2.
Justin Smith Morrill and the Politics and Legacy of the Land-Grant College Acts

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Justin Smith Morrill, in the style of Vermont politicians, defied easy characterization. He was regarded in his own day as a conservative—he opposed the eight-hour workday, women's suffrage, and direct election of the president and senators—though he is remembered today as a populist. His most notable legacy, the 1862 Land-Grant College Act, extended the possibility of higher education to the masses including such traditionally disenfranchised groups as women and African Americans. By any estimation, the law gave new meaning to equal opportunity and thus to democracy in the post-Civil War period. It gave intellectual force to the human and economic development of the states, and thus of the nation. The law also made the United States the world leader in agricultural production and, coupled with the 1944 GI Bill, established the foundation upon which the nation's defense, diplomacy, and economic competitiveness have relied throughout the latter half of the twentieth century.

Morrill is the subject of two published biographies: William B. Parker's The Life and Public Services of Justin Smith Morrill, published in 1924;[1] and more recently Coy F. Cross's excellent Justin Smith Morrill: The Father of the Land-Grant Colleges, published in 1999.[2] This sketch of Morrill and his legacy relies on both of those works, as well as several of the hundreds of scholarly essays concerning the Land-Grant Act itself, from the politics surrounding its creation to the technical aspects of land distribution and revenue management under the law. Not surprisingly, there was a large volume of work and commentary in and around 1962, on the centennial of the act's

passage. More recently, commentary and scholarship have focused on the unfinished agenda of the land-grant concept, particularly with regard to educational opportunity for minorities[3] and the policy implications of Morrill's idea, both in the nineteenth century and today,[4] as public higher education faces new technological, financial, demographic, and pedagogic challenges to its historic mission.

MORRILL THE PUBLIC SERVANT

Justin Morrill was born in Strafford, Vermont, on April 14, 1810. He had no formal education beyond secondary school. He had wanted to attend college but his father could not afford to send both him and his brothers, so elected to send none of them.[5] Nonetheless, by the time Morrill was elected to Congress in 1854 he had enjoyed a successful career dealing in dry goods in Vermont and also in Maine. Politics was a second career. Morrill had retired from business at the age of thirty-eight, in 1848, and settled down to build his gentleman's farm in Strafford.[6]

Morrill was not a political novice when the Vermont Whig Party nominated him for the state's second congressional district in July 1854, though his experience was limited to New England, and he won his office narrowly—by a total of fifty-nine votes.[7] He came to office at a fortuitous time, given the legislation that would become his legacy. The United States had acquired 500,000 square miles of new territory in the 1848 treaty with Mexico, though the immediate effect of the acquisition was to raise again the question of slavery and whether it would be permitted in the new territories. Within a year of Morrill's election to Congress, many northern Whigs and Democrats, Free Soilers, and other antislavery factions had organized into the Republican Party. The 34th Congress, which opened in December 1855, was one of the most contentious ever; it had 108 Republicans, 83 Democrats (most of them proslavery Southerners), and 43 American Party members, better known as the "Know-Nothings," who were themselves split on the slavery issue.[8] Over the length of his congressional career, which lasted for forty-four years and eleven presidents (from 1855 to 1867 in the House, from 1867 to 1898 in the Senate), Morrill was perhaps best known as an expert on taxes and tariffs. It was largely through his efforts that the Union was to finance the Civil War; Morrill was author of the Tariff Act of 1861 and served as chairman of the House Ways and Means Committee. Later, as a senator, he chaired the Committee on Public Buildings and Grounds and served on the Finance Committee.[9] In those positions he was influential in creating, if not singularly responsible for, the modern Library of Congress—its site, its funding, and its architectural design. Until 1897 the congressional reading room was a fairly unimpressive business tucked away in the Capitol building.

EVENTS LEADING TO PASSAGE OF THE 1862 ACT

Morrill, his biographers note, regretted his own lack of formal education and, as a Vermonter, saw the need for practical education in agriculture and mechanics for the working people with whom he identified. In the mid-nineteenth century 80 percent of Americans lived in rural areas, and about 60 percent of Americans were farmers (compared to 23 percent and 2 percent, respectively, today), most of them eking out a subsistence living.[10] In 1860 one farm produced only enough food to feed five people, compared to today's production level of about 140 people per farmer.[11] Agricultural societies had formed in the United States after the Revolutionary War (the first of them, the Philadelphia Society for Promoting Agriculture, founded by Benjamin Franklin and still in existence), and they pushed, with small success, for agricultural colleges that would improve farming methods and productivity. The first American school devoted to agriculture was Gardiner Lyceum, in Maine, established in 1823.[12] Pennsylvania established the first agricultural high school in 1855, which in 1862 became the state's Land-Grant college and eventually Pennsylvania State University. Michigan established the first agricultural college in 1855, followed by Maryland in 1856.[13] All of these schools suffered from a lack of quality teachers and curricula and shaky finances, but they provided fertile ground for the idea that Morrill would carry to the House floor.

Not coincidentally, the farmers and workers whom Morrill championed were the same people who, by 1862, were dying by the thousands in places like Bull Run, Shiloh, and Cold Harbor. Speaking in Congress in 1858, Morrill decried the fact that such people had to "snatch their education, such as it is, from the crevices between labor and sleep. They grope in twilight. Our country depends upon them as its right arm to do the handiwork of the nation. Let us, then, furnish the means for that arm to acquire culture, skill, efficiency."[14]

Historians generally agree that Morrill's vision for Land-Grant colleges had its origins elsewhere—in Europe, which by the mid-nineteenth century had its own workingmen's colleges, and in the work of an Illinois College professor, Jonathan Baldwin Turner, a Yale graduate who had proposed providing liberal education to farmers, factory workers, and others as early as 1850.[15] Specifically, it was Turner who proposed the public lands appropriation as the basis of an endowment to support the creation of new colleges. The Illinois legislature formally proposed the idea to Congress in 1853, asking that each state get $500,000 worth of public land to "endow a system of industrial universities."[16] More generally, of course, the idea for government-sponsored colleges was, in the United States, at least as old as 1618, when King James granted ten thousand acres to Virginia for a college.[17] Public schools in the United States had won federal financial support as early as 1785, when the then quite weak federal government had reserved one section of each township in the country for their maintenance.[18]

A college education in the mid-nineteenth century was generally reserved for white men preparing for careers in theology, medicine, or law, and above all for the well-to-do (since neither medicine nor law called for much advanced training in those days, and such training as existed was often perfunctory).[19] It was anything but practical, and, Morrill thought, obsolete. Many others agreed with him, among them Turner in Illinois and in the East businessmen Ezra Cornell and Thomas Clemson and newspaper publisher Horace Greeley.[20] By 1850, wrote Allan Nevins, the industrial revolution was well under way:

> For Americans in particular, every fresh invention, from sewing machines to telegraphs, every new application of power, from locomotives to liners, every industrial innovation, from oil wells to Bessemer steel, opened stirring vistas. . . . Against this background the college education of earlier times seemed hopelessly antiquated; it had to be wrested out of the ruts in which it had so long traveled.[21]

By 1855, however, there were only a very few institutions around the country that taught something other than the classics. (As late as 1860, according to census data for the year, only 3 percent of the nation's 397 colleges had departments of science or agriculture.)[22] One of them was Norwich University in Vermont, just twelve miles from Morrill's home in Strafford. Norwich had been founded by a former West Point commandant, Captain Alden Partridge, and Partridge had urged Congress in 1841 to establish a national system of higher education that included in its curriculum courses on farming, engineering, and business. To finance the system, Partridge urged a federal appropriation of $40 million, to be paid for by the sale of public lands. Morrill became a trustee of Norwich in 1848 and served in that role until his death in 1898.[23]

Morrill introduced the peoples' college idea to Congress in 1856 (three months after taking his seat in the House), but without the land-grant component. He asked the House Committee on Agriculture to establish "one or more agricultural schools upon the basis of the naval and military academies."[24] One student from each congressional district could then receive a free education at these institutions. A committee member from South Carolina killed the idea.[25]

On a second attempt, Morrill incorporated the idea of federal land grants as a means of finance, and thus re-introduced (following Turner and the Illinois legislature) the land-grant concept to Congress. He introduced the Bill Granting Lands for Agricultural Colleges on December 17, 1857. In it he proposed that each state receive twenty thousand acres of public land for each representative and senator, a proposal for which there was ample precedent.[26] By the mid-nineteenth century the federal government had awarded approximately 45 million acres of public land to veterans, another 25.4 million acres to states and territories for the construction of railroads, and another 67.7 million to

states and territories for schools and universities. By Morrill's estimate, his bill would give about 5.8 million acres to the cause of agricultural colleges, leaving more than 1 billion acres of public land still in government hands.[27]

Morrill's bill went to the House Committee on Public Lands, where opposition focused on the bill's constitutionality and, secondly, on the idea itself. On the first score, Morrill defended his proposal under the commerce clause, likening his idea to the government's financial support for lighthouses, harbor construction, and the service academies and railroads, all in the service of commerce and trade. On the second, he marshaled impressive statistics with which he was able to show that European farmers produced far greater yields on smaller plots of land than did their American counterparts, a feat born of scientific methods largely unknown in the United States. Morrill attributed the Europeans' success to their agricultural colleges, though he noted that these colleges were, in European style, for the privileged few. Morrill argued that any American counterpart to these colleges should be "for the use and benefit of all."[28]

The House passed Morrill's bill 105 to 100 on April 20, 1858. It then went to the Senate, where it ran into strong Southern opposition led by Clement Clay of Alabama, James Mason of Virginia, and Jefferson Davis of Mississippi. The South, in fact, opposed the bill with virtual unanimity, and Democrats everywhere opposed the bill for its implications about federal power. Some unionist Southerners supported the bill for its agricultural significance, which spoke directly to their self-interest. Many westerners opposed it for its easy susceptibility to land speculation and because they thought the idea of educating farmers and working class people quixotic. Only New Englanders supported the bill strongly. Nonetheless the bill passed, twenty-five to twenty-two, on February 7, 1859.[29] President James Buchanan then vetoed the bill at the urging of Louisiana senator John Slidell. Buchanan said he thought the bill unconstitutional, though he commented with some favor on its intent:

> Under this bill, it is provided that scientific and classical studies shall not be excluded from [the colleges]. Indeed, it would be almost impossible to sustain them without such a provision; for no father would incur the expense of sending a son to one of these institutions for the sole purpose of making him a scientific farmer or mechanic. The bill itself negatives this idea and declares that their object is "to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." This certainly ought to be the case.[30]

Morrill tried again after the election of 1860 and the secession of the South. He assumed his chances were good, as thirteen states had instructed their representatives to approve the measure should it come up again. He reintroduced his bill on December 16, 1861, this time increasing the land allot-

ment from twenty thousand to thirty thousand acres for each representative and senator and, importantly, including a provision for teaching military skills (all this excluding the rebellious Southern states, of course).[31]

As with the earlier bill, the new one did not exclude the liberal arts from its curricular prescription. Speaking years later before the Vermont legislature, Morrill said, "It was not provided that agricultural labor in the field should be practically taught, any more than that the mechanical trade of a carpenter or blacksmith should be taught."[32] Rather, Morrill said, he had wanted to bring intellectual instruction to the many—the 1862 bill's exact language proposed colleges that while practical would be broad, "without excluding other scientific and classical studies."[33] In Morrill's words, "The fundamental idea of this legislation was to offer an opportunity in every state for a liberal and larger education to larger numbers, not merely to those destined for sedentary professions, but to those much needing higher instruction for the world's business, for the industrial pursuits and professions of life."[34]

The bill again went to the Committee on Public Lands, whose chairman, John Potter of Wisconsin, recommended against its passage. Western congressmen generally disliked the bill, since of course much of the public lands to be given away and sold were theirs, the benefits (as they saw them) to accrue to eastern states. Western states also feared that the bill would lead to land speculation, a fear that later would prove to have merit. Earlier land grants had benefited those who lived nearby or in the same state, and almost always new states; the Morrill Act, with its national system of distribution based on congressional representation, favored smaller, established, and more populous states, mostly in the east.[35]

While the bill languished in the House, Morrill asked a colleague to introduce it in the Senate, where it met resistance on the same grounds as in the House but nonetheless passed thirty-two to seven on June 10, 1862.[36] The House then approved the bill ninety to twenty-five on June 17, and President Lincoln signed it into law on July 2, 1862.[37] Only two months before, Lincoln had signed into law the Homestead Act, which gave settlers in western states and territories 160 acres of federal land and would eventually give away seventy million acres. Several historians offer the comment that the Morrill Act, with its terms so favorable to the East, might not have passed but for the countervailing terms in the Homestead Act, which were so favorable to the West. In any case, it is notable that the first debate over the Land-Grant Colleges bill had been fought over North-South divisions; the second debate, in 1862, had been fought over East-West divisions, which were sharp but far less bitter or deep. Indeed, one historian describes the 1862 act rather glowingly as "one of many Republican efforts to cement an alliance between east and west, between industry and agriculture."[38]

A day before the Morrill Act became law, on July 1, Lincoln had approved a transcontinental railroad bill that gave approximately 130 million acres of public land to the railroads. These giveaways followed on earlier legislation, preceding Lincoln, which had given 61 million acres of public lands to veterans of

the Mexican War and various Indian wars. Because so much federal land was suddenly available, the states' response to the Morrill Act was fairly slow. Eventually the 1862 colleges received 17,430,000 acres—the tiniest portion of the federal lands given away in this period,[39] but in economic and historical terms, as it would turn out, the investment with by far the greatest return.

THE 1862 ACT IN OPERATION

The mechanics of the 1862 act were straightforward. Western states that still had public land to sell would actually select parcels of land that they could either sell immediately or hold until prices went up. Eastern states with no federal public land remaining within their borders (which was most of them) were given scrip, which they then had to sell to assignees to prevent any state from owning land in another. Assignees could redeem the scrip for land. States were then to invest the proceeds from sales into the "stocks of the United States or of the States, or some other safe stocks, yielding not less than five per centum."[40] This fund was to remain untouched, and the income was to pay for the "endowment, support and maintenance of at least one college" in each state.[41] States had their own role to play in this, since the interest from the land-grant funds was not to pay for buildings, but only for books, supplies, instruction, and so on. The states themselves had to provide the land and the buildings, though the law provided that as much as 10 percent of the capital could be used for the purchase of sites.[42] Some states built from scratch, while many others invested in existing colleges (such as New York did with Cornell, Massachusetts with MIT, New Jersey with Rutgers, and Michigan with its agricultural college, later to be known as Michigan State University). In 1864 Congress amended the act, requiring the states that wished to participate in the program to agree to the law's terms within two years[43]; in 1866, Congress required the participating states to establish a college within five years.[44] A large number had difficulty meeting the 5 percent return requirement and so found various ways to make up the difference. A few (Illinois, and later North Carolina and South Carolina) lost their endowments through "defalcation or dishonesty" and their state legislatures issued bonds to restore them.[45]

Because the monies made available through the 1862 act were so often insufficient to its aspirations, the colleges developed slowly. The first three states to act on the law were Iowa, Vermont, and Connecticut, in 1862. A year later fourteen states had adopted the act, and by 1870 thirty-seven states had instituted some kind of program for teaching agriculture, mechanical arts and, as the act stipulated, military tactics. Nonetheless the Land-Grant College Act might well have been perceived as a bust in its early years. Land prices were low. Total receipts on the 17.4 million acres came to a fairly meager $7.5 million.[46] Many Eastern states sold their scrip quickly and earned less than a dollar an acre for it (Kentucky did the worst, at fifty cents per acre).[47] Only nine states received more than the $1.25 per acre that the act had mandated as a minimum return;

New York held its grant the longest and managed to earn a whopping $5.82 per acre.[48] States had little money for buildings, few qualified teachers, and not many applicants.

Morrill tried repeatedly—first in 1872 and eleven more times through 1890—to win additional land grants or financial support for the colleges, and by 1890 he could boast that forty-eight colleges had been created as a result of his 1862 legislation.[49] That year he succeeded: President Benjamin Harrison signed the second Land-Grant Act into law on August 30, 1890, granting states an additional $15,000 a year initially, and rising to $25,000 per year.[50] Morrill tried again in 1897 and 1898, just before his death, to win additional funding. Where Morrill failed others followed. The 1887 Hatch Act added funds to support agricultural extension stations; the Adams Act of 1906 and the Purnell Act of 1925 both provided for research grants at the extension stations; a 1907 amendment to the 1990 act added another $25,000 per year per college for salaries and operating funds (bringing each state's yearly total to $50,000); the Smith-Lever Act of 1914 established the Co-operative Agricultural Extension Service and made federal funds available to pay part of its costs; and the Bankhead-Jones Act of 1935 added still more federal funds, $1 million to be distributed in flat grants of $20,000 to each state.[51] (For a list of the Land-Grant colleges, see page 85; for a list of federal legislation supporting Land-Grant education, see page 90.)

THE LAND-GRANT ACT AND THE TRANSFORMATION OF AMERICA

The social and economic impact of the Morrill Act and related legislation is impossible to measure, but a few quantitative measures are suggestive. Today the largest of the Land-Grant programs is the University of California, which enrolls approximately 150,000 students on its nine campuses; the smallest is Kentucky State University, with about 2,500 students. All together the Land-Grant colleges enroll about three million students annually and award about 500,000 degrees each year, including one-third of all bachelor's and master's degrees, 60 percent of all doctoral degrees, and 70 percent of the nation's engineering degrees. Since 1862 they have awarded more than twenty million degrees.[52]

There are in addition so-called sea-grant colleges, authorized by the federal Sea Grant Act of 1966. Base funding for the sea grant comes from the National Oceanic and Atmospheric Administration in the Department of Commerce, and the idea is to promote better understanding and use of the nation's coastal, ocean, and Great Lakes resources. There are now twenty-nine sea-grant programs, one in every coastal and Great Lakes state and in Puerto Rico.[53]

Other benefits of the Morrill Act have to be measured qualitatively. Above all,

as Morrill had hoped, the land-grant colleges have benefited "those at the bottom of the ladder who want to climb up, or those who have some ambition to rise in the world but are without the means to seek far from home a higher standard of culture."[54] The colleges made higher education available to women and to blacks, both of whom had traditionally been excluded from educational opportunity. The 1862 law, of course, denied its benefits to Southern states until they re-entered the Union after the war, and in the politics of Reconstruction many of the first land-grant colleges in the region were for blacks. The first was Alcorn State University in Mississippi, founded in 1871. Hampton University followed in Virginia in 1872.

The 1890 act denied funds to any school "where a distinction of race or color is made in the admission of students," and essentially required Southern states to open their land-grant facilities to blacks or open separate institutions for them. They did the latter, of course. It can hardly be denied that the effect of the law was to entrench separate-but-equal as educational policy, the effects of which were made more insidious by the fact that black colleges typically received an amount equal to about 10 percent of the funds states made available to their white-only counterparts.[55] Still, Morrill had successfully argued the principle that education should be available to all for the greater good. Speaking in the Senate in 1876 he said:

> Having emancipated a whole race, shall it be said that there our duty ends, leaving the race as cumberers of the ground, to live or to wilt and perish, as the case may be? They are members of the American family and their advancement concerns us all. While swiftly forgetting all they ever knew as slaves, shall they have no opportunity to learn anything as freemen?[56]

Among the schools for African Americans founded after the 1890 act were the Colored Normal, Industrial, Agricultural and Mechanical College of South Carolina in 1896 (now South Carolina State University) and, in 1897 in Kentucky, the State Normal School for Colored Persons (now Kentucky State University). Today there are seventeen historically black land-grant colleges and universities, and they have awarded approximately 700,000 degrees. All of the historically black colleges have been co-educational from the beginning.[57]

Most recently, it is Native Americans who have benefited from the land-grant program. The National Agricultural Research, Extension and Teaching Act of 1994 (a provision of the Elementary and Secondary Education Reauthorization Act) authorized a $23 million endowment, to be built up over a five-year period, to support twenty-nine tribal colleges on Indian reservations throughout the United States.[58]

There were other, less immediately obvious or even foreseeable benefits of the 1862 law. With its nonsectarian foundations the Morrill Act helped to separate religious doctrine from higher education and, particularly in the period after World War II, when huge numbers of returning servicemen

swelled the rolls of land-grant colleges, helped to establish research as a core function of the American university. At the outbreak of the war, the act's provision for military training at the land-grant institutions was instrumental in meeting the demands of mobilization. Morrill had presumably included the provision in response to the woeful record of Union officers in the Civil War, particularly as compared to the performance of the Confederate officer corps,[59] but it was World War II where the land-grant military training program proved invaluable. When the war began, the U.S. military was very small, and it relied on about fifty thousand Reserve Officer Training Corps officers from the land-grant colleges and universities to train hundreds of thousands of civilians over a very short time.[60] As Army chief of staff General George C. Marshall put it, "Just what we would have done . . . without these men I do not know."[61]

Justin Morrill himself could not have foreseen that the institutions he established would in time become the preeminent system of higher education in the world. Indeed, higher education is one of the few areas in which the United States enjoys a consistent and favorably lopsided balance of trade—relatively few American students travel abroad to study for degrees, while thousands of people come to the United States from virtually everywhere to study, most commonly at the land-grant colleges, and especially for advanced degrees in science and engineering. In this respect, the Morrill Act still functions as its creator hoped it would, making higher education available to those who otherwise would not be able to obtain one, and broadly diffusing its benefits.

What Morrill probably did foresee—indeed, the rationale that compelled him in 1862 and throughout his career—was the role the land-grant institutions would play in carrying American democracy into the next century. At one level the act accomplished that purpose by virtue of its design: The institutions it created, while rising to international prominence, have remained deeply rooted in the needs of their states and regions, as the 1862 act supposed they would be. The United States, unlike many European nations, would have no "national" university; rather. the flexibility of the federal-state partnership permitted each state to find its own way. The act thus enabled the colleges it created to meet the changing needs of a changing country in a manner consistent with the aspirations of a free and open society.

The democratic faith that Morrill made his cause was no certain thing in 1862. As Lincoln would say at Gettysburg a little more than a year later, it was an open question whether a nation dedicated to liberty and equality could endure the bitter strains of separatism. Beyond his role in financing the Union's prosecution of the war, Morrill ensured the outcome of the struggle for freedom by making education the most potent weapon in the contest. Further, Morrill saw to it that the Land-Grant Colleges Act, through the endowments it created, would not be static but dynamic, carried on in perpetuity for the benefit of gen-

erations yet unborn.

NOTES

1. William B. Parker. The Life and Public Services of Justin Smith Morrill. Boston: Houghton Mifflin Co., 1924.
2. Coy F. Cross II. Justin Smith Morrill: Father of the Land-Grant Colleges. East Lansing, Mich.: Michigan State University Press, 1999.
3. See, for example, Frederick Humphries. “1890 Land-Grant Institutions: Their Struggle for Survival and Equality,” Agricultural History, Vol. 65, No. 2, 1991.
4. See, for example, Scott A. Key, “The Origins of the Land-Grant Universities: An Historical Policy Study.” Unpublished Ph.D. dissertation, University of Illinois-Chicago, 1995.
5. Cross, 5.
6. Ibid., 10–12.
7. Ibid., 26.
8. Ibid., 26–27.
9. “Justin Smith Morrill,” American National Biography. New York, Oxford University Press, 1999, 883.
10. “Events leading to the establishment of Land-Grant universities,” website of the University of Florida Institute of Food and Agricultural Sciences (http://gnv.ifas.ufl.edu/www/ls_grant/whatislg.html), May 23, 2000, 1–2.
11. Ibid., 3.
12. Ibid., 4.
13. Ibid. See also Lee C. Deighton, ed. “Land-Grant Colleges,” The Encyclopedia of Education. New York: Macmillan Co. and the Free Press, 1971, 319.
14. Justin Smith Morrill. Speech on the Bill Granting Lands for Agricultural Colleges. United States House of Representatives, April 20, 1858. Washington, D.C.: Congressional Globe Printing Office, 8.
15. See, for example, William David Zimmerman. “The Morrill Act and Liberal Education,” Liberal Education, Vol. 50, No. 3, 1964, 396–400.
16. Allan Nevins. “The Origins of the Land-Grant Colleges and State Universities.” Washington, D.C.: Civil War Centennial Commission, 1962, 6–21; Cross, 78; Zimmerman, 397.
17. Harold M. Hyman. American Singularity: The 1787 Northwest Ordinance, the 1862 Homestead and Morrill Acts, and the 1944 G.I. Bill. Athens, Ga.: University of Georgia Press, 1986, 18–34.
18. Ibid.
19. Nevins, 11.
20. Ibid., 6.
21. Ibid., 8.

22. Deighton, 319.
23. Cross, 78–79.
24. Parker, 82.
25. Ibid., 12. See also Cross, 79.
26. Cross, 80–81.
27. Ibid., 81–82. See also Deighton, 319.
28. Cross, 81–82.
29. Ibid., 82–83.
30. Congressional Globe, 35th Congress, 2 Session, 1413.
31. Cross, 83.
32. John T. Fey. "Morrill's Concept of Education." Vermont History, Vol. 31, No. 2, 1963, 157.
33. Morrill Land-Grant Act of 1862: An Act Donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts. 12 Statute 503, July 2, 1862.
34. Fey.
35. Simon, 105–109.
36. Ibid., 106.
37. Ibid.
38. Ibid., 110.
39. Sauder, 34–37; Cross, 85.
40. Morrill Land-Grant Act of 1862.
41. Ibid.
42. Ben F. Andrews. The Land Grant of 1862 and the Land-Grant Colleges. Washington, D.C.: Department of the Interior, Bureau of Education, 1918, 10.
43. Act of 1864 to Extend the Time for Accepting the Grant, April 14, 1864.
44. Act of 1866, Extending the Time within which Agricultural Colleges May Be Established, 14 Statute 208, July 23, 1866.
45. Ibid., 56–57.
46. Cross, 85.
47. Andrews, 19.
48. Ibid., 35–36; Cross, 85.
49. Cross, 86.
50. Ibid.
51. Roland Renne. "Land Grant Institutions, the Public and the Public Interest." The Annals of the American Academy of Political and Social Science, Vol. 331, 1960, 47. See also Deighton, 320.
52. Cross, 88–89.
53. "Land-Grant and Sea-Grant Acts, History and Institutions," Web page of the University of Florida Institute of Food and Agricultural Sciences (http://gnv.ifas.ufl.edu/www/ls_grant/index.html), May 23, 2000, 3–4.
54. Justin Smith Morrill, Speech on the Educational Bill. United States Senate, December 15, 1880. Washington, D.C.: Congressional Globe Printing Office, 4.
55. Jenkins, Robert L. "The Black Land-Grant Colleges in Their Formative

Years, 1890–1920." Agricultural History, Vol. 65, No. 2, 1991, 63–72; see also Humphries, 3–11.
56. Justin Smith Morrill, Speech on the Educational Fund. United States Senate, April 26, 1876. Washington, D.C.: Congressional Globe Printing Office, 10.
57. Cross, 86.
58. "Events leading to the establishment of Land-Grant universities," 6.
59. Richard M. Abrams. "The U.S. Military and Higher Education: A Brief History." Annals of the American Academy of Political and Social Science, Vol. 502, 1989, 15–28.
60. Cross, 88.
61. Herman R. Allen. Open Door to Learning: The Land-Grant System Enters its Second Century. Urbana: University of Illinois Press, 1963, 171–72.

THE LAND-GRANT COLLEGES

* Indicates historically black institutions
** Indicates Native American institutions created since 1994
*** The 30 tribal colleges created in 1994 are included individually in this list but are represented as a system by the American Indian Higher Education Consortium.

ALABAMA
Alabama A&M University*
Auburn University
Tuskegee University*

ALASKA
University of Alaska system

AMERICAN SAMOA
American Samoa Community College

ARIZONA
University of Arizona
Navajo Community College**

ARKANSAS
University of Arkansas, Fayetteville
University of Arkansas, Pine Bluff*

CALIFORNIA
University of California system

D-Q University

COLORADO
Colorado State University

CONNECTICUT
University of Connecticut

DELAWARE
Delaware State University*
University of Delaware

DISTRICT OF COLUMBIA
University of the District of Columbia

FLORIDA
Florida A&M University*
University of Florida

GEORGIA
Fort Valley State College*
University of Georgia

GUAM
University of Guam

HAWAII
University of Hawaii

IDAHO
University of Idaho

ILLINOIS
University of Illinois

INDIANA
Purdue University

IOWA
Iowa State University

KANSAS
Kansas State University
Haskell Indian Nations University**

KENTUCKY
Kentucky State University*
University of Kentucky

LOUISIANA
Louisiana State University system
Southern University and A&M system*

MAINE
University of Maine

MARYLAND
University of Maryland, College Park
University of Maryland, Eastern Shore*

MASSACHUSETTS
Massachusetts Institute of Technology
University of Massachusetts

MICHIGAN
Bay Mills Community College**
Michigan State University

MICRONESIA
Community College of Micronesia—FSM

MINNESOTA
University of Minnesota
Fond du Lac Community College**
Leech Lake Tribal College**

MISSISSIPPI
Alcorn State University*
Mississippi State University

MISSOURI
Lincoln University*
University of Missouri system

MONTANA
Montana State University
Blackfeet Community College**
Dull Knife Community College**

Fort Belknap Community College**
Fort Peck Community College**
Little Bighorn College**
Salish Kootenai College**
Stone Child College**

NEBRASKA
University of Nebraska system
Nebraska Indian Community College**

NEVADA
University of Nevada, Reno

NEW HAMPSHIRE
University of New Hampshire

NEW JERSEY
Rutgers, the State University of New Jersey

NEW MEXICO
New Mexico State University
Crownpoint Institute of Technology**
Institute of American Indian and Alaska Native Culture Arts Development**
Southwest Indian Polytechnic Institute**

NEW YORK
Cornell University

NORTH CAROLINA
North Carolina A&T State University*
North Carolina State University

NORTH DAKOTA
North Dakota State University
Fort Bethold Community College**
Little Hoop Community College**
Standing Rock College**
Turtle Mountain Community College**
United Tribes Technical College**

NORTHERN MARIANAS
Northern Marianas College

OHIO
Ohio State University

OKLAHOMA
Langston University*
Oklahoma State University

OREGON
Oregon State University

PENNSYLVANIA
Pennsylvania State University

PUERTO RICO
University of Puerto Rico

RHODE ISLAND
University of Rhode Island

SOUTH CAROLINA
Clemson University
South Carolina State University*

SOUTH DAKOTA
South Dakota State University
Cheyenne River Community College**
Ogalala Lakota College**
Sinte Gleska University**
Sisseton Wahpeton Community College**

TENNESSEE
Tennessee State University
University of Tennessee

TEXAS
Prairie View A&M University*
Texas A&M University

UTAH
Utah State University

VERMONT
University of Vermont

VIRGIN ISLANDS
University of the Virgin Islands*

VIRGINIA
Virginia Polytechnic Institute & State University
Virginia State University*
American Indian Higher Education Consortium***

WASHINGTON
Washington State University
Northwest Indian College**

WEST VIRGINIA
West Virginia University
West Virginia State College*

WISCONSIN
University of Wisconsin-Madison
College of the Menominee Nation**
Lac Courte Ojibwa Community College**

WYOMING
University of Wyoming

FEDERAL LEGISLATION SUPPORTING LAND-GRANT EDUCATION

1787 - Northwest Ordinance is passed, authorizing the sale of public land for support of education, thus establishing the land-grant principle.

1862 - First Morrill Act is passed and signed by President Abraham Lincoln, donating public lands to the several states, the sale of which is for the "endowment, support, and maintenance 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 practical education of the industrial classes in the several pursuits and professions in life."

1887 - The Hatch Act is passed, mandating the creation of agricultural experiment stations for scientific research.

1890 - The Second Morrill Act is passed, providing further endowment for col-

leges. Part of this funding is to be used for institutions for black students, leading to the creation of seventeen historically black land-grant colleges.

1907 - Nelson Amendment to the Morrill Acts of 1862 and 1890 is passed, providing further increased appropriations to land-grant institutions.

1908 - Benefits of Second Morrill Act and the Nelson Amendment extended to Puerto Rico.

1914 - The Smith-Lever Act is passed, providing federal support for land-grant institutions to offer educational programs to enhance the application of useful and practical information beyond their campuses through cooperative extension efforts with states and local communities.

1924 - Clark-McNary Act. Section 5 of this act provides funds (on a matching basis by the individual states) for cooperative farm-forestry work.

1928 - Capper-Ketcham Act. This provides for the further development of agricultural extension work at the 1862 land-grant colleges and stipulates that future funds be allocated “in addition to and not a substitute for” those made available in the Smith-Lever Act of 1914.

1929 - Alaska Act of 1929. This extends the benefits of the Hatch Act and the Smith-Lever Act to the Territory of Alaska.

1931 - Puerto Rico Act. This coordinates the agricultural-experiment station work and extends the benefits of the Hatch and Smith-Lever Acts to the Territory of Puerto Rico.

1934 - Congress creates the National Youth Administration to enable college students to earn money by performing educationally useful tasks and to continue their studies.

1935 - The Bankhead-Jones Act adds to annual appropriations for land-grant institutions. This extends the scope of research conducted under the Hatch Act and provides for the future development of Cooperative Agricultural Extension work and for the further endowment and support of 1862 and 1890 land-grant colleges.

1942 - The General Equivalency Diploma (GED) program and the Military Evaluations Programs for veterans who left school to serve in World War II are established.

1944 - The Servicemen’s Readjustment Act (GI Bill of Rights), Public Law 346. This provides for the higher education of veterans.

1945 - The Bankhead-Flannagan Act furthers the development of cooperative extension work in agriculture and home economics.

1946 - Congress passes the Fulbright Act (Public Law 584) to enable Americans to study and teach abroad.

1946 - The United Nations Educational, Scientific and Cultural Organization (UNESCO) is established, which, among its many other activities, provides international exchange opportunities for American scholars and administrators.

1946 - Agricultural Marketing Act. This furthers authorized extension programs in marketing, transportation, and distribution of agricultural products outside the Smith-Lever formula, but states are required to match federal funds.

1948 - The U.S. Information and Educational Exchange Act (the Smith-Mundt Act) provides for the international exchange of teachers, students, lecturers, and other specialists.

1949 - Clarke-McNary Amendment. This authorizes the U.S. Department of Agriculture to cooperate with land-grant colleges in aiding farmers through advice, education, demonstration, etc., in establishing, renewing, protecting, and managing wood lots and so forth, and in harvesting, utilizing, and marketing the products thereof.

1950 - Point Four Program is enacted by Congress (the Foreign Economic Assistance Act, subsequently called the International Cooperation Administration, then renamed the Agency for International Development, or AID).

1950 - Congress creates the National Science Foundation (NSF).

1950 - The Land-Grant Endowment Funds Bill protects federal and private endowments from unilateral federal action to divert them from the purposes for which they were granted.

1952 - Veterans' Readjustment Assistance Act (Korean GI Bill of Rights) is passed.

1953 - Smith-Lever Act Amendment. This simplifies and consolidates ten separate laws relating to extension. Establishes new funding procedures based on rural/urban population formula and amounts. Repeals the Capper-Ketcham Act and the two Bankhead-Jones Acts of 1935 and 1945. Inserts "and subjects relating thereto" after agriculture and home economics and makes refer-

ence to necessary printing and distribution of information.

1955 – Smith-Lever Amendment. This authorizes work with disadvantaged farms and farm families and authorizes funds for extension outside the traditional funding "formula."

1958 - National Defense Education Act (NDEA) provides college student loans, graduate fellowships, and aid for the improvement in the teaching of science, mathematics, and modern languages.

1960 - Land-grant status for the University of Hawaii establishes a new precedent. Since there is no longer adequate federal land to donate for the creation of an endowment, the University of Hawaii is given a $6 million endowment in lieu of land scrip.

1961 - Report of the U.S. Commission on Civil Rights, "Equal Protection of the Laws in Public Higher Education: 1960," recommends that federal funds be disbursed "only to such publicly controlled institutions of higher education as do not discriminate on grounds of race, color, religion, or national origin."

1963 - The Higher Education Act (HEA) of 1963 recognizes federal responsibility for aid to colleges and universities in the form of grants and loans for the construction of academic facilities.

1964 - The National Defense Education Act Amendments authorize major changes to expand and strengthen the graduate fellowship program and eliminate discriminatory institutional limitation on loan-fund grants.

1965 - The Higher Education Act of 1965 is passed, funding many higher education programs, including student aid.

1965 - The Housing and Urban Development Act of 1965 establishes a maximum interest rate of 3 percent for the College Housing Loan Program to provide relief for students from the high cost of college attendance.

1966 - The National Defense Education Project is passed to coordinate the federal role in international education. Later, this project is incorporated as Title VI of the Higher Education Act.

1966 - National Sea Grant College and Program Act. This establishes a program (under the U.S. Department of Commerce) to provide for applied research, formal education, and advisory (extension) services for development of marine and Great Lakes resources. About two-thirds (of the thirty coastal and Great Lakes states involved) have integrated this effort with that of cooperative extension.

1967 - The District of Columbia Post Secondary Education Reorganization Act gives land-grant status to Federal City College, now the University of the District of Columbia. This establishes a precedent for federal trust areas to participate in the land-grant system.

1968 - The Navajo Community College Act creates the first tribally controlled college.

1968 - District of Columbia Public Education Act. This designates Federal City College as the land-grant institution for extension in the District of Columbia and authorizes funds for this work.

1972 - Rural Development Act of 1972 - Title V. This authorizes rural development and small-farm extension programs, requires that administration of programs be associated with programs under the Smith-Lever Act, and establishes State Rural Development Advisory Councils.

1972 - University of Guam, Northern Marianas College, the Community Colleges of American Samoa and Micronesia, and the College of the Virgin Islands secure land-grant status through the Education Amendments of 1972 (Public Law 92-318).

1978 - The Tribally Controlled Community College Act stimulates the development of a variety of technical, two-year, four-year, and graduate colleges currently located on or near tribal reservations.

1979 - The U.S. Department of Education is established.

1980 - Congress passes the Education Amendments of 1980 (to the Higher Education Act of 1965).

1991 - National Security Education Act (Boren Bill) is enacted to provide support for undergraduate study abroad and graduate work in foreign languages and area studies.

1992 - President Bush signs the Higher Education Act Amendments, reauthorizing the 1965 Higher Education Act.

1993 - The National and Community Service Trust Act establishes a corporation to coordinate programs through which students receive minimum wage stipends and tuition benefits in return for community service.

1993 - The federal government begins “direct lending,” a program that enables