

Background for Developing a System of Hispanic-Serving Land-Grant Colleges



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**Prepared for the
Hispanic Association of Colleges and Universities**

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Foreword

This report entitled *Background for Developing a System of Hispanic-Serving Land-Grant Colleges*, by Clifford W. Young is one of a series commissioned by the Hispanic Association of Colleges and Universities (HACU). Leading experts on Hispanic education were identified by HACU to develop papers that describe practices for promoting Hispanic success in higher education. This paper was part of a larger project funded in part by the W. K. Kellogg Foundation, whose goal is to create and identify methods for sharing information about educational policies and innovative programs that can best meet the higher education needs of Hispanic Americans.

The thoughts expressed in these papers are not necessarily the opinions of HACU or the W. K. Kellogg Foundation. These reports are intended to focus attention on these issues and spur further papers that will help us understand and address the complex problems affecting the education of Hispanic Americans today; however, they should not be assumed to be definitive work in their respective areas. For comments or questions concerning the contents of this paper please contact the author:

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The time has come to develop a new federally-funded system of Hispanic-serving land-grant colleges. Hispanic Americans have achieved sufficient political strength to help create such a system due to growing numbers of Hispanic voters and astute Hispanic statesmen. The nation is enjoying a budget surplus. Many Americans are concerned that too many Hispanic youth do not finish high school and, undereducated, are able neither to reap the benefits of national prosperity for themselves and their families nor to contribute to the welfare of the country. Americans seem very concerned with the state of education and possible changes that can be made to improve it. We believe that a Hispanic land-grant system is logical, equitable, and feasible.

The following information may be useful in the development of a strategic plan for creating that system. This paper is an introduction to the history and development of existing land-grant systems, current issues that land-grant institutions are facing, and the status of federal funding for land-grants. Later research will investigate the status of Hispanic education, agriculture-related programs at colleges serving large numbers of Hispanic students, and perspectives from key people at existing land-grant institutions, government agencies, non-governmental organizations, and business and professional associations.

I. History of Land-Grant College Planning and Development

Before starting to construct a plan for the new Hispanic-Serving Institution (HSI) land-grant system, we should examine the origins and evolution of the 1862 Morrill Act and subsequent developments that extended land-grant higher education ever wider in society: in 1890 land-grant institutions were created for African Americans; Pacific and Caribbean islands were included in the 1960s and 1970s; and finally, in 1994, Native American tribally-controlled community colleges were included in land-grant legislation.

History is valuable when dealing with large social issues like education because education represents social values which are slow to change. Critical investigations of educational developments within broader social and historical contexts have real benefits for program development.¹ Those benefits are not merely “academic”: one land-grant college president suggests that his colleagues could get more federal funding if they would emulate nineteenth-century predecessors in their dealings with Washington.² Modern discussions of land-grant higher education echo the history of the society and its government.

In the mid-1860s, even as the United States was engaged in the deadly struggle of the Civil War, Congress debated and passed important legislation that would change both the way the federal government related to the states, and the future of higher education. The Agricultural College Act of 1862 (now known as the Morrill Act) granted each state public land or land scrip, the amount dependent on the population of the state, for the establishment of “at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts . . . in order to promote the liberal and professional education of the industrial classes in the secular pursuits and professions of life.”³ This legislation profoundly changed the course of American public higher education.

The history of this movement, especially the planning, organizing, and lobbying involved, may be a useful starting point for establishing a new system of Hispanic-serving land-grant institutions.

The Antebellum Colleges

Land-grant colleges and universities represent a uniquely American development in higher education: mass education extended to the working classes, in striking contrast to the older European-inspired concept of higher education primarily for the privileged upper classes.

The traditional view of antebellum colleges (colleges created before the American Civil War) is perhaps exaggerated: rigidly orthodox institutions characterized by anti-science curriculums, expensive tuition, restrictive admissions policies, and aristocratic student bodies. A number of historical studies of the land-grant movement make stark the contrast between the antebellum colleges and institutions set up for the working classes in 1862 and 1890.⁴ According to some historians, the growing democratic trends of the nation inevitably called forth more democratic schooling that was also more responsive to national needs, flexible, and progressive than the conservative pre-land-grant academies. Individuals in academia and government merely gave voice to the national urge.

Revisionist studies challenge the view that the old colleges were anti-new science and elitist, arguing instead that old institutions were open to new science and open to students from many levels of society.⁵ These revisionist critiques, though, have not changed the popular view of antebellum colleges. Progressive, democratic land-grant colleges and universities are still seen as the American antidote to elitist academies.

1862: Land-Grant Institutions for the Working Class

Origins of the Movement

Most histories of the land-grant college movement put Justin Smith Morrill, the Vermont senator, at the center of a story about educational reform. It was Morrill who put forward Congressional legislation and permanently affixed his name to the land-grant college movement. The movement, however, predates Morrill and concerns economics as much as education. The whole story of how the movement developed relates to the purpose of the Hispanic-Serving Land-Grant initiative, showing how much preliminary work needs to be done before legislation can be introduced, how persistent and politically astute the supporters need to be, how disparate motives can mesh to produce powerful results, and how creators do not necessarily get the credit for their creations.

Traditional View of the Land-Grant College Movement

The prevailing view is that Justin Smith Morrill was the prime agent in the land-grant movement that inevitably and serendipitously evolved from the democratic flow of history. Likewise, the dominant view is that educational reform to educate the common people was the principle motivation. Some historians focus on the educational motives of the Act, emphasizing the move

from a classical to a science-based curriculum, and the use of public-lands distribution to achieve these ends.⁶ Other writers echo this emphasis on educational reforms while detailing the importance of educators and professional associations in providing data and political influence.⁷ One land-grant historian voices the traditional view that education reform was the most important reason for land-grant college legislation, although he credits educators, not politicians, as instigators of the movement.⁸

Educators as Agents of Social Change

Educators and professional associations played critical roles in the land-grant movement. State-supported colleges of agriculture and industrial arts began to flourish in the 1850s as the technology of the industrial revolution became available to a wider group of Americans; some began calling for a national network of colleges. An educator, Jonathan Baldwin Turner, is widely credited for originating the concept of federally-funded “practical” institutions of higher learning to educate the working classes, but the relationship between Turner’s plan and the eventual land-grant legislation position is not widely understood. John R. Campbell argues that Turner provided not only the original idea, but also the motivating idealistic rhetoric, the initial public support, the overall plan for the movement, and crucial political maneuvering. A brief summary of Turner’s contributions to the land-grant movement hints at the work ahead for sponsors of a Hispanic land-grant college system.

Turner was an outspoken educator at Illinois College in the 1830s. Administrators forced Turner to leave the private college for too vehemently crusading for the education of the sons and daughters of the working class. Undaunted, Turner continued to develop and promote his ideas, presenting his proposals in 1850 to annual conventions of the Illinois Teachers Institute, an Illinois farmers association, and a group of leading Illinois industrialists. In these settings, Turner argued that Americans needed instruction and discipline to qualify them for working, and he called for a “practical system of thorough education, whereby youth without distinction of sex should be trained for eminent usefulness in all the departments of industry.”⁹ These groups of educators, farmers, and industrialists then directed resolutions and petitions to Illinois legislators, who began talking about a national appropriation to establish industrial universities in every state.

Deciding that the bill would more likely pass if it were sponsored by a Congressman from one of the Eastern states rather than from Illinois, Turner then settled on Vermont Representative Justin Smith Morrill, a friend of agriculture and one of the founders of the Republican Party. Turner gave Morrill an extensive packet of documents, papers, speeches, correspondence, and pamphlets and asked him to introduce the bill. Morrill unsuccessfully introduced versions of the bill in 1857, 1858, and again in 1859 when it finally passed Congress only to be vetoed by President Buchanan.¹⁰

Many educators such as Amos Brown, founding president of The People’s College in New York, lobbied for the passage of the Morrill Act.¹¹ It was Turner who rescued the effort, capitalizing on his long-standing friendship with Abraham Lincoln, who promised Turner that he would sign the bill if he were elected president. Turner extracted exactly the same promise from Lincoln’s

Democratic rival, Senator Stephen A. Douglas. After Lincoln was elected, Morrill again introduced the bill which again successfully passed Congress and which Lincoln signed into law as promised in July 1862, as the first civil act of his administration.

Much academic and political maneuvering lay behind later legislation.¹² In 1872, Senator Morrill unsuccessfully introduced a bill to increase the endowments of land-grant colleges whose growth had stalled. The following year, he enlisted the assistance of astute 1862 college presidents, including Penn State president George Atherton, who had political influence with the federal government and with the National Grange. The bill passed with this crucial support. To lobby for funding legislation for agricultural research, Atherton successfully rallied the newly organized Association of American Agricultural Colleges and Experiment Stations; these educators provided much of the information and argument for the 1887 Hatch Act, which provided annual appropriations for agricultural research stations.¹³ Atherton and the association he headed continued to press for annual appropriations for educational programs at the land-grant colleges, which led to the Second Morrill Act of 1890.

Educational Reform Driven by Economics

The industrialization of the United States during the first half of the nineteenth century coincided with common school expansion and reforms.¹⁴ While writers as early as the seventeenth century had recognized the importance of learning and science in stimulating economic development, it was not until the mid-nineteenth century that Horace Mann explored and publicized the idea of the economic productivity of education. Mann's early arguments for mass education stressed the economic and moral benefits of education to the individual; but after the Massachusetts House Committee on Education recommended abolishing the Board of Education, Mann began to demonstrate the importance of schooling to the economic development of the state. Mann's *Fifth Annual Report* addresses the issue of inequality of the means of education, stating what was then a universal assumption that equality under laws constitutes the distinctive feature of a democracy, and lamenting that "the most influential and decisive measure for equalizing the original opportunities of men, that is, equality in the means of education, has not been adopted."¹⁵ However, the historical significance of the report—the argument that education was economically the most productive investment any individual or community could make—was widely circulated and cited by business and government leaders. Mann sought to calculate the monetary value of education to society, a strategy that both state and land-grant institutions continue to use in getting government to invest in education.¹⁶ The widely cited *Report* did much to convince capitalists of the value of education as a means of increasing the value of labor.¹⁷

Mann's ideas were widely known in the Northeast, but he was not the only proponent of educational reform. Legislators from rural, agricultural states would have been aware of the educational reform efforts of John Pierce in Michigan, Calvin Stowe in Ohio, and Calvin Wiley in North Carolina, all working at the same time as Horace Mann.¹⁸ By 1862, education of the working class was accepted as a sound way to increase state and national productivity.

Most historians agree that economics and politics were involved in making land-grant legislation. Morrill may have had several motives other than educational reform.¹⁹ Certainly, providing

practical education for the industrial classes, including agriculture, was important. This group, which comprised 80% of the American population at the close of the Civil War, was the largest group of constituents not specifically served by higher education. The legislation supporters may have hoped to bring the industrial movement, particularly the agrarian interests, into the Republican party.

The 1862 Act had sweeping political effects. One significant result was that Morrill led Congress to take control of a process that had been going on for seventy-five years, the creation of state universities funded by land grants, so that the institutions might better serve national needs, with emphasis on newer areas of science, accountability, and cooperation. The Act represented a giant step toward federal involvement in higher education, hitherto funded and managed by state governments.

Within Congress, the economic motive appears to have been paramount and exclusive in 1862: by disposing of public lands, the federal government hoped that it could generate more revenue.²⁰ The debate over what to do with federal public lands had raged for years; in the 1850s, the arguments were about whether public lands should be sold outright, with the proceeds financing the government, or whether they should be donated to settlers, who would contribute to greater agricultural production, leading to greater consumption and higher tax revenues, indirectly benefiting the government over a much longer period. Selling the vast holdings of federal public lands would have reduced the already-low land prices even more, resulting in little practical benefit to the federal government.

Morrill's ingenious solution was to donate the land to the states, which would sell the lands to create endowments for institutions that would provide special schools and appropriate literature for the principal producers of American national wealth. Similar types of grants had long been used by all levels of government for many purposes, including the founding of educational institutions. Morrill's language promoting the 1862 bill speaks much of economics, and little of education except as a means to increased national wealth.²¹

Morrill and others added the idealistic rhetoric of educational democracy two decades after the institutions were established. By the late 1880s, the institutions' original endowments were seen to be insufficient. The issue of public lands had been settled, with almost no disposable public land left. The institutions needed direct Congressional appropriations. Speaking at the Massachusetts Agricultural College (now the University of Massachusetts at Amherst) in 1887, Morrill again addressed the purpose of his act:

The land-grant colleges were founded on the idea that a higher and broader education should be placed in every State within the reach of those whose destiny assigns them to, or who may have the courage to choose industrial vocations where the wealth of nations is produced; where advanced civilization unfolds its comforts, and where a much larger number of the people need wider educational advantages, and impatiently await their possession . . . It would be a mistake to suppose it was intended that every student should become either a farmer or a mechanic when the design comprehended not only instruction for those who may hold the plow or follow a trade, but such instruction as any person

might—with “the world all before them where to choose”—and without the exclusion of those who might prefer to adhere to the classics.²²

Even though the author of the Morrill Act came to voice the democratizing effects of the legislation as its cause, the language of educational democracy replacing that of economics, it is probably wise to remember that national economic productivity has remained the basis for land-grant education. Public education is a bulwark of the national economy.

1890: Land-Grant Institutions for Black Americans

Educators and their Congressional supports soon realized that land-grant endowments were insufficient funding for the growing institutions of the growing nation. Many were disappointed that the new land-grant colleges were having little effect on national development after the Civil War, and what had initially been a national policy was once again devolving into a state responsibility.²³ Morrill sponsored a bill to improve funding, supplementing by direct appropriation the original income from the land grants that established the schools. Each state and territory would receive \$25,000 annually for instruction in food and agricultural sciences (the Nelson Amendment in 1907 increased that sum to \$50,000, which remained constant until terminated in 1994, supplanted by revenues from other federal sources).

Land-grant funding for instruction specified in the 1890 Act also pertained to the 1862 institutions and continues to dictate federally-funded, land-grant instruction at all land-grant institutions. Land-grant funding is approved for a range of disciplines:

- *Agriculture*: horticulture, forestry, agronomy, animal husbandry, dairying, veterinary medicine, poultry husbandry, and agriculture
- *Mechanic arts*: mechanical engineering, civil engineering, electrical engineering, irrigation engineering, mining engineering, marine engineering, railway engineering, experimental engineering, textile industry, architecture, machine design, mechanical drawing, ceramics, stenography, typewriting, telegraphy, printing, and shop work
- *English language*: English language, English literature, composition, rhetoric, and oratory
- *Mathematical sciences*: mathematics, bookkeeping, and astronomy
- *Natural and physical sciences*: chemistry, physics, biology, botany, zoology, geology, mineralogy, metallurgy, entomology, physiology, bacteriology, pharmacy, physical geography, and meteorology
- *Economic sciences*: political economy, home economics, commercial geography, and sociology
- *Teacher preparation*: history of industrial education (with special reference to agriculture, mechanic arts, and home economics); methods of teaching agriculture, mechanic arts, and home economics; special instructions to persons teaching agriculture, mechanic arts, and home economics²⁴

While the primary purpose of the Second Morrill Act of 1890 was to provide for the further endowment and annual federal support of colleges of agriculture and the mechanic arts, probably the most significant feature was extension of educational access to a previously unserved

constituency: African Americans. The Act stipulated that no money would go to states whose land-grant colleges based admissions on race—unless those states provided institutions for both white and colored students and “equitably divided” the federal funds. Seventeen Southern states soon classified existing Negro colleges as land-grant institutions, or established new ones, in order to receive 1890 funding. One private college, Tuskegee Institute (now Tuskegee University), was later included in legislation for research and extension programs provided to the 1890 schools but is not officially designated as a federal land-grant institution. There are now sixteen historically black land-grant institutions, and Tuskegee University, in sixteen states; West Virginia has none, and Alabama has two. The situation of West Virginia is explored below.

“Equitably” was left for state legislatures to define. Older histories of the black land-grant movement are understandably not overtly critical of state legislatures, but more recent historians have detailed state economic disparities between institutions based on race from 1890 through the mid-1960s.²⁵ Eroding civil rights might have been one motive for the 1890 Morrill Act, with the federal government attempting to provide what state governments withheld. From the period of the 1880s in the South, white-run state governments passed laws to disenfranchise blacks, and white leaders openly questioned the need to educate blacks. In many cases, particularly during the critical decade of the 1890s, state aid to black colleges was virtually nonexistent. Nineteenth-century blacks trying to establish black land-grant colleges in Southern states faced a host of problems.²⁶

Southern states consistently underfunded Historically Black Colleges and Universities (HBCUs) by withholding both state funds and equitable shares of state-managed federal funds, resulting in some of the troubles that HBCUs face today. The 1890 land-grants, lacking state funding for agriculture and engineering programs and facing hostility from 1862 schools, specialized in teacher training for black public schools. There is good evidence that teacher training was a rational response and resulted in an increase in the stock of human capital that proved vital as the constraints on black labor migration loosened in the early years of the twentieth century.²⁷ Even through the 1950s, 90% of black college graduates went into teaching.²⁸ The 1890 land-grants evolved from basic literacy schools to teacher-training colleges to full-fledged research and extension universities.

Education in agriculture and the industrial arts was not particularly popular among African Americans. Given the heritage of slavery, it was not easy to convince blacks to educate their children in agriculture and other practical vocations. Also, the white Southern economy of the 1880s and 1890s was getting rid of black artisans and independent black farmers because the white labor force did not want competition. While Southern state governments attempted to force low-level industrial education on blacks in the early years, it was a kind of training that appealed to white Southern imagination but not to black self-interest, Booker T. Washington notwithstanding.²⁹ The gradual appearance of higher-level agricultural educators, scientists, and professionals as role models has recently begun to attract more black youth into these areas.

Administrators of 1890 institutions wanting their schools to develop into full-fledged universities faced resistance from 1862 universities and from state governments. Florida A&M is a good example; the college president was fired in 1923 for attempting to offer a liberal education and

scientific agriculture instead of limited vocational training.³⁰ Some blacks wanted to be scientific farmers, research scientists, or engineers, or to do ROTC training—options then unavailable at most 1890 land-grant schools. Individual blacks began filing lawsuits to get into graduate programs at white institutions in the late 1930s. States hastily set up graduate programs at black public colleges between the 1930s and 1950s. A 1949 ruling by the General Counsel of the Federal Security Agency required 1890 institutions, like all other land-grants, to offer courses in military tactics.³¹

The 1890 institutions have remained dependent on federal funding, which for years did not equal that provided the 1862 institutions. In the 1970s, federal assistance to 1862 and 1890 schools was even more unequal than state funding, and the federal gap was widening.³² Congress decided to act in the 1980s.³³ According to testimony presented at 1981 Congressional hearings, the 1890 institutions were suffering because they received limited state construction funds for research facilities. These colleges were not eligible for federal facilities grants funded under the Research Facilities Act of 1963 through the early 1970s, which were available to the 1862 land-grant institutions. Therefore, Congress authorized grants of \$50 million for each of the 1890 institutions to help build a more effective capacity for agricultural research. By 1994, Historically Black Colleges were receiving \$17,000 per student annually in federal aid, compared to \$7,000 per student at mainstream community colleges, and \$3,000 per student at Native American tribal colleges.³⁴ HBCUs are still underfunded compared to traditionally white schools because they receive less state aid, lower tuition income, fewer federal and corporate research grants, and less foundation assistance, but they are stronger than they were.

Research and Extension of Services

1887: Hatch Act

The 1862 Morrill Act gave the original land-grant colleges their mandate to teach. Those colleges acquired a research function in 1887 through the Hatch Act, which recognized the need for original research to support the teaching of agriculture and to help develop agricultural innovations.³⁵ The legislation funded a system of state agricultural “experiment stations,” most of which were established under the direction of the 1862 land-grant colleges. Faculty with Agricultural Experiment Station appointments have potential access to “Hatch” research funds, which are administered by the U.S. Department of Agriculture (USDA) and distributed to the state agricultural experiment stations according to a formula based on population and number of farms and ranches.

A group of land-grant university presidents and agricultural professors, led by Pennsylvania State president George Atherton, met in 1865 to plan a campaign for legislation supporting agricultural research and held their first convention as the Association of American Agricultural Colleges and Experiment Stations (AAACES) in 1887, following passage of the Hatch Act. The Act was passed “in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science . . .”³⁶ A major portion of the federal Hatch funds must be matched by the state.

The double emphasis on research and “diffusion” led the AAACES to become a powerful lobby, turning the Hatch Act into an instrument of educational reform through the establishment of agricultural science programs in secondary schools.³⁷ Minnesota, Alabama, and other states attached secondary agricultural schools to the experiment station at the land-grant college or to regional branch experiment stations, using instructional materials provided by the USDA’s Office of Experiment Stations.

The Smith-Hughes Act of 1917 changed the direction of the “diffusion” of agricultural education from agriscience to vocational training. There was initially some concern about overlapping responsibilities between the cooperative extension service and agricultural education, and much care was given to avoid duplication of efforts after the passage of federal legislation.³⁸

Hatch Act funds are available only to 1862 institutions and institutions in the Caribbean and Pacific islands. Hatch funds do not go to 1890 or 1994 land-grant institutions, although other federal and state funds have been made available to them for research.

1914 Smith-Lever Act

With the 1914 Smith-Lever Act, the 1862 colleges took on a third function, called “Extension,” which was designed to disseminate knowledge generated by agricultural research at land-grant colleges beyond the campus to farms and consumers. The Smith-Lever Act did not invent extension. Both 1862 and 1890 land-grant colleges and universities commenced extension work soon after they were established. Booker T. Washington made notable contributions to rural demonstration and extension at the Tuskegee Institute in the 1880s.³⁹

Smith-Lever formalized extension at 1862 colleges, taking federal control through funding and reporting. Extension was to be a cooperative activity between the federal government (the USDA) and the states (the 1862 land-grant colleges). State governments receive and disburse federal Smith-Lever funds and are required to match these funds. The Cooperative Extension Services have proven a potent force in developing programs to fight rural poverty.⁴⁰

The 1890 and 1994 land-grant institutions are provided separate federal funding for extension services, not requiring state matching and independent of state control.

1977: Evans-Allen Act; Food and Agriculture Act

Because the 1890 land-grants do not receive Hatch Act or Smith-Lever funds, Congress has passed several provisions to help finance agricultural research and extension at these institutions.⁴¹ Black land-grant schools were made eligible under the 1972 USDA Appropriation Act to apply directly to the USDA for funding, avoiding state disbursement entirely and avoiding state matching requirements. Subsequent legislation has provided extension funding for Pacific and Caribbean territories and possessions, and for the Native American tribally-controlled institutions awarded land-grant status in 1994.

The Evans-Allen Act provides 1890 schools with funds equal to at least 15% of Hatch Act appropriations.⁴² The Act requires that each 1890 institution work with its corresponding 1862

land-grant university to develop jointly an annual plan of research, which is to be submitted to the USDA's Cooperative State Research, Education, and Extension Service for approval.

The National Agricultural Research, Extension, and Teaching Policy Act of 1977 brought together all federal coordination of research and extension, specifically including funding for 1890 schools. The extension agency of each state is responsible for submitting a plan to the USDA showing how all the institutions will cooperate in research and extension services.

The Smith-Lever extension act was amended in 1971 to include institutions in the Caribbean and Pacific; it was amended again in 1998 to include 1994 Native American land-grant colleges, with \$5 million authorized to be appropriated for the development of research and demonstrations in agriculture, solar energy, home economics, and other areas.⁴³

1960s-1970s: Institutions for Citizens of American Territories

The District of Columbia

In 1967, representatives of Federal City College, a two-year institution in the nation's capital with mostly black students, proposed that the District of Columbia was "the last substantial area in the nation without the services of a land-grant college."⁴⁴ As a federal territory, not a state, the District of Columbia has not been included in land-grant appropriations. Congress awarded the school land-grant status and a \$7.24 million endowment in lieu of a land grant. The college (now the University of the District of Columbia [UDC]) is considered one of the Historically Black Colleges and Universities.⁴⁵ It receives annual funding on the same basis as other land-grant schools.

UDC had an auspicious beginning. Relatively generously endowed and enthusiastically received, the college enjoyed enlightened leadership, a dedicated faculty, an open admissions policy, and an innovative curriculum in which most courses were interdisciplinary, problem-oriented, and related to human and urban needs. The program, however, was overly ambitious and soon ran into problems. Black separatists and their white supporters became dominant in the faculty. As faculty conflict led to administrative problems and declines in enrollment, the college began having problems with city and Congressional overseers.⁴⁶

Federal City College merged with Washington Technical Institute and the District of Columbia Teachers College in 1976 to form the University of the District of Columbia, but its land-grant endowment was not increased to accommodate this expansion. Despite winning a sizable Ford Foundation grant to work with the urban poor and disadvantaged in 1983, the college has continued to struggle with problems posed by its urban context, large expectations, limited endowment, administrative turnover, and administrative scandals.

Pacific and Caribbean Islands

Beginning in 1971, representatives of Guam and the Virgin Islands repeated the territorial argument that the District of Columbia had first voiced: these territories were "the only areas under the American flag which have not been allowed to participate in the land-grant college

program.”⁵⁸ Land-grant status for these territory institutions was approved in 1972 in a Special Education amendment. Each institution was to receive a \$3 million endowment instead of land or land scrip. Land-grant status was given to institutions in Micronesia, American Samoa, and the Northern Marianas in 1990. Research and extension funds are appropriated to these institutions on a similar basis as they are to other land-grant universities.

1994: Institutions for Native Americans

The federal government assumed responsibility for Native American education after tribes were relocated to reservations in exchange for their homelands. An array of federal legislation since 1923 has attempted to increase the educational and vocational opportunities for adult Native Americans. The Adult Education Act and the Carl D. Perkins Vocational Education Act provided funds to the states to operate adult educational and vocational training programs.⁴⁸ The federal government provided direct funding to Native communities for program development by the Indian Education Act, the Indian and Hawaiian Natives Vocational Education Program, the Joint Training Partnership Act, the Family Support Act, and several Bureau of Indian Affairs programs. These programs have always been caught between serving the needs of the communities and reducing federal expenditures.

The history of federal management of tribal education, the development of tribal colleges, and the need for greater federal funding is complex, partly because of the semi-autonomous status enjoyed by federally recognized tribes and the often-uneasy relations between tribes and governments of the states in which they reside.⁴⁹ The impetus for the creation of Indian community colleges came from the Indians themselves; the Navajo Community College was established with the aid of foundation grants in 1968, and Congress did not vote to provide federal funds until 1970.

In 1972, six tribally-controlled community colleges founded the American Indian Higher Education Consortium (AIHEC); the organization successfully sought Congressional support, and in 1978 the Tribally Controlled Community College Assistance Act was signed into law, stabilizing funding, though at a low level. Encouraged, other tribes organized colleges; the American Indian College Fund (AICF) was launched in 1989 to raise funds from the private sector to support the tribal colleges.

Federal funding was very limited before the colleges received land-grant status in 1994. That year, inspectors for the Bureau of Indian Affairs threatened to close the main classroom building of Navajo Community College, recommending that it be demolished, and reported that many other tribal colleges were housed in abandoned and condemned buildings.⁵⁰ The Navajo college's situation was no worse than that of other tribal colleges.⁵¹

In 1993, the American Indian Higher Education Consortium accomplished a two-year project: Sen. Jeff Bingaman of New Mexico brought to the Senate Committee on Indian Affairs proposed legislation that provided land-grant status to twenty-nine Native American tribal colleges in twelve states. In hearings before the committee, proponents referred to precedents of the

University of the District of Columbia and the land-grant colleges in the Pacific and Caribbean islands, saying that reservations were essentially territories not served by land-grant institutions.

Not all the argument was based on claims of territorial equity, however. Referring to existing land-grant institutions in the fifty states, the U.S. territories and possessions, and Historically Black Colleges, Tommy Lewis, President of Navajo Community College, testified that “tribal colleges are analogous to those institutions, which are currently eligible under the land grant institutions, and that for the Federal Government to meet its commitment to equal educational opportunities for all Americans, these tribally-controlled colleges must also be included.”⁵² Officials of the colleges, Congress, and the National Association of State Universities and Land Grant Colleges all invoked Morrill, saying that the Native American colleges were engaged in educational activities in the Morrill tradition. Supporters also presented evidence that Native American colleges had been underfunded compared to other federally-supported schools. Supported by the National Association of Land-Grant Colleges and the Departments of Education and the Interior, The Equity in Educational Land Grant Status Act became law in 1994, attached as a rider to the Elementary and Secondary Education Reauthorization Act.

The Act authorized a \$23 million endowment for these small, mostly two-year colleges that served a total of 14,000 students, amounting to approximately 10,000 full-time enrollment (FTE) in 1994. The bill authorized \$50,000 in direct grants per school for instructional expenses and a \$1.7 million challenge grant program, managed by the consortium, for programs in agriculture and natural resources. A separate grant of \$5 million, spread over five years, went to the Cooperative Extension Service of the 1862 institutions in those states with tribal colleges for joint agricultural extension programs focused on the needs of the Native American institutions.

A 1996 federal executive order was issued to ensure that the 1994 institutions have access to opportunities afforded to other land-grants (and HSIs) and to encourage links between tribal colleges with early childhood, elementary, and secondary education programs.⁵³

Tribal colleges had been teaching native languages and cultural beliefs and practices along with standard academic subjects. With land-grant status came a new impetus to explore the agricultural potential of reservation lands.⁵⁴

Creation of the 1994 land-grant legislation happened at about the same time that some tribes were beginning to profit from tribally-owned gaming operations. Some tribes use gaming revenues to fund education and social services.⁵⁵ However, most of the tribes operating successful casinos are near metropolitan areas and do not operate their own tribal colleges. Only five out of thirty tribal colleges benefited from gaming in 1999.⁵⁶ Much-publicized tribal entrepreneurial success, however, has caused some states to reconsider state obligations to Native American tribes. Although Michigan had agreed in 1934 to “care for Indians resident within the state” in exchange for tribal land, the state did not decide until 1976 that this care should include scholarships to public universities. Michigan governor John Engler proposed eliminating scholarships in 1995, arguing that Indian scholarships were no longer needed.⁵⁷

No substantive changes have been made to land-grant systems since creation of the 1994 tribally-controlled college land-grants.

II. Current Concerns of Land-Grant Institutions

Existing land-grant institutions are grappling with a number of issues that should be taken into consideration when planning and developing a Hispanic-serving land-grant program. Some of these issues are faced by all land-grants, and some are more problematic for certain groups of colleges.

Low numbers of minority students and faculty, in disciplines for which the land-grant schools were originally established, resulting in low numbers of new minority teachers preparing to enter those fields.

Higher education enrollment for minorities in all U.S. institutions increased between 1982 and 1992, with Hispanic enrollment up 83.9%, black enrollment up 26.6%, and Native Americans up 35.1%. While predominantly-white state universities experienced strong growth in minority enrollment, 1862 land-grant schools experienced considerably less growth.¹

Minority students tend to avoid science and engineering courses, including agricultural and mechanical science courses, as do American students in general. The percentage of young Americans preparing for careers in science and engineering has been declining steadily since the 1980s. The agricultural community has raised questions about the future availability of an adequate supply of scientists. Aware that historically black land-grant institutions could play an important role in supplying minorities to help meet this critical need, several recommended initiatives have been proposed to encourage minority youth to prepare for careers in agriculture.² Hispanic-Serving Institutions could provide an important national service in this regard.

Examples of prominent, successful minority scientists and professionals are not plentiful in American society. Blacks in particular may have avoided agricultural careers because of the unsavory legacy of slavery and cultural memories of forced farm labor, and many still consider any work of this nature menial and demeaning.³ Parents, professionals, and successful older peers are important role models in a young person's choice of career. For example, it has been found that among black and white women in land-grant college home economics programs, family members, home economics deans, and teachers had the greatest influence on the choice of a major in home economics regardless of ethnicity.⁴ Agronomy students, pre-veterinary students, animal science majors, and agricultural students are influenced similarly regarding choice of college major; students were influenced primarily by their parents and also by practicing professionals of their acquaintance.⁵

Minority and non-minority students seem to have different attitudes to agriculture based on different family histories and perceptions. One study done in a Texas high school found that white students tended to enroll in an introductory agriscience course because they had positive experiences and expectations associated with agriculture, whereas minority students were more likely to express reasons they considered beyond their control.⁶ Minorities had more negative

attitudes toward agricultural occupations. The greater a student's perceived chance of attending college, the more positive that student was in enrolling in agriscience for agricultural and career reasons, the fewer barriers to enrolling he or she perceived, the more positive his or her attitude toward agricultural careers.

Another study of minority black professionals confirms the negative attitudes of minority youth toward agriculture but shows that these attitudes can change if the young people continue to associate with teaching professionals and adult practitioners.⁷ Initially seeing agriculture simply as farming, hard work with little opportunity for a professional career, the subjects in this study emphasized that exposure to career professionals while in high school and college influenced their career decisions. The subjects felt that minority students needed minority role models and noted that the numbers of black agricultural education teachers and extension agents had declined with the combined programming brought about by racial integration.

No comprehensive study of minority student enrollment in land-grant schools seems to have been made, but several studies have looked at specific schools and disciplines. A 1980 study of ethnic enrollment in agronomy programs at Southern land-grant universities found only 15.6% non-white agronomy majors.⁸ Another study found very few black or other minority status students in pre-veterinary science, one of the more popular agriculture-related majors in Southern land-grant colleges.⁹

The 1994 *Hopwood v. Texas* decision has had negative effects on public universities' ability to attract African-American and Hispanic students. Institutions with aspirations for more selective admissions standards, including land-grant colleges and universities, face a daunting challenge: either to have a less diverse student body or to lower admissions standards. Land-grant institutions, like all public higher education institutions, are struggling with new ways to maintain ethnic diversity.¹⁰ Educators generally accept the reality that no single admissions criterion or combination of criteria will produce the same level of minority participation which institutions enjoyed prior to *Hopwood*.¹¹

Administrators and educational policymakers are undoubtedly keenly aware of the history and recent developments in affirmative action legislation.¹² California and Washington have passed state initiatives that bar affirmative action in public employment, public education, and public contracting. In both states, the initiatives were adopted after contentious campaigns. The measures forbid discrimination and "preferential treatment" on the basis of race, ethnicity, national origin, sex, and other factors. Exceptions are provided in both state measures for programs in which failure to use race-conscious measures would result in loss of federal funds, exceptions that would seem to exempt land-grant schools, although the Regents of the University of California enacted their own institutional policy that bars most affirmative action there.

Established land-grant institutions' deep roots in rural, agricultural history may make it difficult for them to respond to national social changes. California seems to be a battleground of liberal and conservative forces that manifest themselves in admissions policies of higher educational institutions. In California, the use of race as a factor in admissions is arguably historically consistent with the larger effort by the University of California to admit students from a broad

range of California society.¹³ However, the translation of broad, vaguely-defined policy goals into specific programs has posed major problems, notably a disjuncture between the values of the university's socially conservative Board of Regents and those of the academic and administrative community. In some parts of the country, even faculty are not supportive of affirmative action. Researchers looking at the Virginia Polytechnic Institute and State University (Virginia Tech) found that faculty members accepted the general principles of equal opportunity, but did not support affirmative action measures designed to end workplace segregation or to ensure diversity.¹⁴

Low minority student enrollment in the agricultural sciences may be related to low numbers of minority teachers as recruiters and role models. Agricultural education enrollment and graduation figures are probably indicative of other agriculture-related fields like agriscience and horticulture; all these fields have suffered losses in enrollment, regardless of ethnicity. Agricultural education programs nationwide have recently experienced a growing shortfall in the number of fully qualified potential teachers prepared to accept available teaching positions. At the same time, there is a decline in the number of active programs of Agricultural Teacher Education Programs that may have serious long-term implications for the profession.¹⁵

Teachers of the agricultural and engineering disciplines are overwhelmingly white, non-Hispanic, which has implications for attracting minority students into those disciplines. The vast majority of agriculture teacher educators at land-grant institutions are white, male, tenured professors.¹⁶ A recent, detailed study of agricultural education programs showed that of the 625 newly-qualified potential teachers of agricultural education produced in the United States in 1995, only 15 were Hispanic. Of those, ten came from Texas A&M at Kingsville.¹⁷ That campus of the university is an HSI member of HACU with a Hispanic enrollment of 63% in 1999. Because the total percentage of Hispanics enrolled in the total Texas A&M system is only 10%, the university as a whole cannot be officially termed a Hispanic-Serving Institution.¹⁸

New Mexico State University (NMSU), on the other hand, is both a land-grant and a Hispanic-Serving Institution, with 37% Hispanic enrollment. This institution is the only Hispanic-serving land-grant university in the continental United States (the University of Puerto Rico is an HSI). NMSU produced six potential agricultural education teachers in 1995—all white, non-Hispanic.¹⁹ According to information from the university, Hispanic student enrollment in the College of Agriculture and Home Economics is 32% at the undergraduate level, but only 16% at the graduate level that produces academic careers in agricultural disciplines. Faculty in the NMSU College of Agriculture fit the “tenured white male” model: 90% non-minority white, 76% male, 75% at the professor or associate professor rank. Among the ninety-seven members of the Agriculture Department faculty, one is American Indian, three Asian American, four Hispanic, and eighty-eight “other” (presumably white). The situation regarding the NMSU College of Engineering is similar.²⁰

A growing perception that land-grant institutions have abandoned their traditional, mandated role as providers of practical education to the working classes and of basic research and service to rural communities. They are seen

instead as trying to emulate elitist universities by some critics and as handmaidens to agribusiness interests by others.

A number of educators sound the theme that land-grant institutions, especially those established in 1862, are at a crossroads and must adapt to more completely fulfill a new set of public expectations. Land-grant leadership has allegedly failed to recognize and act upon the changing political economy of the social environment.²¹ According to this view, rather than keep to its traditional mission of teaching modern agriculture to an agrarian society, the modern land-grant university needs to focus on human food and forest product systems, life science and biotechnology, environmental quality, and natural resource preservation.²²

Some critics accuse land-grant institutions of “betrayal” regarding their mission and tradition, in allying themselves with big business. Land-grant universities are charged with having become a silent partner in the agribusiness and “agrigoovernment” takeover of the national economy.²³ One professor at a land-grant university describes the land-grant universities as having lost touch with the people they were created to serve:

Land-grant institutions were founded in the mid 19th century to improve the condition of a large group of Americans who were disadvantaged socially and economically because of class (working), location (rural), and occupation (farmer). At the time, they were associated with a single sector—agriculture. Despite the lack of appropriate science to address these issues, land-grant universities were founded in state after state. As they evolved, many universities, particularly the portions that were still responsive to the land-grant mandate, gradually left behind their commitment to improve conditions by class, location, and occupation, but instead focused on creating a strong sector. The people for whom the system was created lost importance, while what they produced took precedence.²⁴

Land-grants are also accused of identifying with elite research academies. Some critics charge that land-grant faculties have become introverted in their disciplines and have taken up publishing and consulting in imitation of faculty at more prestigious research institutions. One critic attributes this change to a takeover of the traditional land-grant roles by private sector research and employer-provided education and suggests new directions for land-grants, including international involvement.²⁵ It is said that nowadays land-grant colleges and elite universities have undergone a wholesale shift of values: careerism, competition, standardized rules and hierarchies, obsession with expansion and growth, professionals seeking fame and money, and administrators building empires.²⁶ For some, the new “professionalism” and authoritarian leadership of land-grant schools are anathemas to the land-grant ethic of egalitarianism.²⁷ One land-grant educator agrees that “there are too many land grant colleges and universities in America today that are getting away from their mission and trying to replicate the values and the research proclivities of private elite colleges and some elite state universities.”²⁸

The 1862 universities have also, some charge, neglected their mandate for public service. Land-grants are accused of ignoring adult undergraduates, a legitimate and growing segment of the student population.²⁹ At the 1990 annual convention of the American Association for Adult and

Continuing Education, the land-grant university system went “on trial,” charged with abandoning its mission, and was found guilty of neglecting undergraduate teaching and service/outreach, developing instead an orientation to research and graduate study.³⁰

Some have also suggested that land-grant universities have not been sufficiently active in the development of both rural and urban policy, pointing out that rural population is now at an all-time high, with 60 million in 1990, 25% of the total American population, and another 23% living in non-metro areas.³¹ Another writer says that “our nation needs an ‘urban-grant’ program for city colleges and universities and their inner-city populations that serves the same purpose as the land grants that enabled our great state universities to enhance the lives of citizens in the expanding America of the late nineteenth century.”³² A major review of the land-grant system conducted recently by the National Research Council concluded not only that land-grant institutions need to include a wider array of students, faculty, and clientele of diverse backgrounds and perspectives, but also that land-grant schools have an unfulfilled responsibility to serve urban and suburban residents and environmental interest groups.³³

A number of critics say that land-grant universities should more actively support alternative agriculture and sustainable environmental issues. An increasingly strong and proactive coalition of alternative agriculturists, environmentalists, labor activists, animal rights proponents, and consumer advocates is largely ignored by land-grant universities, these critics charge. Surveying land-grant faculty, one study found that, on the question of industrial versus alternative agricultural methods, faculty in agricultural disciplines were significantly more conventional than other faculty.³⁴ Alternative agricultural research suffers because it is often not included in “main-stream” land-grant research and education agenda.

Continuing inequities in state and federal funding favoring 1862 institutions, and competition between 1890 and 1994 institutions for limited federal funds.

Continuous federal and state underfunding of black institutions has prevented HBCUs from hiring more highly-qualified faculty, offering advanced degrees, developing state-of-the-art facilities, and participating in international development programs. Many 1890 institutions have very limited faculty resources capable of participating in international development activities coordinated by the U.S. Agency for International Development (AID) or competing for research grants.³⁵ Recent state-level reductions in funding for all higher education disproportionately affect institutions that have been chronically underfunded. Downsizing and merging rarely benefits minority institutions. One recent example is that, as a result of a college-desegregation lawsuit in Alabama, a federal district judge ordered Alabama to merge the agricultural extension systems of predominantly white Auburn and historically black Alabama A&M. Since Auburn is larger and has better facilities, Auburn oversees the unified system, managing all its employees and programs and providing its headquarters. Black leaders in Alabama see the merger as a death knell for A&M’s autonomy in the national land-grant network.³⁶

Many institutional lawsuits aimed at righting the balance between white schools and HBCUs have been filed. Of particular interest is West Virginia State College’s challenge to the state government, which rescinded WVSC’s land-grant status in 1957 when West Virginia University

was desegregated, moving all agriculture programs to West Virginia University. West Virginia State College won state reclassification as a land-grant institution in 1991 but faced two major hurdles in regaining federal land-grant status as an 1890 Historically Black College at the federal level: (1) a feeling that federal desegregation orders would be violated by the move, and (2) by the 1990s, the 90% white enrollment at WVSC. President Bush vetoed the first effort, Clinton approved the second in 1994. WVSC does not now benefit from federal land-grant programs created after 1890 since the college has no agriculture programs, although college administrators have expressed intentions to create agribusiness and economics for low-income residents and legislation is pending that would restore land-grant funding to the college.³⁷

Although state governments were initially reluctant to provide equitable funding for the 1890 institutions, in recent years states have been more forthcoming as they have made a more explicit link between education and economic development.³⁸ Even so, problems continue. A 1995 settlement of a 21-year-old federal desegregation suit awarded Louisiana's historically black Southern University system more than \$100 million over the next decade.³⁹ At the same time, Southern University officials protested both the state's continuing unequal distribution of land-grant funds and the construction by the traditionally white Southeastern Louisiana University of a branch of campuses that would perpetuate segregation by siphoning white students from black-majority community colleges.

One contentious issue now within and between land-grant college systems is the National Research Council's recommendation that the federal government require states to match formula funds going to 1890 institutions for both research and extension.⁴⁰ Although the 1890 schools favor this recommendation, some states may not agree to provide the match, not because of discrimination against minority-serving schools, but rather because many state governments are generally opposed to new federal requirements that mandate increased state spending, while other states are financially unable to meet the challenge.⁴¹

As an HBCU in a special "territorial" category, The University of the District of Columbia continues to struggle, but the situation has improved. Experiencing financial problems, the city of Washington, D.C., reduced its funding for the University in the mid-1990s; the board put pressure to increase tuition substantially, fewer degrees were being granted, there was weak political support, and other private universities were attracting students from the struggling institution.⁴² The university was threatened with closure or reduction to community college status, but its interim president vowed to regroup, raise outside funds, and repair morale.⁴³

Even after being granted land-grant status funding in 1994, tribally-controlled colleges continue to operate on a budget of 40% less than what mainstream community colleges receive from government sources. Representatives of the American Indian Higher Education Consortium say that President Clinton's 2000 budget calling for an increase of \$7.1 million for tribal colleges actually results in a funding cut of \$220 per student, leading to the lowest per student budget in twenty years.⁴⁴

Minority-serving land-grant institutions' financial problems related to growing enrollment, retention, and graduation rates.

Academic success, ironically, has created problems for 1890 and 1994 land-grants. Federal funding has not grown at the same rate as increased enrollment and retention.

Higher retention and graduation rates are well documented for Historically Black Colleges. HBCUs do a better job than traditionally white institutions in steering African Americans into engineering and the hard sciences and preparing them for graduate study.⁴⁵ HBCU graduation rates are improving, and graduates have higher average wages than other black Americans.⁴⁶ African American students at HBCUs are more likely to aspire to postgraduate studies and to become professionals. In a 1997 study, Wenglinsky found that graduates of HBCUs were more likely to plan on entering programs in the sciences, engineering, or business than were black graduates of traditionally white schools.⁴⁷

Some information also suggests that Native American tribal colleges are improving the educational situation of their communities, although there are few studies of retention and graduation. Structural arrangements such as “2+2+2” articulation agreements (high school-community college-university) have been shown to increase Native American enrollment and persistence.⁴⁸ About 25,000 Native Americans were attending the tribal colleges in 1997, up from 14,000 in 1994. According to information from President Clinton’s Board of Advisors on Tribal Colleges and Universities, about 90% of Native Americans who attend tribal colleges obtain their degrees, whereas about the same percentage of those attending mainstream colleges drop out.⁴⁹ A student outcomes study found that most tribal college graduates had continued their education or found employment.⁵⁰ According to the American Indian College Fund, more than 40% of the students receiving associate degrees or vocational certificates go on to pursue more advanced degrees in four-year colleges or universities. Students who attend Indian colleges for as little as one year and then transfer to a mainstream college complete their degrees four times as often as Indian students who go straight into mainstream colleges.⁵¹

Tribal colleges’ vocational education programs are attracting more students because they are successfully training workers. Placement rates of graduates at one tribal college’s vocational program have been shown to exceed local employment rates because of the college’s successful attempts to cater to diverse community needs.⁵² America’s corporations are beginning to see tribal college graduates as a nearly untapped source of talent.⁵³ Several strategies, especially those related to culturally-sensitive counseling, community involvement, and close monitoring of student progress, have proven successful at tribal colleges to enhance recruitment and retention.⁵⁴

III. Current Federal Funding of Land-Grant Institutions

Intending that state governments would provide additional and subsequent funding for buildings and instructional costs, the first Morrill land-grant act primarily dealt with how public lands would be apportioned and how the endowment would be invested. The first act specified that the funds could not be used for building and must be used for instruction in “such branches of learning as are related to agriculture and the mechanic arts . . . in order to promote the liberal and

practical education of the industrial classes in the several pursuits and professions in life.”¹ State governments received a quantity of land equal to 30,000 acres for each senator and representative in Congress, based on the census of 1860. States were required to invest the moneys in safe bonds; the money would “constitute a perpetual fund, the capital of which shall remain forever undiminished . . . and the interest of which shall be inviolably appropriated, by each State” for land-grant institutions (*Morrill Act*, 1862).² Endowments initially varied according to state population. The funds for instruction (eventually specified by the 1890 Act and subsequent decisions) are administered by the Departments of Education, Health and Human Resources, and Agriculture.

Federal funds from various sources are used to help the states maintain agricultural instruction programs.³ The first source is income from the original land grants or scrip (some states received later land grants to supplement their first endowments). A few states continue to hold some of the original 1862 land; most have sold the land and invested the proceeds. The states handle land-grant funds, subject to the conditions prescribed in section 5 of the Morrill Act.

Income from the original grants differs widely in amount among the states. According to Brunner’s 1962 study, six states derived less than \$5,000 annually (in 1962), while three states derived more than \$100,000 annually, and Minnesota more than a million dollars.⁴ A preliminary search has failed to find more recent accounting of state revenue from land-grant endowments.

A second source of federal aid for instruction is “continuing appropriations” requiring no Congressional action each year. The Second Morrill Act of 1890 gave each state and territory \$25,000 annually for instruction in land-grant colleges. The annual state appropriation for 1862 and 1890 institutions was raised to \$50,000 per state in 1907, then completely terminated in 1994.⁵ The 1994 law giving land-grant status to tribal colleges stipulates annual payment of \$50,000 to each college.⁶ That law also authorized \$1.7 million per year for five years for building capacity grants and \$5 million per year for 5 years for research grants.

A third source of funding comes from annual, variable appropriations. Congress historically appropriates less than the amount authorized, but in recent years Congress has appropriated full authorizations for several HBCU and HSI programs.⁷

A fourth major source of Congressional funding of specific projects is “the academic pork-barrel,” discussed below.

Federal funds flow to land-grant institutions for a multitude of programs. A detailed look at federal funding disbursed through the Departments of Agriculture, Interior, and Education may be useful. According to the 1996 GAO report, *Programs for Land-Grant Schools*, federal funds for land-grant institutions amounted to \$1,245.1 million in FY 1996, with funds for twenty-four programs coming through these three federal departments.⁸

Department of Agriculture Programs and Funding

The following information comes from the 1995 GAO report *Programs for Land-Grant Schools*.⁹

The USDA received \$874.7 million in FY 1996 for distribution to programs it oversaw. A portion of these USDA funds (26%) was available to non-land-grant schools, including Hispanic-Serving Institutions, on a competitive basis. The other 74% was allocated primarily by formula to land-grant institutions. USDA funds were apportioned among these sixteen programs.

USDA Programs Available Only to Land-Grant Schools

• Hatch Act: research, 1862 schools	\$171.3 million
• Evans-Allen Act: research and buildings, 1890 schools	\$ 28.2
• Instruction Grants: 1890 schools	\$ 10.6
• Building Grants: 1890 schools	\$ 15
• Endowment Fund: 1994 schools	\$ 4.6
• Smith-Lever Act: extension, 1862 schools	\$272.6
• Smith-Lever/National Interest Programs: 1862 schools	\$118.4
• Extension Services: 1890 schools	\$ 26.2

USDA Programs Available to All Schools

• Forestry Research: state experiment stations	\$ 20.8
• Animal Disease Research: veterinary schools	\$ 5.6
• Higher Ed. Teaching: land-grant and 25% <i>minority</i> schools	\$ 7.5
• Special Research Grants: unrestricted	\$ 56.6
• National Research Grants: unrestricted	\$130.0
• Renewable Resources: state-supported forestry schools	\$ 3.3
• Agricultural Telecommunications: networked schools	\$ 1.2
• Schools Receiving Rural Health Research Center Grants	\$ 2.8

Department of the Interior Programs and Funding

The Department of the Interior managed and disbursed \$29.7 million in grants to twenty-three tribal colleges in FY 1996, authorized by the Tribally Controlled Community College Assistance Act of 1978. That amount included formula funding based on FTE for operating grants, equally divided technical assistance grants, matched endowment grants, and supplemental grants. The Interior did not provide funding to other land-grant institutions or HSIs.

Department of Education Programs and Funding

The Department of Education disbursed \$340.7 million by formula for various programs in the Historically Black Colleges and Universities, most of which are 1862 or 1890 land-grants, and in

the tribally-controlled colleges. Howard University is a federally-funded HBCU not classified as land-grant.

- Strengthening HBCUs: facilities, teaching, student services \$109.0
- Strengthening HBCUs: graduate programs \$ 19.6
- Endowment Challenge Grants: HBCUs \$ 2.0
- Howard University: university support \$196.0
- Perkins Vocational Act: Indian & Hawaiian Native schools \$ 11.8
- Strengthening Institutions: 50% minority enrollment \$ 2.3

Analysis of HSI Access to Land-Grant Funds in FY 1996

In the one USDA program specifically inviting HSI applicants, the Higher Education Teaching program, Hispanic-Serving Institutions that offered programs in agriculture and food sciences were eligible to compete against all 105 land-grant schools and against all other high-minority schools for a share of the \$7.5 million budgeted. Realistically, few HSIs other than New Mexico State University and Texas A&M-Kingsville have the resources to compete for grants in forestry, agricultural research, veterinary science, agricultural telecommunications, and rural health.

Among the Department of Education programs, Hispanic-Serving Institutions were specifically invited to compete in the “Strengthening Institutions” program, along with all other schools that had at least 50% of students receiving financial aid. These schools with impoverished students could compete against each other for a share of \$2.3 million. Other Education programs in 1996 were not open to HSIs.

In the FY1996 budget for these three departments, 82% of the total (\$1,017.3 million of \$1,245.1 million) was specifically for 1862 land-grant institutions, for 1890 black land-grants and other Historically Black Colleges and Universities, and for 1994 Native American institutions. No funds were earmarked for HSIs.

More Recent Funding Years

Comparably detailed analyses do not exist for more recent funding years. The Clinton administration has been trimming departmental budgets for Agriculture, Interior, and Education, reducing most programs. USDA-administered Hatch, Smith-Lever, 1890 Research and Extension, and Higher Education programs have remained static or suffered slight reductions.¹⁰ Even so, Hispanic-Serving Institutions have begun to get federal attention. USDA instituted a \$2 million program of Hispanic Serving Institutions Education Grants in 1997, expanded to \$3 million in 1998.¹¹

The USDA’s proposed budget for 2000 includes substantial increases for most of the “Programs Supporting Civil Rights Initiative.”¹² The 1890 Facilities program would be increased from \$8 million to \$12 million. Extension Services at the 1994 Institutions would grow from \$2 million to \$4 million, and the Indian Reservation Extension Agents programs would grow from \$2

million to \$5 million. The Hispanic Serving Institutions Education Grants would remain static at \$3 million.

According to budget summaries available from the Department of the Interior, tribal college funds for FY 1997 came to \$26,320,000 and for FY 1998 to \$29,320,000 (this is in addition to land-grant funds authorized by the Equity in Education Act of 1994). By 1999 that figure had risen to \$31.3 million. The Interior proposes increasing this to \$34.6 million for 2000.¹³ The Interior provided \$8.4 million to HBCUs in FY 1999 and proposes \$15 million in 2000.

In 1998, amendments to the Higher Education Act brought significant improvements to minority-serving institutions. To strengthen historically black institutions, Congress authorized \$134.5, some of which could be used to build endowments, and \$30 million for HBCU graduate programs.¹⁴ A new \$3 million matching grant program was appropriated for tribal college endowments; \$6 million has been proposed for 2000.

Significantly for this research, the 1998 amendments make it easier for colleges with large proportions of Hispanic students to qualify for federal grants aimed at helping “developing institutions.” Grants will go to institutions with at least 25% Hispanic students, 50% of whom must be from low income families. Congress appropriated \$10.8 million in 1997, \$12 million in 1998, and \$28 million in 1999. The President’s FY 2000 budget proposes \$42.25 million for this program.¹⁵

Benefits to Land-Grant Institutions

The GAO’s 1995 report *Land-Grant College Revenues* appears to be the most recent compilation of federal revenue for land-grant schools.¹⁶ Revenue data cited is from the 1992-93 school year. Funds are from the Departments of Agriculture, Interior, and Education. The GAO report lists federal revenue, total college revenue, and FTE data for 1862, 1890, and 1994 schools.

Some fifty-seven institutions are classified as 1862 land-grant schools (including Pacific island colleges and universities, which are funded in this category). The schools range widely in FTE, from Northern Marianas College’s 475 FTE to Ohio State’s 44,792 FTE. Average federal revenue for 1862 institutions accruing from land-grant status was \$75 million. Federal revenues represented an average of 17% of all revenues received by these institutions. Northern Marianas College received the least: \$3.6 million, for an average of \$2,500 per FTE, representing 33% of total college revenue. The University of Wisconsin-Madison received the most: \$272 million, for an average of \$7,298 per FTE, representing 20% of total university revenue. The land-grant school receiving the highest federal funding per student was MIT, with \$26,647 per FTE.

Data in the GAO report covers nineteen 1890 schools, including the University of the District of Columbia and the University of the Virgin Islands. These institutions vary in size but with fewer extremes than the 1862 schools, with FTEs ranging from 1,166 at the University of the Virgin Islands to 9,431 at Southern University and A&M College in Baton Rouge. Average federal revenue for 1890 institutions was \$13 million, representing an average of 23.8% of total revenue for these schools. The 1890 land-grant receiving the least federal revenue in 1992-93 was the University of the Virgin Islands: \$4.3 million representing 13% of total revenue, for an FTE

average of \$3,660. The institution receiving the greatest amount was Tuskegee, whose \$27.6 million represented 38% of total revenue for an FTE average of \$8,094, the highest funding per FTE in this category.

Because the GAO report *Land-Grant College Revenues* is based on 1992-93 figures and pre-dates the 1994 legislation awarding land-grant status to tribally controlled colleges, funding amounts for the tribal colleges listed in the GAO report include only annual funding from the 1978 Tribal College Assistance Act. The 1994 legislation added substantially to annual federal revenues to these colleges.

It must be remembered that the 1994 institutions serve scattered and impoverished rural communities, serve both Native Americans and non-Indian students, and receive no state funding. All twenty-two colleges for which information was available had relatively low enrollments, from 964 FTE at Navajo Community College to 67 FTE at Fond du Lac Community College (enrollments have nearly doubled following awarding of land-grant status in 1994). Average federal revenue was \$2.9 million, representing an average of 71% of total revenue. Fond du Lac Community College received the least federal revenues: \$211,995 representing 68% of its total revenues, for an FTE average of \$3,164. Navajo Community College received the most, with \$6,690,123 representing 60% of total revenues, for an average FTE of \$6,937. Little Hoop Community College received \$2.3 million in federal funds for 133 students, for an average of \$17,319 per FTE.

“Academic Pork-Barrel” Funding

Congress increasingly votes to fund special projects at both private and public institutions, “earmarking” specific spending measures and directing federal agencies to award these funds to the colleges and universities.¹⁷ The practice is not subject to the competitive, merit-based reviews that most agencies use to distribute money. These funds are separate from that awarded by land-grant legislation. Often, federal agencies do not support the projects and seek to disavow them or to reduce appropriations for them. In FY 1999, Congress provided a record \$767 million in “earmarked” funds. USDA distributed about 11.7% of this “earmarked” money for agricultural projects. USDA’s share was exceeded only by the Department of Defense (23.7%); the balance was channeled through various other federal agencies.

Many land-grant institutions receive “pork-barrel” funds, especially schools whose states have representation in the Congressional appropriations committees. In FY 1999, ten of the top twenty-five recipients of individual-institution earmarks were 1862 land-grant universities. Between 1990 and 1999, fourteen of the top twenty-five recipients were 1862 land-grants. Many other land-grant universities, including HBCUs, tribal colleges, and HSIs also receive these special funds, although minority-serving schools have not made the top twenty-five list. New Mexico State University, a land-grant HSI, received \$1.3 million in individual earmarks through USDA in 1999 for eight agricultural research projects. NMSU also shared in \$738,000 awarded to regional agricultural consortia and \$3 million through the Environmental Protection Agency for consortium research on environmental issues. NMSU has received similar amounts annually for several years. Texas A&M-Kingsville, another land-grant HSI, received two small grants; six other HSIs received 1999 “pork-barrel” appropriations.

These appropriations are also available to territorial and foreign institutions. From 1996 through 1999 the Department of Agriculture disbursed funds of \$564,000 per year to each two-year college in the Pacific and \$2,724,000 to each Pacific and Caribbean university for research on agricultural development, in addition to funding for instruction. Several institutions in Mexico also received Congressional funding.

Determination of Land-Grant Funding Amounts

Congressional funding apparently attempts to be rational. The 1862 Morrill Act used a formula based on state population, and the Hatch Act funding is based on overall state population and the farming population. Research funding at 1890 schools is based on a percentage of research funding for 1862 institutions.

Similarly, endowment funding for 1994 tribal college endowments was based on land-grant endowments awarded since 1960.

In the early stages of negotiating Senate Bill 1345 (Equity in Educational Land-Grant Status Act of 1993), the Committee on Indian Affairs first considered that the endowment appropriation for these small colleges would be \$10 million, then raised the amount to \$23 million, following testimony from Margie Perez, President of AIHEC.¹⁸ Perez stated that the \$23 million endowment request for the twenty-nine tribally-controlled colleges was based upon an average of the actual endowment amounts that were appropriated since 1960. Perez pointed out that the previous endowments were made between eight and thirty-three years before, so that the “1994” colleges’ requests represented far less than what other land-grant institutions had received in real dollars. Transcripts of the *Equity* hearings do not include rationales for the other amounts: \$50,000 grants to each college, \$8.5 million building capacity grants (\$1.7 million per year for five years), and the \$5 million annual appropriations for research and extension services.

Summary and Recommendations

Developers of the existing land-grant systems have depended heavily on historical precedents, and it would seem wise that planners for the proposed Hispanic-serving land-grant system follow that example. Educators have taken the lead. Certainly administrators and faculty at colleges and universities have been very important as planners and lobbyists, but much of the political work has been done by professional associations. While high-sounding rhetoric has always been expected, underlying realities have been more economic and political in nature.

Minority-serving land-grant systems have faced special challenges. They have repeatedly encountered discriminatory policies and inequitable distribution of funds. Minority youth are not much drawn to the sciences and may be especially averse to agriculture, engineering technology, and vocational education. Cooperation among minority-serving land-grants, and with 1862 land-grants, is necessary for success. Historically black land-grants and Native American land-grants have effectively argued for what amounts to educational reparations, following centuries of persecution and neglect; whether that argument will be useful for the proposed Hispanic-serving land-grant system development is something that deserves deep thought. Given the arguments about funding for HBCUs and the hot issue of affirmative action, the question of whether this

proposed land-grant educational system unfairly favors one ethnic group over another is sure to be raised.

The new system of Hispanic land-grant colleges may want to incorporate innovations that address current concerns of existing land-grants and other national issues. Among these issues might be urban agriculture and extension; alternative agriculture; and increased numbers of minority teachers in all disciplines (not just agriculture and home economics). Certainly the Hispanic land-grant system must be deeply involved with K-12 “pipeline issues.” A new Hispanic system of land-grants would provide ROTC opportunities that will prove helpful to the U.S. military, now deeply downsized yet facing growing demands and looking to Hispanics to fill out its thinning ranks.

Minority-serving land-grant systems have benefited from research documenting institutional effectiveness regarding retention, graduation, continuation in graduate and professional studies, and employment. Ironically, these successes have brought further problems as growth exceeds resources.

The latest group of colleges to join the ranks of land-grant institutions may provide a good model for Hispanic system planning. Native American college presidents formed AIHEC, whose leadership identified certain colleges which would be included in legislation, found support among other land-grant institutions and academic associations as well as from government agencies, identified a legislative supporter, and developed a rationale for funding. These are essentially the measures that led to previous land-grant systems and may be the path to follow in the future.

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