

Investing in People

Assessing the Economic Benefits of 1890 Institutions

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Introduction

The connections between education and the economy are complex and interdependent. The economy affects the attractiveness of education by creating incentives and disincentives to continue schooling. Family structure and access to learning resources and experiences also help determine educational success. The 1990s witnessed increasing rewards to higher education and, therefore, heightened economic incentives for additional schooling. Given this increased demand for education, access to and supply of higher education will underpin the future productivity of American workers and long-term economic health and growth of our country.

The 1890 land-grant universities (1890s) help ensure a more equitable distribution of educational opportunities. They were established by the Second Morrill Act in 1890 to provide equal educational opportunities for African-American students who had been denied admission to their States' original 1862 land-grant universities. The 1890s have developed teaching, research, and extension programs that serve mainly rural communities. African-American students receive undergraduate and graduate education at the 1890 universities in an environment particularly attuned to the needs of minority students. Research and extension programs address issues of special interest to minority rural communities and small-scale and limited-resource farm operators, as well as more traditional topics reflecting the expertise and interests of the 1890 faculty and graduate students.

USDA has strengthened links to the 1890 institutions by building a stronger base of funding support. USDA's Economic Research Service (ERS) entered into cooperative agreements in 1997 with four 1890 institutions to study outcomes and benefits of USDA investment in the 1890s' food and agricultural programs. The collaboration has explored core questions

of how these programs have been funded, what have been the outcomes of these programs and what are the best indicators by which to measure those outcomes, and how to develop conceptual models for estimating the future returns to investments in these programs.

Many studies have described the programs of 1890s, but there has been no systematic effort to measure the economic contribution of the 1890s' teaching, research, and extension programs to human capital development and to improving the well-being of the population they serve. As public funding of research and development falls under increasing scrutiny and worthy educational investment opportunities multiply, linking identifiable outcomes and measurable indicators with public investments in 1890s is increasingly important.

Legislative History

Congress created the land-grant system of colleges and universities to make practical higher education accessible to working families. The land-grant system took shape through four pieces of landmark legislation, amended over time, that endowed the colleges and universities in the system with three missions: teaching, performing agriculture-related research, and providing extension services to farmers.

The first piece of legislation, the Morrill Act of 1862, provided a grant of public land to each State and U.S. territory to fund a perpetual endowment for at least one institution to teach "agriculture and the mechanical arts." The legislation established a network of public institutions still known as the 1862 land-grant colleges and universities. Every State has established at least one 1862 institution using the funds from the sale of its allotment of public land.

The Hatch Act of 1887 created the State Agricultural Experiment Stations (SAESs) under the auspices of the

Table 1—Development history of 1890 institutions and Tuskegee University

Name of Institution	Year founded	Initiated 4-year program	Initiated graduate program	Regional accreditation
Alabama A&M University	1875	1939	1958	1963
Alcorn State University	1871	1871	1975	1961
University of Arkansas-Pine Bluff	1873	1929	NA	1933
Delaware State College	1891	1947	NA	1957
Florida A&M University	1887	1909	1951	1949
Fort Valley State College	1895	1945	1957	1957
Kentucky State University	1886	1929	1972	1939
Langston University	1897	1897	NA	1939
Lincoln University	1866	1935	1940	1945
University of Maryland-Eastern Shore	1886	1936	1978	1953
North Carolina A&T University	1891	1925	1939	1946
Prairie View A&M University	1876	1909	1954	1958
South Carolina State College	1872	1924	1948	1960
Southern University	1880	1922	1957	1958
Tennessee State University	1909	1922	1942	1946
Tuskegee University	1881	1928	1943	1933
Virginia State University	1882	1943	1937	1933

NA = Not available.

Source: Christy and Williamson (1990), p. 32.

land-grant universities. Research funded by the Hatch Act provided teaching material for professors and strengthened the scientific basis of the curriculum. Funds appropriated under the Hatch Act are allocated among the States according to a statutory formula based on each State's farm and rural population. In States having two experiment stations, funds are divided as determined by the State legislature (USDA, 1994).

The Second Morrill Act, passed in 1890, provided for annual appropriations to each State to support its land-grant college. The act also forbade racial discrimination in admission policies for colleges receiving these Federal funds, but granted States the right to establish separate colleges for Black and White students. The act required Federal funds to be divided between a State's land-grant colleges and universities in a "just," but not necessarily equal, manner.

Southern States established separate Black colleges. Maryland assigned its money to a private Black college that subsequently became a State institution. Alabama, Arkansas, Florida, Texas, Kentucky, Virginia, Mississippi, and Missouri gave portions of the funds to existing public Black schools. Delaware, Georgia, North Carolina, Oklahoma, South Carolina, Tennessee, and West Virginia created new land-grant schools for their Black residents (Huffman and Evenson, 1993).

Thus, the Second Morrill Act led to the establishment of land-grant colleges for African-Americans, which are known as the 1890s. Today, 17 institutions, located predominantly in the southeast region of the United States, are included in the 1890 system. Of the 17, Tuskegee University is the only private university. It is considered an 1890 because it was created by State legislation and has historically focused on agricultural research. In addition, beginning in fiscal year 2000, agricultural appropriations acts have provided that within the total appropriations for 1890 research and extension formula programs, \$1 million shall be made available for both research and extension at West Virginia State College.¹

Finally, the Smith-Lever Act, passed in 1914, created the Cooperative Extension Service as a joint effort of the U.S. Department of Agriculture, the State land-grant institutions, and individual county governments. The act provided for this partnership across Federal, State, and county levels to give instruction and practical demonstrations in agriculture and home economics in rural areas of the United States.

¹West Virginia abolished the 1890 designation for West Virginia State College in the wake of *Brown vs. Board of Education*, the 1954 Supreme Court ruling that ended segregation in public education.

Chronology of Major Legislation Affecting 1890s

Year	Legislation	Purpose
1862	Morrill Act	Established the land-grant college system. Gave each State 30,000 acres of land (for each senator and each of its representatives in Congress) to endow colleges.
1887	Hatch Act	Provided annual grant for agricultural research, and established the State agricultural experiment stations.
1890	Second Morrill Act	Blacks were to be admitted to land-grant institutions. States could establish separate land-grant colleges—"the 1890s" were established.
1906	Adams Act	Provided each State additional Federal funding for agricultural research.
1914	Smith-Lever Act	Established the Cooperative Extension Service.
1917	Smith-Hughes Act	Established Federal grants for vocational education in agriculture, home economics, and industrial arts in public colleges and high schools.
1935	Bankhead-Jones Act	Established formula funding for research and Federal-State matching grants.
1965	Public Law 89-106	Established "Specific Research Grants" program and provided research funds collectively for 1890 institutions.
1977	Food & Agriculture Act	Provided formula funds to research at 1890 institutions.
1985	Food Security Act	Amended the 1977 act to provide not less than 6 percent of Smith-Lever funds to be allocated for extension work at the 1890 institutions.
1998*	Agricultural, Research, Extension, and Education Act	Established requirements for State matching of Federal formula, extension, and research funding of 1890 institutions.

Sources: Adapted from NRC (1995) and Christy and Williamson (1992).

*U.S. Department of Agriculture, Cooperative State Research, Education, and Extension Service