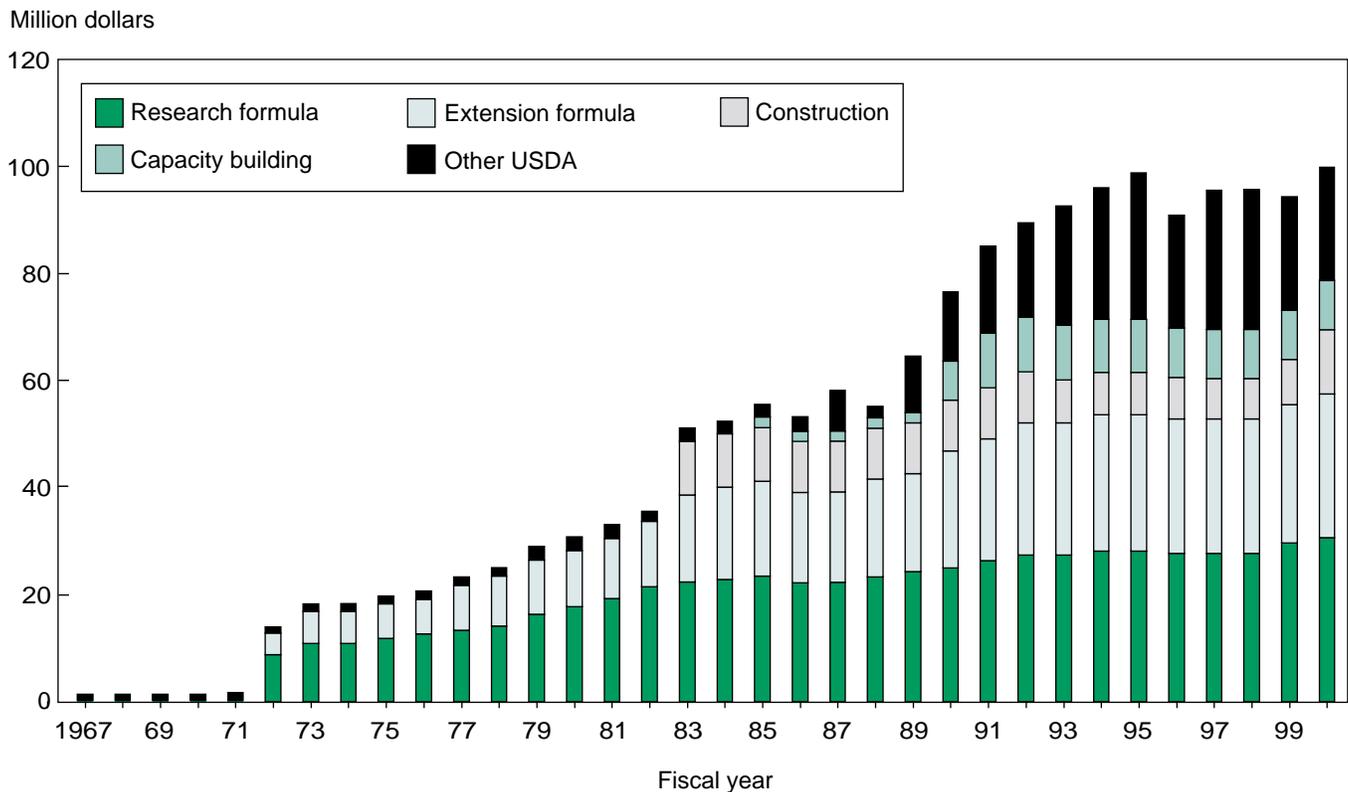
Although the 1890s are part of the same system that authorizes and governs the 1862 land-grants, lack of financial resources slowed the 1890s' growth and development. For example, no Federal funds were available to these institutions until 1967 (figs. 1 and 2). While cross-institution comparisons are difficult to assess because of differences in missions, the 1890s have received far less funding relative to 1862 land-grant colleges on a per student basis (Huffman and Evenson, 1993). Legislatively established funding mandates for research and extension have not been appropriated. The actual funding for 1890 research and extension relative to the minimum amount required under sections 1445 for research and 1444 for extension is shown in figure 3. On the other hand, actual funding for extension fell far short of the mandate for most of the first 10 years, and has exceeded the mandate since 1990, albeit by a lesser amount than for research. In addition, some federally funded programs have never been established at 1890 institutions. For example, the Hatch Act of 1887 authorized funding to

States for scientific research at agricultural experiment stations, which were to operate under the direction of an 1862 institution or other substantially equivalent arrangement (USDA, 1994); no State has established such an experiment station at an 1890 institution.

In 1967, through P.L. 89-106, a broad authority for research grants awarded on a discretionary basis, the 1890s began to receive Federal funds to support research (USDA, 1994). Funds granted to 1890s under this program totaled \$283,000 per year through 1971 (see table 2). In fiscal year 1972, Congress appropriated \$8.8 million for research grants to 1890 institutions. That same year, Congress appropriated \$4.0 million under section 3(d) of the Smith-Lever Act for extension work specifically at 1890s (USDA, 1994), although these funds were distributed to the 1890s through the 1862 land-grants in each State.

Direct appropriations to support agricultural research at 1890s started with the enactment of the Evans-Allen Act as section 1445 of the National Research, Extension, and Teaching Policy Act (NRETPA) of

Figure 1  
**USDA support for 1890s**  
*Funding by program, fiscal year 1967-2000*



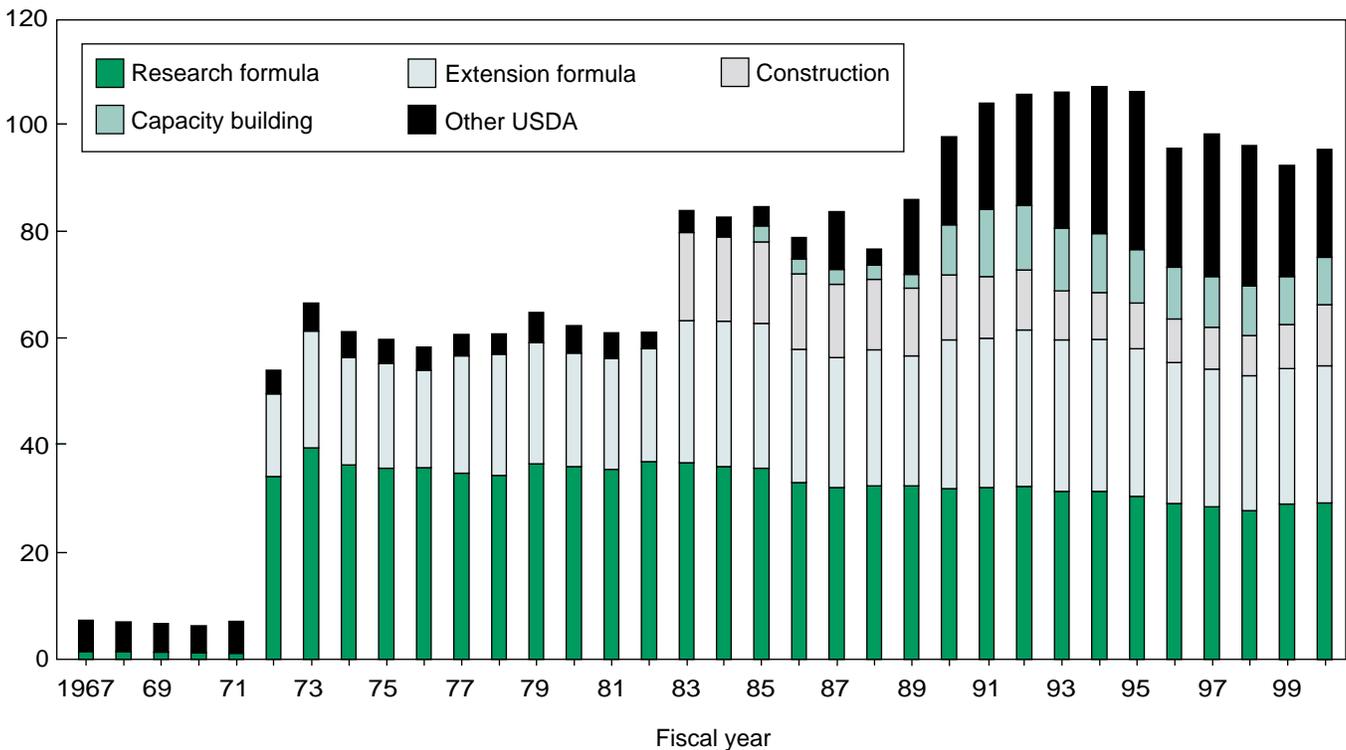
Source: USDA, Office of Budget and Program Analysis.

Figure 2

**USDA support for 1890s in constant dollars**

*Funding by program, fiscal year 1967-2000*

Million dollars



Source: USDA, Office of Budget and Program Analysis.

1977. This statute provided a permanent funding authorization for the 1890s similar to the Hatch Act authorization under which formula funds for research at 1862 land-grants have been appropriated since 1887 (McDowell and Evans, 1990). Under section 1445, 1890s receive an amount equivalent to no less than 15 percent of the funds appropriated under the Hatch Act each year (see table 3).

From 1972 to 1978, annual appropriations to 1890s (under the Special Grants authority for research and Smith-Lever 3(d) for extension) increased from \$12.9 million to \$23.5 million. Two-thirds of the funds were reserved for supporting research in an effort to integrate these institutions into the public agricultural research system (see table 2).

The 1890s began to conduct extension and outreach programs, with emphasis on underserved populations and communities, shortly after their establishment under the Second Morrill Act of 1890. However, they did not receive specifically authorized Federal extension formula funds until enactment of section 1444 of

the National Agricultural Research, Extension, and Teaching Policy Act of 1977. This act provided for extension funding directly to the 1890s instead of through the 1862s as had been done since 1972 under Smith-Lever 3(d). Under section 1444, 1890s receive an amount equivalent to no less than 6 percent of funds appropriated under Smith-Lever annually (see table 3).

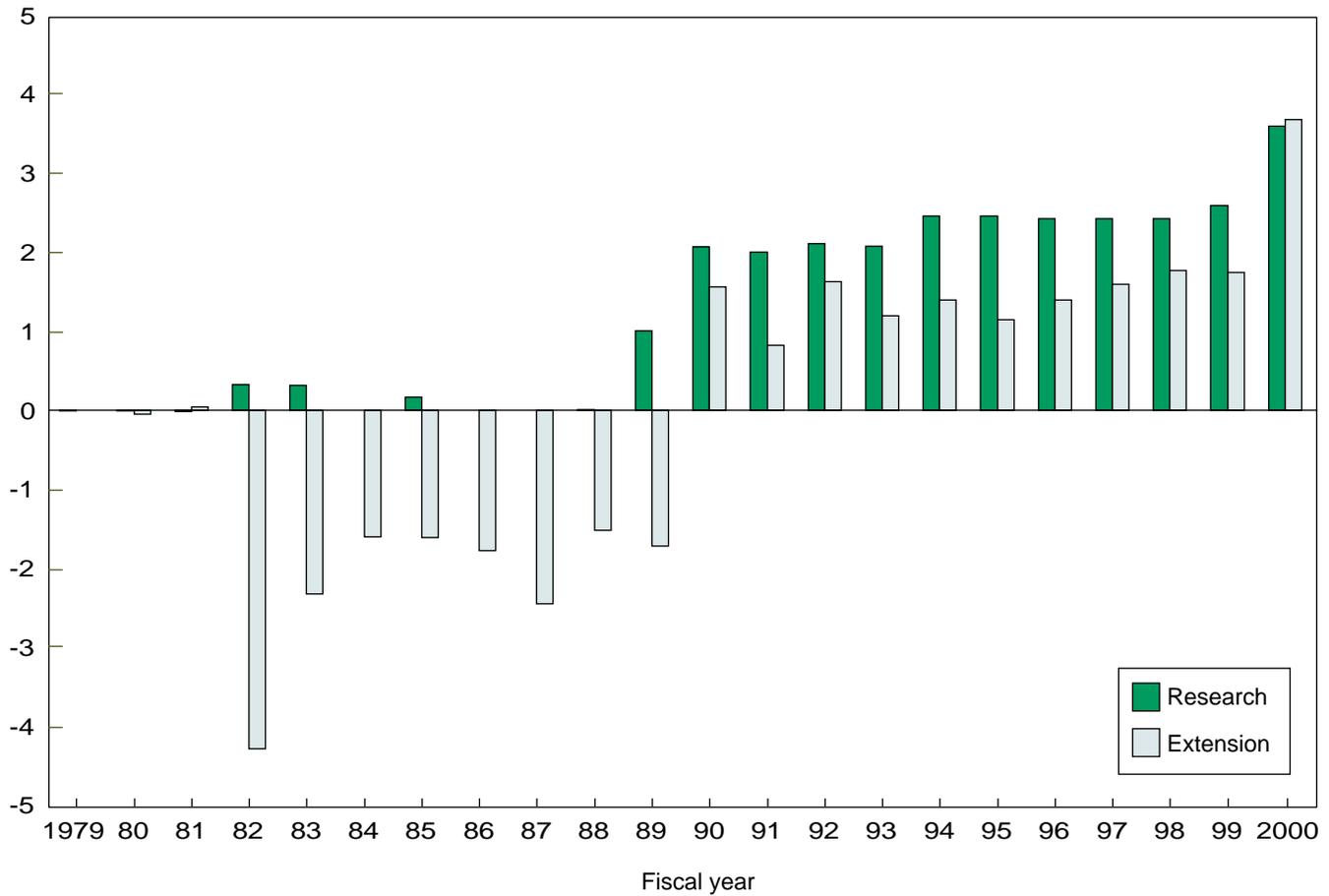
Total USDA funding of 1890s for the 34 years from fiscal year 1967 to 2000, including funds for research, extension, and general support, rose from about \$1.4 million in 1967 to about \$100 million in 2000. For the period 1972 through 2000, the average rate of increase in total funding was 7.3 percent per year. Funding for research grew at an annual rate of 4.5 percent, while funding for extension grew at an annual rate of 7.05 percent (see table 2).

The National Research, Extension, and Teaching Policy Act of 1977 and subsequent Federal legislation in 1981, 1985, 1990, and 1996 enhanced Federal financial support to the 1890s. State support for 1890s'

Figure 3

**Funding for 1890 research and extension relative to mandates in 1977 farm bill, 1979-2000**

Million dollars



Source: USDA, Office of Budget and Program Analysis.

research and extension programs was further strengthened by the Agricultural Research, Extension, and Education Reform Act of 1998, which required States in which 1890s are located to phase in, over a 3-year period (FY 2000-FY 2002), a 50-percent non-Federal match for each Federal dollar received for research and extension programs under section 1444 (which funds extension) and 1445 (which funds research).<sup>2</sup> Prior to this legislation, Federal law required State governments to match the Federal formula-based contributions to research conducted at the experiment stations located at 1862 institutions; in fact, States contributed

far more than their match requirements (National Research Council, 1995). However, no such requirements applied to Federal contributions to research based at 1890 institutions until the 1998 legislation was enacted.

In fiscal year 2000, the first year of the matching fund phase-in period, States were required to match 30 percent of the Federal allocation for research and extension programs. In total, States provided a 27-percent match, and 7 States took advantage of the opportunity to request a waiver, which was available for fiscal year 2000 only (see tables 3, 4, and 5). Preliminary information for fiscal year 2001 indicates that most States will have met the applicable 45-percent requirement (Larson, 2001).

<sup>2</sup>The matching requirement is for 30, 45, and 50 percent for fiscal years 2000, 2001, and 2002. States could ask for a waiver only for fiscal year 2000.

**Table 2—USDA funding for 1890 land-grant institutions and Tuskegee University, fiscal year 1967-2000**

Fiscal year	Research formula payments <sup>1</sup>	Extension formula payments <sup>2</sup>	Research extension construction <sup>3</sup>	Strengthening/ capacity building grants <sup>4</sup>	Other CSRS <sup>5</sup>	Other USDA <sup>6</sup>	Total
\$1,000							
1967	283	0	0	0	1,150	NA	1,433
1968	283	0	0	0	1,150	NA	1,433
1969	283	0	0	0	1,150	NA	1,433
1970	283	0	0	0	1,150	NA	1,433
1971	283	0	0	0	1,150	NA	1,433
1972	8,833	4,000	0	0	1,150	NA	14,033
1973	10,883	6,000	0	0	1,150	NA	18,033
1974	10,883	6,000	0	0	1,150	NA	18,033
1975	11,824	6,450	0	0	1,150	NA	19,424
1976	12,706	6,450	0	0	1,150	NA	20,306
TrQr	3,176	1,373	0	0	292	NA	4,841
1977	13,352	8,400	0	0	1,150	NA	22,902
1978	14,153	9,333	0	0	1,150	NA	24,636
1979	16,360	10,115	0	0	1,176	NA	27,651
1980	17,785	10,453	0	0	1,174	NA	29,412
1981	19,270	11,250	0	0	1,177	NA	31,697
1982	21,492	12,241	0	0	270	NA	34,003
1983	22,394	16,241	10,000	0	821	NA	49,456
1984	22,844	17,241	10,000	0	610	NA	50,695
1985	23,474	17,741	10,000	2,000	598	NA	53,813
1986	22,320	16,887	9,508	1,902	1,071	NA	51,688
1987	22,320	16,877	9,508	1,902	5,901	NA	56,508
1988	23,333	18,291	9,508	1,902	499	NA	53,533
1989	24,333	18,291	9,508	1,902	521	6,300	60,855
1990	25,012	21,836	9,508	7,308	888	8,200	72,752
1991	26,346	22,794	9,508	10,250	1,989	10,300	81,157
1992	27,400	24,730	9,508	10,250	1,652	11,800	85,340
1993	27,400	24,730	8,000	10,250	1,302	16,609	88,282
1994	28,157	25,472	7,901	9,917	1,844	16,200	89,491
1995	28,157	25,472	7,901	9,207	1,634	18,700	91,781
1996	27,735	25,090	7,782	9,200	5,242	15,859	90,908
1997	27,735	25,090	7,549	9,200	4,757	21,224	95,555
1998	27,735	25,090	7,549	9,200	4,479	21,696	95,749
1999	29,676	25,843	8,426	9,200	4,844	16,366	94,355
2000	30,676	26,843	12,000	9,200	4,879	16,319	99,917

<sup>1</sup> Research formula payments have been made under sec. 1445 of P.L. 95-113 since 1979; payments were made under P.L. 89-106 from 1967 to 1978.

<sup>2</sup> Extension formula payments have been made under sec. 1444 of P.L. 95-113 since 1979; funds were provided under Smith-Lever sec. 3(d) from 1972 to 1978.

<sup>3</sup> Research/Extension Construction grants were provided through Cooperative State Research Service (CSRS) for research facilities for 1983 to 1987; and through ES for extension facilities from 1988 to 1992 and for research and extension facilities since 1993.

<sup>4</sup> Strengthening grants were funded from 1985 to 1991. Capacity building grants were begun in 1990.

<sup>5</sup> Other CSRS includes Morrill-Nelson payments (through 1994); Bankhead-Jones payments (through 1981), and grants under various special and competitive grant authorities.

<sup>6</sup> Other USDA includes work under cooperative agreements, support for students under cooperative education authorities, and liaison officers at 1890 institutions. NA = Not available.

Sources: USDA budget reports and appropriation history records. Amounts shown in other CSRS and other USDA categories are based on available records, which are incomplete for years prior to 1989.

**Table 3—Comparison of matching requirements and actual match for research at 1890 institutions<sup>1</sup>, fiscal year 2000**

Institution	State	FY 2000 allocation	30 percent required match	Actual match	Difference
<i>Dollars</i>					
Alabama A&M University	AL	1,619,671	485,901	485,901	0
Tuskegee University	AL	1,600,501	480,150	108,893	(371,257)*
University of Arkansas-Pine Bluff	AR	1,421,565	426,470	441,830	15,360
Delaware State University	DE	547,577	164,273	203,600	39,327
Florida A&M University	FL	1,201,936	360,581	360,581	0
Fort Valley State University	GA	1,828,727	548,618	0	(548,618)**
Kentucky State University	KY	2,124,022	637,207	637,207	0
Southern University	LA	1,295,569	388,671	0	(388,671)**
University of Maryland-Eastern Shore	MD	958,815	287,645	0	(287,645)**
Alcorn State University	MS	1,638,116	491,435	3,600,000	3,108,565
Lincoln University	MO	2,031,558	609,467	609,467	0
North Carolina A&T State University	NC	2,618,586	785,576	500,012	(285,564)*
Langston University	OK	1,337,442	401,233	401,233	0
South Carolina State University	SC	1,406,226	421,868	0	(421,868)**
Tennessee State University	TN	1,995,099	598,530	0	(598,530)**
Prairie View A&M University	TX	2,664,999	799,500	799,500	0
Virginia State University	VA	1,716,752	515,026	515,026	0
West Virginia State College	WV	975,000	-	-	0
<b>Total payments to States</b>		<b>28,982,161</b>	<b>8,402,151</b>	<b>8,663,250</b>	<b>261,099</b>

Note: Funding is provided under section 1445 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA).

<sup>1</sup> Includes Tuskegee University and West Virginia State College.

Section 1449 of the NAREPTA does not apply to West Virginia State College.

\* Waiver requested for the difference.

\*\*Waiver requested.

Source: USDA, Cooperative State Research, Education, and Extension Service.

**Table 4—Comparison of matching requirement and actual match for extension at 1890 institutions<sup>1</sup>, fiscal year 2000**

Institution	State	FY 2000 allocation	30 percent required match	Actual match	Difference
<i>Dollars</i>					
Alabama A&M University	AL	1,328,487	398,546	398,546	0
Tuskegee University	AL	1,328,487	398,546	91,677	(306,869)*
University of Arkansas-Pine Bluff	AR	1,199,632	359,950	547,383	187,433
Delaware State University	DE	433,652	130,096	159,900	29,804
Florida A&M University	FL	1,117,451	335,235	335,235	0
Fort Valley State University	GA	1,600,131	480,039	0	(480,039)**
Kentucky State University	KY	2,004,220	601,266	601,266	0
Southern University	LA	1,101,869	330,561	0	(330,561)**
University of Maryland-Eastern Shore	MD	847,013	254,104	0	(254,104)**
Alcorn State University	MS	1,311,143	393,343	586,861	193,164
Lincoln University	MO	2,002,099	600,630	699,000	98,370
North Carolina A&T State University	NC	2,384,762	715,429	500,000	(215,429)*
Langston University	OK	1,196,996	359,099	359,099	0
South Carolina State University	SC	1,162,178	348,653	0	(348,653)**
Tennessee State University	TN	1,802,935	540,881	0	(540,881)**
Prairie View A&M University	TX	2,466,029	739,809	1,546,215	806,406
Virginia State University	VA	1,521,996	456,599	456,599	0
West Virginia State College	WV	1,000,000	--	--	0
<b>Total payments to States</b>		<b>25,809,080</b>	<b>7,442,786</b>	<b>6,281,781</b>	<b>(1,161,003.00)</b>

Note: Funding is provided under section 1444 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA).

<sup>1</sup> Includes Tuskegee University and West Virginia State College.

-- = Section 1449 of the NAREPTA does not apply to West Virginia State College.

\* Waiver requested.

\*\*Waiver requested for the difference.

Source: USDA, Cooperative State Research, Education, and Extension Service.

**Table 5—Required and actual match for 1890 research and extension, fiscal year 2000**

Program	Allocation	30-percent match	Actual match	Waiver*
<i>Thousands of dollars</i>				
Research (section 1445)	28,982	8,402	8,663	7
Extension (section 1444)	25,809	7,443	6,282	7
<b>Total</b>	<b>54,791</b>	<b>15,845</b>	<b>14,945</b>	<b>7</b>

\*Seven States requested waivers in matching requirements for both research and extension funding.

Source: USDA, Cooperative State Research, Education, and Extension Service.

## Funding for Teaching Programs

Although the original driving force for the land-grant system was the need for higher education for the majority of the U.S. population, financial support for the teaching component of the land-grant mission has since been largely relegated to States. The Federal Government's financial support to the land-grant system has been centered on funding research and disseminating research-based knowledge through extension (National Research Council, 1996). In 1995, for

example, while USDA allocated \$406 million for research and \$439 million for extension, the allocation for higher education grants was only \$18 million (of which more than half was for institutional capacity building in both teaching and research at 1890s) (National Research Council, 1996).

The Second Morrill Act did not endow the 1890 institutions with the public land and other resources appropriated for the 1862s, and they were not compensated

in subsequent legislation (National Research Council, 1996). For example, the Morrill-Nelson grants, which provided \$50,000 annually to each State for land-grant academic programs, were not accessible to 1890s for many years, and when they became available the amounts were minimal. Compensatory efforts have been made through strengthening and capacity building programs initiated in 1985, which were designed to enable the 1890s to meet the needs of an expanding student population (National Research Council, 1996).

Currently, the majority of funds for undergraduate and graduate instruction at the 1890s come from State governments. However, Federal support is still significant for funding scholarships and enhancing the capacity of 1890 institutions to develop and improve teaching programs. The major Federal support programs for 1890 land-grant teaching are administered by the USDA Cooperative State Research, Education, and Extension Service Office of Higher Education. Federal support for teaching programs includes:

- (1) The teaching components of 1890 Institution Capacity Building Teaching and Research Grants Program,
- (2) The USDA/1890 National Scholars Program, a cooperative education program, and
- (3) Higher Education Multicultural Scholars Program.

The Capacity Building Grants Program that began in 1990 has become the most significant of these three Federal sources of funds. USDA awarded 429 Capacity Building Grants between 1990 and 1999, of which 242 (56 percent) were for teaching projects.<sup>3</sup> The teaching grants awarded \$41.6 million to strengthen teaching capacity at 1890s (Hood, 1999). USDA investments made through these programs help to advance the quality of teaching programs in food, agriculture, and natural resources at 1890 universities.

### **Funding for Research Programs**

Research at land-grant colleges and universities is supported by funds from Federal, State, and private sources. Federal support for research at land-grant colleges is primarily financed through four funding mechanisms (National Research Council, 1995):

- (1) formula-based grants administered through USDA,
- (2) special grants earmarked by Congress for specific institutions and administered by USDA,
- (3) competitive grants awarded and administered by USDA, and
- (4) cooperative agreements with USDA and other Federal agencies.

While Federal sources constitute only 30 percent of the 1862 land-grant universities' total research funds, Federal sources make up 87 percent of total funds for research at the 1890s (table 6). Federal formula funds constitute approximately 90 percent of the CSREES-administered research funds for 1890s, while the corresponding figure for 1862s is 44 percent. Non-Federal sources contribute 19.5 percent of total research funds at 1862s; private sources of research funds at 1890s are very small (1 percent). State funding is the single largest source of research funding for 1862s, accounting for 47 percent of funds, while States' contribution to research at 1890s is only 12 percent. State funding of 1890s' research will likely increase with passage of the Agricultural Research, Extension, and Education Reform Act of 1998, which requires States to match 50 percent of Federal formula funds for 1890s' research and extension.

Over the last four decades, the types of Federal funding to land-grant universities have changed, with a decreasing share of research dollars awarded through formula funds and an increasing share awarded through competitive grants and special grant funds (Huffman and Just, 1999). Moreover, the funding bases for agricultural research have been shifting recently away from public sources and toward private. These developments put 1890s at a comparative disadvantage to 1862s, since most 1890 universities are comparatively small and more dependent on Federal formula funding than the 1862s. Thus, even small changes in USDA funding for research play a much larger role in the 1890s than in 1862s.

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<sup>3</sup>During the same period, 44 percent of USDA's Capacity Building Grants were for research projects.

**Table 6—Source of funds for research to 1890 and 1862 institutions, fiscal year 2000**

Funding mechanism	1890s	1862s
	\$1,000	\$1,000
Formula funding	28,311 (75.8%)	186,915 (7.9%)
Special research grants	714 (1.9%)	58,727 (2.5%)
Competitive research grants	0 (0%)	40,877 (1.7%)
Other CSREES	2,812 (7.5%)	34,472 (5.7%)
Other USDA	89 (.2%)	75,022 (3.2%)
Other Federal	512 (1.4%)	285,379 (12%)
State appropriations	4,548 (12.2%)	1,117,819 (47.4%)
Other non-Federal	370 (1%)	458,912 (19.5%)
Total	37,356 (100%)	2,258,123 (100%)

Source: USDA, Cooperative State Research, Education, and Extension Service.

### Funding for Extension Programs

The 1890 extension service programs are funded almost entirely by USDA through the Cooperative Extension Service. The Smith-Lever Act established the Cooperative Extension Service as a joint effort of USDA and the land-grant institution in each State, and also provided for county-level participation. The 1890s were directed to work in cooperation with their 1862 counterparts to extend the benefits of the Cooperative Extension System to their States' Black populations (USDA, 1988). This arrangement lasted until the mid-1960s, when charges of discrimination brought a reevaluation of the dual program.

Beginning in 1972, Congress provided direct funding (as well as funding to be administered by each State's

Cooperative Extension Service) to 1890 extension programs. Funds were provided under Smith-Lever section 3(d) from 1972 to 1978, and increased from \$4 million in 1972 to \$9.3 million in 1978. The 1977 Food and Agriculture Act eliminated the role of the Extension Service in distributing funds to the 1890 Extension program in those States with two land-grant colleges (Godfrey and Franklin, 1992); since 1979, extension formula funds have been made under section 1444 of P.L. 95-113. These formula funds increased from \$10.1 million in 1979 to \$26.8 million in 2000 (see table 2). Extension facility construction grants were also provided for extension facilities from 1988 to 1992 and for extension and research facilities since 1991 (USDA, 1994).