

Introduction: California and a Great American Movement

We almost owe more of our economic gains in the last seven decades to investment in people than to saving and the amassment of capital. And the margin in favor of people is increasing.

— JOHN KENNETH GALBRAITH, 1960

California can and will, as in both the past and the present, provide adequate support for an efficient program of public higher education designed to meet fully the changing needs of society.

— CALIFORNIA MASTER PLAN FOR HIGHER EDUCATION, 1960

To a degree unmatched by any other state in the twentieth century, California embraced public higher education as a tool of socioeconomic engineering, and with dramatic results. As early as the 1920s, when the state ranked only eleventh in total population, California had the largest enrollment in public education of any state. By the 1930s, 24 percent of California's college-age population matriculated to an institution of higher education, while the national average was closer to 12 percent. Only New York, with its vast network of private colleges, rivaled California in the college-going rate of high school graduates. By 1960, California's college-going rate was 55 percent, while the national average was close to 45 percent.¹

In 1959, before a gathering of the AFL-CIO in San Diego, Clark Kerr, president of the University of California and a labor economist by training, reflected on this remarkable record. "[California] comes closer than any nation or any other state to the achievement of universal education of young people," explained Kerr. "It provides equality of educational opportunity, it stimulates an unusually high proportion of high school graduates to seek further training, and it offers those students perhaps the richest and most

varied opportunities for advanced training to be found anywhere in the nation."² Access to a public higher education had become an important facet in the lives of Californians. It profoundly shaped their aspirations and, ultimately, their views on what it meant to be a Californian.

The pivotal role of public and private colleges and universities in the state's economy added to the centrality of higher education in California. From the growth of the state's agricultural economy to the cold war dependence on high technology and, more recently, to the arrival of the microchip and the burgeoning world of biotechnology, institutions such as the University of California, Stanford University, and Caltech, as well as the California State University system have been the major sources of trained labor and research expertise; they have been the catalysts for new technologies and new businesses.

Here, I attempt to tell why and how Californians created their network of public colleges and universities. I also attempt to decipher California's place within the historical landscape of American higher education. California was not alone in its effort to nurture higher education as both a tool for socio-economic mobility and an engine for economic growth. Yet the state chose a path that reflected its unique and evolving political culture. On the far side of the western frontier, California at first emulated great experiments in higher education of other states. By the turn of the century, however, California was a leader in a movement toward mass higher education that would engulf America and fundamentally reshape society. In the twentieth century, the Golden State has offered an aggressive and influential model for both increasing access and creating high quality institutions of higher education: a model that I have called the *California Idea*.

A Great American Movement

The stimulus for expanding higher education in the United States emerged from a complex matrix of sources.³ In the earliest years of the republic, the college filled an important gap in America's social structure,⁴ but it was, in large part, a devoutly sectarian effort, steeped in missionary purposes and structured to create America's clergy. Institutions such as Harvard and Yale would transform themselves beyond this singular purpose, becoming homes for classical training and for educating the sons of America's elite. New experiments also blossomed in the post-Revolutionary period, notably the publicly funded and nondenominational University of Virginia—the direct

outgrowth of the passions of Thomas Jefferson and his acceptance of the Enlightenment. It was, however, the advent of the nation's network of "land grant" universities in the mid-1800s that formed the first dramatic period of transformation and growth in American higher education—a transformation linked to the ethos of the common school and the arrival of the industrial revolution.

The passage of the Morrill Act is a watershed in the history of American higher education. Signed into law during the Civil War by Abraham Lincoln in July 1862, the utilitarian focus of the act was a triumph of Whig-Republicanism that advocated the use of public institutions, such as the university, to shape America's political, economic, and social experiment. The act led to the establishment of some sixty-eight land grant colleges and universities. It also provided a federal subsidy and incentive that forced the expansion of higher education toward an education and research model suitable for a changing national economy.

The academy had resisted this broadening of its charge. Scientism, along with the call of America's farmers and an emerging business and professional class for applied training, had been met with severe skepticism. Sectarian-controlled private colleges, which dominated American higher education, looked at the teaching of modern science and the creation of "godless" public institutions as not only a threat to their way of life but as gateways for moral decay. The Morrill Act provided a turning point. The federal government became a critical instigator for change, offering an endowment in the form of federal land for possible use by both public and private institutions of higher education. The largess came with a number of stipulations. Income generated by federal scrip could be used for expanding existing institutions and for the creation of new colleges and universities, but only if the institutions included programs in "agriculture and mechanical arts" and only if they adopted two relatively new concepts beyond teaching: scientific research and public service.

Under the Morrill Act and all other federal legislation intended to support America's colleges and universities, it remained the responsibility of state governments to organize education in their respective states and to charter institutions of higher education. This key interpretation of the U.S. Constitution has fundamentally shaped America's multifaceted and decentralized brand of education. The Morrill Act placed the burden on state lawmakers to manage and disburse the profits generated by the land grants. Although federal land scrip for education had been provided in the immediate post-Revolutionary era, the Morrill Act remains the largest single allocation of

resources for higher education and is closely matched only by the surge of federal funding in the immediate post-Sputnik era.

The Morrill Act provided a grand vision of a network of colleges and universities tied to local economies and needs. It was a catalyst for states to establish one or more land grant institutions, and it significantly influenced the growth of institutions that began to call themselves research universities. Yet the income generated by this seminal legislation and managed by state governments was largely exhausted by the 1890s. In most states, land grant funds had been spent on a relatively small number of public and private institutions that could not possibly meet the appetite of a growing American population for higher education.⁵ The burden of funding America's public research universities and expanding higher education opportunities fell to state governments, many of which had earlier assumed that federal grants would prevent the need for large state investments—at least for the foreseeable future.

At the turn of the century, state lawmakers began a more concerted effort to establish and expand existing public colleges and universities. On the one side, the drive of individuals to succeed in an increasingly complex and technical marketplace created a new demand for postsecondary education. On the other side, state lawmakers and business interests increasingly recognized higher education as a means to improve the skills of the nation's labor force and the productivity of major sectors of its economy. This widely recognized link—of investment in higher education to socioeconomic mobility and economic prosperity—drove one of the most important social engineering experiments in American society. No longer should postsecondary education be reserved for the affluent or for a restrictive definition of an intellectual elite; it should train, accredit, and impart social status to a larger mass of students, irrespective of social and economic class, and it should create knowledge to serve the needs of society. As with the common school of the 1800s, the concept of broad access to higher education eventually became an accepted part of the American political landscape and increasingly occupied the time and thoughts of lawmakers and the public.

Older, prestigious private institutions, such as Harvard and Yale, considered this change in societal values and incorporated more expansive admission practices. Though these institutions developed more applied curricula and expanded their research activities, they remained largely divorced from this profound public sector movement toward mass higher education.

Writing in 1903 and after serving for twelve years as the founding president of Stanford, David Starr Jordan professed that public higher education

was the key to America's evolving social and moral experiment for two reasons. First, private colleges and the small number of private research-oriented universities remained, on the whole, tied to the relatively small, sectarian communities that created and sustained them. These institutions had no inherent need or desire to expand access or to meet the regional educational and economic needs of a rapidly expanding and increasingly diverse population. Second, these institutions could not garner the fiscal resources necessary to keep pace with the need for a better-educated society. Only public coffers could subsidize such a massive and consistent commitment of resources and institution building. In the final analysis, concluded Jordan, private higher education could not fulfill the needs of a democratic society; conversely, it was the obligation of the state to furnish education to the large mass of Americans and ultimately to empower the average citizen. While reserving an important role for institutions such as Stanford, Jordan pronounced that the growth of public higher education was the "coming glory of democracy," the "most wonderful thing in educational development since Alfred found Oxford and Charlemagne Paris."⁶

In an iterative process that reacted to and shaped this new market demand, policymakers in government and within the nation's growing education community redefined the purpose of higher education. Public institutions, responsible more directly to the wants and economic desires of Americans and chartered and funded by lawmakers, became the primary vehicles for redefining the purpose of American higher education. It did not happen overnight. The ever-expanding role of public higher education in society has a long and complicated history, with significant differences between regions. Along the eastern seaboard, for example, the infrastructure of private institutions essentially delayed the growth of public higher education. In the more recently settled American West, the lack of an existing network of private institutions created a vacuum which lawmakers rushed to fill by creating new public institutions. Among southern states, a strong antistate political culture and a society rooted in an agrarian economy and racial segregation resulted in the slow development of higher education institutions, both private and public.

World War II provides an important transition point in this long process of institution building. Before the war, more students attended private than public colleges and universities. Particularly in states along the eastern seaboard, private institutions dominated. However, the college-going rate was relatively low. Five years before America's entry into the war, only 12.5 percent of high school graduates continued their education in post-

secondary institutions. The age of the robber baron and the image of the entrepreneur with moderate or no formal education driving economic innovation, though faded, still remained. Access to postsecondary training was related largely to economic and social class, often to the exclusion of the middle class, women, and ethnic groups. Higher education was a luxury to the mass of Americans—particularly under the demands of the Great Depression.

The post–World War II years ushered in the era of mass public higher education. By 1960, the national college-going rate of high school graduates was 45 percent. In 1975, it was 51 percent. In 1990, that figure had grown to nearly 60 percent. Equally important, the number of students over twenty-four years of age increased dramatically, reflecting the broadening of both academic programs and the demand for “lifelong learning.” As a result, enrollment growth since the war has been staggering. In 1945 the nation’s colleges and universities enrolled 1.5 million students; by 1990 that number had increased to nearly 15 million.

Public institutions are the bulwark of this movement toward mass higher education. Nearly three-quarters of all students participating in higher education now attend public institutions. The surge in the number and size of public universities also supported a dramatic increase in graduate and professional degree programs. In 1900, a total of only 382 doctoral degrees were granted; by 1960, and shortly after the scientific and political spectacle of Sputnik, the number of doctoral degrees had grown to nearly 10,000; and by 1990 the number of doctoral degrees conferred in the United States was approximately 35,000.⁷

Access to higher education has become both a real and imagined determinant for success in American society. As David O. Levine explained, “Not only must lawyers and doctors attend college before beginning professional training, but would-be entrepreneurs and social workers also must acquire several years of postsecondary schooling before Americans deem them qualified to practice their chosen vocations.”⁸ American popular culture also embraced education as a panacea, a new American religion with moral, applied, and intrinsic values. In the nineteenth century, the focus was on building the common school. In the twentieth century, higher education became the new mantra. Americans, explained Martin Trow in 1970, are increasingly sending “their children to college to share in the high culture, for its own sake as well as for its instrumental value in gaining entrance to the old and emerging elite occupations.” Higher education, concluded Trow, “is assuming an increasingly important role in placing people in the occupa-

tional structure and, thus, in determining their adult class positions and life chances.”⁹

Another important yet largely unstudied stimulus for the expansion of public higher education—one examined in this book—is the perceived role of colleges and universities in regional economic development. As states assumed the burden of financing and expanding higher education, communities increasingly saw the establishment of public colleges as vital components for training and educating the local labor market, for infusing state funding into their economies, and for attracting businesses. The aphorism that all politics is local has special relevance to the development of state systems of higher education. The political repercussions of the rising demand by communities for state-funded institutions were profound: Representatives in local and state governments, particularly after World War II, engaged in heated races to gain new campuses and to expand academic programs and enrollment at existing colleges and universities. To be without a public college or university was, and continues to be, a decided market disadvantage.

In the initial rush to build new and primarily public institutions that began in the early part of this century, most states failed to coordinate their network of institutions. As described by Lyman Glenny in a 1959 study of state systems of higher education, American higher education represented “a happy anarchy” of colleges and universities. The wave of new and primarily public institutions was the result of the entrepreneurial drive of local interests, often businessmen and their representatives in state legislatures. Public colleges and universities usually had their own governing boards. They independently created their own academic programs and sought students for admission with little, if any, regard for the mission or programs of other colleges and universities, public or private.¹⁰ Not until after World War II did most states attempt to restructure and give coherence to their evolving public systems of colleges and universities. To expand access and to control costs, state governments attempted to impose order on what were often politically powerful and competing institutions.¹¹

The California Idea

California departed significantly from this national trend. Around the turn of the century and in the midst of a powerful political reform movement intended to reshape California society, three interrelated goals emerged that would redefine the notion of educational opportunity. First, advocates for ex-

panding higher education argued that all high school graduates should have the opportunity for postsecondary training. It was a compelling interest of the state, they claimed, to expand access and empower the individual to participate in the economic life of the state and in its social reform movement. Second, these advocates also argued that California government should aggressively expand the number of public higher education institutions throughout the state, especially near growing population centers. Finally, in the course of this expansion, new types of institutions and academic programs should be established to cater to the social and economic needs of a rapidly changing California.¹²

A higher education system to match the ambitions of Californians—this was the call of California Progressives engaged in one of the nation's most potent reform movements between 1900 and the end of World War I. The translation of these goals into concrete and meaningful institution building created a powerful and influential model that exuded the values of America's emerging middle and professional classes. By 1920, California government had established a formal and coherent hierarchy of public institutions that could be found in no other state. California boasted the nation's first and largest network of public junior colleges. The University of California was America's largest postsecondary institution in enrollment and was also the nation's first multicampus university, with campuses in Berkeley and Los Angeles and with research stations along the coast and in agricultural centers of the state. It was also the first public university to receive direct budget allocations for research from state government. Completing the creation of a tripartite system, the state began the transformation of a set of teacher's colleges into regional and liberal arts colleges. This was a transition that came slowly and was accompanied by heated debate.

These many accomplishments came within the framework of two important values that shaped policymaking and further distinguish the California Idea. The first relates to balancing the three goals of broad access, affordability, and quality—what has proven to be one of the major challenges for American higher education and for other national systems of public higher education. Most states did not fully understand the difficulty of creating this balance within their evolving public systems, and they often gave the most weight to access and affordability. Particularly in the Midwest, states often responded to populist demands for greater access by attempting to make their land grant universities all things to all people, incorporating not only the goals of a research university, but also the educational responsibilities

and admissions standards of a junior college, including vocational training. These accommodations often led to a decline in the quality of these institutions. California explicitly rejected this path. Each segment of the tripartite system was assigned a specific and rather rigid mission. The objective was to decrease redundancy among the state's network of colleges and university campuses and to encourage public institutions to excel in their own sphere of responsibility.

The second value that distinguishes California within the landscape of American higher education is the concept that the state's public colleges and a multicampus university are part of a logical and interconnected system. As noted, many states attempted to tie together their collection of public institutions by centralizing them under a single board, particularly in the post-World War II era. Creating a coherent system of higher education was, essentially, a top-down process, imposing change on the culture and function of existing institutions.

In California, integration was created not at the governance level but within the operational aspects of each institution and at the earliest developmental stages of the tripartite system. As early as 1910, matriculation agreements linked the tripartite structure: A student at a junior college who completed a two-year degree program accredited by University of California faculty would have guaranteed admission to the Berkeley campus. A similar guarantee existed by the 1920s for undergraduates attending California's teachers colleges. Within the rubric of California's "educational ladder," the university played a central role in management. Its faculty helped to develop the idea of the junior college, formulated the concept of the associate of arts degree, set standards, and accredited junior colleges and high schools. For a time, public funding of high schools was directly tied to university accreditation. Articulation agreements and accreditation provided formal ties within the state's public higher education system, in effect making it greater than the sum of its individual parts.

Some eighty years after the invention of the state's tripartite system, its conceptual framework remains largely intact. Today, California's massive effort to invest in human capital and research includes the University of California, the California State University, and the California Community College systems, each with a mission that reflects the vision of California's Progressives and each with its own governing board. Nearly 2 million students are now enrolled in more than 140 campuses. Combined with a relatively small number of traditional private institutions, such as Stanford and

Caltech, California stands as an internationally renowned center for higher learning.

In retrospect, the tripartite structure has proven a remarkably durable and flexible system for expanding educational opportunity and for meeting the growing and evolving training and research needs of California. During the 1920s, due primarily to the proliferation of junior colleges and the immense size of the multicampus University of California, more Californians went on to a higher education than did residents of any other state. In the midst of the Great Depression, public colleges and universities absorbed a portion of California's labor pool and trained students for emerging sectors of the state's economy. During World War II, the size and academic quality of the University of California attracted federal funding for science that helped drive new technologies, created the national lab system, and helped support the tremendous wartime growth in the aeronautics and electronics industries. In the cold war era, the state's tripartite system grew dramatically in enrollment and academic programs, playing a key role in California's rise as a major economic force in high technology. The location of Silicon Valley, the concentration of biotechnical firms, and the growth of communications industries all relate directly to the productivity of California's mix of public and private higher education.

For the California taxpayer, the tripartite structure has also proven extremely cost-effective (a topic discussed in the epilogue). The reasons are numerous. The early development of the junior college, in particular, offered a relatively efficient mechanism for expanding educational opportunity under the idea that not all students were prepared or able to enter the university. The monetary focus on the University of California system as the primary state-funded source for research also controlled costs. As a result, the state's investment per student in public higher education has historically been rather low in comparison with other large state educational systems. In 1960, for example, California ranked twenty-fifth in the cost per student funded by state taxpayers—just below Alabama and South Carolina. Since that time, the cost per student has remained at or just below the national average.¹³

It would be a mistake, however, for the reader to begin this story thinking it chronicles a slow and rational march of policymaking. California's path toward a vast network of public college and university campuses is intertwined with sharp political battles, power politics, racism, sexism, sometimes slow adaptation to economic change, miscalculations, and poor decisions with unforeseen consequences. The twists and turns are many. As this nar-

rative describes, the development of California's higher education system is intricately tied to the often turbulent and certainly spectacular history of California.

Population Growth, Political Culture, and Higher Education

In explaining why Californians developed their pioneering system of higher education, two important themes are discussed in this study. The first relates to the state's unparalleled population and economic growth and the subsequent emergence of a political culture that profoundly shaped institution building in the state. The second relates to the process of policymaking and the powerful role of the University of California in creating the tripartite structure.

The terrific energy of a state rushing to redefine the American Dream has its roots in California's argonaut beginnings. Yet, after the initial rush for gold, California soon gained worldwide attention for other attractions: cheap land, a moderate climate, employment in agriculture and industry, a sense of a new beginning without the difficulties of the frontier, and the ideals, if not the reality, of a classless society. As a result, the initial population surge was followed by successive and massive waves of new Californians. Unlike most of the American West, California not only quickly rivaled the dense population of most eastern seaboard states, but its gold rush beginnings and subsequent economic development concentrated a high proportion of its population in urban areas. By the turn of the century, California had 1.5 million people, making it the fifteenth largest state in the country. It also had a population evenly divided between rural and urban areas—a transition point not reached in the United States as a whole until 1920. Depression and war only further catapulted California toward its destiny as an economic powerhouse. "California has not grown or evolved so much as it has been hurtled forward, rocket-fashion, by a series of chain-reaction explosions," stated Carey McWilliams in 1949 and in the midst of yet another surge in immigration to the state. "In California the lights went on all at once, in a blaze, and they have never been dimmed."¹⁴

Nineteen years after World War II, California celebrated its new status as the nation's most populous state when it surpassed New York. Governor Pat Brown designated a day for his fellow Californians to honk their horns and help announce to the world the state's new status and its unique place in American history: the ultimate land of opportunity, only distantly rivaled

by other states in the Union. This was more than self-proclamation. California was the focus of a national press that looked for affirmation of America's greatness in the cold war era. No state paralleled California in its population and economic growth. No other state had media coverage to reinforce its self-image—California had Hollywood. "California is a window into the future," remarked *Look* magazine in the wake of California's new status as the nation's most populated state." [It has] the most fertile soil for new ideas in the U.S. The migrating millions who vote with their wheels for California are responding not only to the lure of sunny skies, but the lure of opportunity."¹⁵ Though the image would be tarnished by the upheavals of the 1960s and by a renewed recognition of the complications of such a huge and diverse society along the Pacific, California's allure remains strong.

Today, California has over 31 million people and an economy that, if it were a country, would rank among the top seven in the world. Thus far, every generation has seen the state's population nearly double. Throughout much of this expansion, Californians have espoused what might be termed the "politics of optimism": a sense of destiny and confidence in their ability to shape the future. The caveats to this positive self-image are many, constrained by the realities of economic recessions, the consternation of race riots, and the pervasiveness of poverty. However, this sense of fate and glory, what Peter Schrag has called the "re-rendering of the old myth of El Dorado," is a powerful part of California's history, affecting not only the average citizen, but government itself.¹⁶ California sought to both nurture and anticipate population and economic growth, making large public investments in the state's infrastructure and public institutions, including higher education. The innovation of the tripartite system is, in no small measure, a reaction to this constant desire to serve the expanding needs of a burgeoning population and economy—the efforts of an activist state government to shape the future.

California's first decades of statehood brought a mix of new blood and ideas with reliance on existing models of civic institutions found in the home regions of immigrants. A strong contingent of Yankees espousing the fervor of Whig-Republican ideals was particularly important in this early period of policymaking. As in other states, establishing a public university was viewed as an avenue for social and economic mobility and as a primary source of training and research for agriculture.

In California, it was also seen as an institution that could provide social and economic stability within a new society created by fortune seekers. A public university, it was hoped, would induce civility and culture, and attest

to California's aspiration to be a new experiment in American democracy, despite frontier roots and geographic isolation from the nation's perceived cultural center on the East Coast. In California, pride mixed with status-anxiety, creating a strong desire for a public university and a general expansion of educational opportunity.

By the early part of the twentieth century, higher education gained further relevance. The University of California was a breeding ground for Progressives and a major source for the conceptual ideals of Scientism. It was a public institution that would release California from the rogue clutches of monopoly and rampant corruption. "The university was their Progressive dream come true," remarked Kevin Starr in his study of the Progressive Era. "[T]heir vision of elite high-mindedness in the public interest translated into buildings, libraries, faculty, students, research and teaching programs."¹⁷

Other states, Wisconsin in particular, linked their political reform movements to the expansion of their state universities. Yet the saliency of higher education to California's reformers transcended the public university in ways that were unique and influential. California Progressives translated higher education into a public good that needed to be allocated in a rational, cost-effective, and egalitarian way. University leaders such as Benjamin Ide Wheeler (president of the University of California between 1899 and 1919) and Alexis Lange (dean of the School of Education at Berkeley) provided ways to accomplish this, while protecting their vision for the University of California. They argued and lobbied for the establishment of the nation's first network of public junior colleges and an expansion in the number of state normal schools.

Lange, known among his contemporaries as the father of the junior college movement, argued that each of these institutions would serve the growing appetite of Californians for access to postsecondary training. Each would also deflect demand from the University of California and would allow Wheeler and his successors to pursue the relatively new model of the American research university: a selective institution in admissions, focused on advanced training, research, and public service. In no small part, the tripartite structure that emerged was built not only to serve a Taylorite vision of specialized institutions but also to support the aspirations of the University of California.

In successive years, the political power of the University of California acted as an important conservative force for maintaining the tripartite structure, strengthened politically by its elevation in 1879 to a public trust under the state constitution. Few public universities have enjoyed the level of au-

tonomy granted to the governing board of the University of California. Attained during a turbulent period of constitutional reform in the late 1870s, the university's Board of Regents assumed a level of independence that buffered it from sometimes rancorous state politics. More importantly, this autonomy gave the board, the university president, and faculty the ability to develop academic programs and make internal management decisions—including developing new campuses and setting selective admissions standards—enjoyed by few other public universities.

University officials and key legislators constructed the legal foundations of the tripartite system in an era of consensus policymaking. However, consensus would soon dissolve into conflict. The emergence in the 1920s of the regional college movement in California created a new rival for the university, fighting for state funds, academic programs, influence in the economy, and the loyalty of lawmakers and the public. The University of California, its alumni, and its political friends argued that state colleges should focus on educating teachers, which was their historical mission. Increasingly, supporters of the state colleges argued for the maturation of their institutions. Proposals emerged for new campuses, for four-year degrees in a number of fields beyond teacher education, and for master's and professional programs in areas such as engineering. The state colleges found support in local communities, in part because of frustration with the University of California. Although a campus of the university was established in Los Angeles in 1919 and another in Santa Barbara in 1944, such geographic expansion was reluctantly undertaken by university officials. The university's unusual status as a public trust meant that lawmakers could not create new campuses by statute. They needed the agreement of the Board of Regents, who sought to focus funds and energy largely on their campuses at Berkeley and Los Angeles. Hence, the only route for lawmakers to expand educational opportunity was to create new state-funded regional colleges and encourage the growth of junior colleges.

From the 1920s up to 1960, the regional college movement gathered up steam, despite the political opposition of university officials. Particularly in the post-World War II era, the battle over the future of the tripartite structure intensified, and the university's political influence to defeat legislative bills and to restrict the growth of state college campuses and programs waned. By the late 1950s, three interrelated factors raised the real possibility of a major reorganization of the state's public higher education system under a single "superboard": one, the infighting between the university and the state colleges; two, the sometimes frantic attempts of lawmakers to cap-

ture the political prize of a new campus; and three, the spiraling costs of expanding a higher education system increasingly subject to ad hoc policy-making and entrepreneurial efforts of local communities. Despite significant state budget deficits, local representatives scrambled to pass legislation to get a new campus in their districts.

As the following narrative details, California's 1960 Master Plan for Higher Education provided resolution to this debate and a path for ordered growth in the state's higher education system. The Master Plan was the result of a negotiation process between the higher education community and lawmakers that, in the end, preserved and codified the best aspects of the California Idea in public law and numerous agreements. Conversely and perhaps more importantly, the plan ended the threat of lawmakers to reorganize California higher education under a central governing board. The Master Plan renewed and redefined a social contract with the people of California to expand access to higher education. It also stands as one of the most profound and influential efforts at socioeconomic engineering in post-World War II America—one that remains the focus of interest nationally and internationally as a model for planning systems of higher education. Yet, as this history explains, it did not invent or even reinvent California's system of higher education.

A New World?

In his seminal 1963 study of the modern university, Clark Kerr stated that higher education was the "prime instrument of national purpose," the essential element for developing the "knowledge industry."¹⁸ Since then, American higher education has become a \$140 billion sector of the national economy, with the vast majority of resources going to public institutions. No other nation has a similar array of public and private colleges and universities that feed the technical and professional labor pool and research needs of a postindustrial economy while also providing broad access and the promise of socioeconomic mobility. America's multifaceted higher education institutions, despite their many failings and redundancies, have proven to be a major market advantage in the new global economy.

California, in particular, is a source of inspiration and study for nations caught in the complexities of transforming an elite and relatively small network of institutions into high-access, populist vehicles for social change and research.¹⁹ A similar transition was undertaken long ago in California.

Like the transatlantic influence of the German research university during the nineteenth century, the movement toward mass higher education in America is a model aspired to, in one form or another, by other nations. "Higher education," noted a 1993 report by the RAND Corporation, using the lexicon of the late twentieth century, "is increasingly perceived as America's principal point of comparative advantage against international competition. Human capital is clearly becoming the central engine for economic growth, and human capital is the main product of higher education."²⁰ Of all states in the Union, California's higher education system provides the greatest success story of a broadly accessible and high-quality network of colleges and universities.

Yet, California's tripartite system and, more generally, American higher education have entered a new era of transition. There are a number of factors that will alter the structure and delivery of postsecondary education in the new millennium. For one, operational costs have been rising. Since World War II, these costs have far outstripped other major sectors of America's economy. Traditional institutions, one might argue, appear to be inherently inefficient, much like the nation's health care profession, which is now undergoing a major restructuring process. One result of these soaring costs has been a rise in tuition that has outpaced the cost of living. It has also resulted in rising student-to-faculty ratios—an important gauge of the quality of the traditional college and university with its dependence on human contact and mentoring. Add to this conundrum limited public resources and a political era that embraces small government, and you have a corresponding erosion in public funding for public higher education. All of these circumstances pose challenges for California's higher education system—a system that is under increasing strain from the pressures of growing enrollment demand, battles over affirmative action, and a shift in political culture that, thus far, is extremely reluctant to invest in its infrastructure of public institutions.²¹

Perhaps more importantly, a relatively new dichotomy has emerged that will test the resilience of California's and other states' systems of public and private colleges and universities. While the consensus that formed in the post-World War II period to fund and expand higher education has dissipated, the market for new forms of education and training continues to expand. The arrival of "virtual universities" and other technologically induced innovations, intended to expand access to train and to retrain the nation's labor force, provides an important and relatively new catalyst for change. The combination of expanding demand and technology-driven forms of educa-

tion and training may substantially alter what Virginia Smith, the former president of Vassar College, has called the monopoly of traditional colleges and universities in the postsecondary market. The ability of these institutions to "protect their almost exclusive share of the market of certain students who seek higher education," she predicts, "cannot be sustained."²² Indeed, the monopoly of what have become the "traditional" colleges and universities is already eroding. However, this does not necessarily imply their demise. The market for higher education is growing, creating an environment for a greater array of institutions and providers of training and research.

Peter Drucker and others have warned that big universities will be relics of the past within the communications environment of the new century. Despite the proliferation of electronic communication, however, the physical cohabitation of a community of students, scholars, and researchers remains salient. This explains, in part, why the vast majority of biotechnology businesses are located within a mile of a research university—linked physically and not just electronically to the research and training productivity of the academic community. Universities provide "a critical mass of intellectual collegiality," notes Denis Cioffi, "which, although supplemented by modern high-technology toys, will not soon be replaced electronically."²³ The collegiate experience also fulfills a logical and productive transition for Americans moving not only from school to work but also from the parental household to independent living.

The growing demand for higher education and for university-based research and training suggests a greater diversity of choices and institutions, not a paradigm shift to a singular model of virtual universities and on-line education. However, the savvy of existing institutions to strategically and aggressively adopt new technologies will likely be a key variable in determining which will be the leading institutions of tomorrow. As the world slides increasingly toward a postindustrial and technology-driven economy, the shape of existing institutions will change, and new modes of developing human capital will emerge. What will American higher education look like in twenty years? This question is beyond the scope of this book. Suffice it to say that forces of change and the possible magnitude of organizational restructuring appear to be similar in scope to those of the last major period of transformation in American higher education in the early part of the twentieth century. With the largest system of public universities in the nation, within the most demographically diverse state in the Union, which also contains the highest concentration of high technology businesses in the world,

one cannot help but think that California will continue to be on center stage. As outlined in the epilogue of this book, innovative change on the scale first imagined by California Progressives will require significant reflection on the purpose of the academy and a greater recognition of the pivotal role of higher education in the economy and society of tomorrow.