

PART ONE: ON COMMUNITY COLLEGES



Chapter One

The Perfect Storm

COMPONENTS OF THE PROBLEM

Upon return from a trip abroad and having not picked up a newspaper or turned on a television, I was faced with the surprising collapse of the American banking system. This was soon compounded by the 2008 foundering of the mortgage lending industry and rising unemployment figures. As a current student, fear of not being able to find work was a real concern and I contemplated spending more time in academia. I knew I was not alone in this prospect as Americans started to return to universities, technological schools and community colleges to retool. Doug, a friend of mine working at a community college, echoed my concerns and confirmed the notion that a portion of society was, in fact retooling. I recall a conversation with Doug we had several years earlier about his job security, rising gas prices and how he was changing his lifestyle to fit the tough economic times prior to the recession. Now, still concerned with his personal circumstances, he was telling another story. He was concerned about funding and educational accessibility.

This conversation led me to think that this project was not just about finding a way to better design a campus, but to help create economic, social and environmental accessibility through the built environment. To do this, it is important for designers to understand the components of the problem, the dynamic history of the subject and current strategies being employing. -Barry Gordon

This chapter presents an account of how the economic

crisis, budget cuts and spiking enrollment have conspired to create a perfect storm for higher education. It will then provide a brief history of the American community college, present some current innovations community colleges are pursuing and how they are changing their campuses. The chapter concludes with a discussion of the limited literature on community college housing.

Strong competition for scarce state funding.

Community colleges across the country already have to stretch their dollar further than their four-year counterparts prior to the current economic hardship (Anon. 2009), but how much farther would they have to stretch their funding now? Despite the massive, yet temporary, federal stimulus package's ability to relieve state and federal fiscal shortfalls in the short term (\$150 billion over fiscal years: 2008-09, 09-10, 10-11), the projections show that increases in state tax revenues will not rise sharply enough to avoid the need for more budget cuts or tax increases in the future (Donald Boyd 2009).

In fact, the current recession is forcing state legislatures to cut higher education funding, leaving schools to compete for limited resources at the time when enrollment is rising (Bers 2008). Boyd's (2002) study, using an adapted methodology from Hovey's (1999) survey; published by the National Center for Higher Education Management Systems, says that several states, including Oregon, have been increasing state funding on primary education and healthcare, while budget shortfalls in every state in the country leave higher

education with less financial support.

When comparing the national, state & local revenue surplus (gap) from Boyd's (2002) to Hovey's (1999) study the results are less grim on the national average -3.4 (2002) versus -3.8 (1999), but worse in Oregon -1.3 (2002) compared to -.1 (1999). In another comparison, Katsinas (2005) and Hovey (1999) both recognize increased spending on Medicaid, as the primary reason why state budgets cut higher education financial support. Additionally, higher education is typically the last and largest discretionary item to be decided in most state budgeting processes, leading to tuition hikes, accessibility, and affordability issues (Katsinas et al. 2008).

Tuition, enrollment & discretionary spending.

Community Colleges have been mentioned in most presidential State of the Union addresses over the last decade. In 2005 and 2010, Presidents Bush and Obama both referred to community colleges, highlighting concerns of accessibility and affordability, yet "presidential attention does not translate into hard dollars to finance preservation – much less expansion – of the open door college" (Katsinas 2005). In fact, according to the Washington D.C. based Center on Budget and Policy Priorities, at least 44 states faced shortfalls in their 2009 budgets. The effects of these financial shortfalls can be seen in California, Massachusetts, New York and Oregon:

- On its website, the Community College League of California reports that proposed bud-

get cuts of more than \$332 million could force the Golden State's 110 community colleges to turn away 262,845 current students;

- The Boston Business Journal reports that Massachusetts' community colleges face some \$12 million in budget cuts;

- New York Governor, David Paterson proposed eliminating a combined \$348 million from the State University of New York (SUNY) and City University of New York systems (Anon. 2009); and

- Oregon was one of 20 states with community college funding formulas that did not receive full funding for funding year 2007-2008 (Katsinas et al. 2008).

With four-year universities raising tuition, students, short on money; are being driven to community colleges at the same time laid-off workers and recent high school graduates are trying to enroll (Katsinas et al. 2008; Greengard 2009). This situation – what Greengard describes as the perfect storm of crumbling economy, budget cuts and spiking enrollment – is forcing schools to place enrollment caps on traditionally open-enrollment policies (Greengard 2009) or accept the students with no additional funding.

The rapid reduction of federal and state appropriations continues to leave community college leaders struggling to

maintain their institutions fiscal viability. The community college model in the United States is in the midst of a significant transformation, giving them the opportunity to assert their creative thinking and to help adapt in this erratic fiscal landscape to ensure access to those that need the community college most.

This project focuses on trying to help community colleges adapt in a fiscally challenged time through a process of participatory planning and design. But to do that, we must understand how the changes have come to pass.

ADAPTATION

“The community college is the most flexible of educational institutions, keeping in touch with local needs and having the ability to adjust to rapid change.” Community College Journal (Roueche 1995)

Pre-community college. This is not the first time colleges have had to adapt. In the 1930s the cost of attending colleges was on the rise regardless of the negative effects from the Great Depression. At that time, there was no financial aid to students or to struggling professors and institutions. Professors accepted scrip (IOU's) – or were not paid at all (Thelin 2004). When jobs and money were in short supply, the best option for students and professor was to continue as business as usual until something changed.

The federal government provided some relief through the Federal Employment Act. Under the Work Progress Administration (WPA) and the Public Works Administration (PWA) campus construction projects were undertaken – although this was short lived. The most significant transformation came from the newly appointed president at Harvard University, James Conant. He introduced what would become ‘need based financial aid’. This effort pushed higher education, in that era, towards mass participation.

Another change occurred in 1944 with the GI Bill. According to Edwin Kiester, Jr., the bill guaranteed veterans “a year of education for 90 days’ service, plus one month for each month of active duty, for a maximum of 48 months. Tuition, fees, books and supplies...paid directly to the college or university” (Kiester 1994). This infusion of potential enrollees initiated a robust advertising and recruitment program that resulted in many colleges and universities experiencing a doubling of enrollments between 1943 and 1946. This quick increase in enrollment prompted a wholesale change in the application and evaluation policies and increased the use of standardized testing throughout American higher education.

The President’s letter. As enrollment increased due to the introduction of the GI Bill, President Truman saw a need for widening educational opportunities. In a 1946 letter, President Truman asked the presidential commission on higher education to examine “ways and means of expanding educational opportunities for all able young people; the adequacy of curricula...the desirability of establishing

a series of intermediate technical institutes; the financial structure of higher education with the particular reference to the requirements for the rapid expansion of physical facilities" (Woolley and Peters). The Commission's recommendation highlighted the need for community colleges in the United States.

Although state and local governments supported an expanded higher education system, state and local governments vehemently opposed the committee's recommendation, due to the high level of federal involvement. The U.S. Constitution reserves the topic of education for state and local government. The 10th Amendment of the U.S. Constitution reads, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people." Soon after the federal government brought the topic of higher education to the attention of the public on a national level, the state governments, private institutions and public colleges and universities followed the commissions lead to carry out its recommendations on their own. Soon after, significant national and state investment in higher education was regarded as a way to bolster Americans technological and scientific dominance in the early days of the Cold War (Astin 1993).

In the last sixty years, community colleges have reached the commissions goal of broadening access to higher education for Americans at all socioeconomic levels by providing educational opportunities for low-income students, minor-

ity students, and students interested in special vocational education (Medsker and Tillery 1971). A 2006-2007 survey by the National Center for Education Statistics, published in 2008 states that there are 1,045 community colleges in the United States teaching nearly 6.2 million students annually, which closely mirrors the number of students enrolled in public four-year colleges. The number totals 1,600 when including branch campuses of community colleges (Provasnik and Planty) (see figure I-1). While community colleges support a considerable number of part-time students, nearly 40% of students attend community college full time (American Association of Community Colleges 2008). With



Figure I-1
Community colleges in the United States. Image available at aacc.nche.edu.

decreased funding and enrollment on the rise, it is time for the fringe community college to evolve once again.



Figure 1-2
Butte College pv shaded
parking. Image Barry
Gordon.



Figure 1-3
Lone Star CyFair's new
college campus. Image
available at <http://www.lonestaredu/cyfair>.

MAKING SENSE OF CHANGE

Contemporary innovations. In 2000, the United States Census Bureau developed three population growth scenarios for the United States at low, medium and high projections. The medium and high estimates are projected at 571 million and 1.26 billion Americans by 2100. When the U.S. population surpassed the lowest projections in 2006, the Census Bureau recalculated its projections stating that they could reach 400 million Americans by 2039. Presently, half the world's population lives in urban areas (United Nations 2010). A recent article in Planning Magazine is one among many professional periodicals asking, "[w]here will the roughly 100 million more Americans live" (Lang, Alfonso, and Dawkins 2009)? What development patterns will be used? Are they the most efficient patterns? What is the role of the present community college model in this age of fiscal insecurity? Changing demand from students and employees coupled with the economic and demographic shifts in society are forcing institutions of higher education to reassess their roles in the wider community (Harrison and Tsao 2006). Through research and site visits, the Urban Design Lab found three contemporary innovations that are worth reviewing.

1. Interweaving Sustainability. We visited thirteen community colleges as part of this research and many of them are interweaving sustainability into their educational mission and built environment. Three-hundred university presidents and chancellors in over forty countries, including Lane

Community College, have already signed on to the American College & University Presidents Climate Commitment, which calls for "each participating institution to develop a comprehensive plan to reach climate neutrality as quickly as possible...in an effort to reduce and offset emissions of potentially harmful greenhouse gases." Institutions are making the effort to include many of the following strategies in to their operations: buying Energy Star compliant machinery and computers; constructing LEED silver certified buildings (Cape Cod Community College, Butte College); installing a biomass heating facility that saves \$2.5 million in electricity a year (Mount Wachusett Community College) (Wong 2008); Butte College plans on adding more solar photo voltaic panels than any other institution in the country (see figure 1-2); and by installing a solar panel array and electric vehicle charging stations (Lane Community College – planned). Interweaving sustainability usually means requiring an up front investment creating cost savings in the long run. But rarely do we find ourselves in a place when doing the right thing can also be prudent. This may be one of those times.

2. Facility Design. Another key innovation that institutions rely on is a plan that matches their educational mission with their physical plant. Community colleges have the responsibility to provide facilities that meet the goals of educational and institutional excellence. Joch (2008) asserts that there is a connection between innovative new approaches to community college facility designs and academic success of its students, faculty and the institution itself. Two schools that Joch highlights have "captured the connection between

an innovative approach to facilities design and academic success.” The first is Lone Star-CyFair, located in suburban Houston (see figure 1-3). Lone Star-CyFair has created a new campus that is noted for its unique clean slate approach to design, creating – what they call an oasis – of modern, modular classrooms, with outdoor spaces to study and socialize set within a native and natural environment. Lone Star-CyFair has seen “students happy and excited to be on campus” in an environment that supports learning in a collaborative environment. The second is Maryland’s Cecil College Bainbridge campus, located on a former Naval training facility. A developer gave the college a 15-acre parcel, part of a 1200-acre land swap that will eventually include commercial, residential and public facilities in a phased development plan. To ensure growth in enrollment, the school has created partnerships with local public schools, and the state-of-the-art facilities have helped attract faculty and students, making recruitment easier.

3. On-Campus Housing. In an informal poll of University of Oregon undergraduate and graduate students, the UDL asked “how many people lived on campus during their undergraduate education?” Four out of five respondents said they did, and that at least one year was mandatory. In further discussion, most of the respondents commented that they thought the mandatory housing requirement was to acclimatize new students to college living and generate revenue for the institution. They all said that benefits of living on-campus include, “making friends” and added to the “true college experience.” There are important findings

from literature on well-planned and administered residence facilities at four-year institutions that back up this informal poll. Some of these benefits include: positive improvement of academic performance, student persistence, and higher level of student involvement of on-campus and extracurricular activities (Chickering and Kuper 1971; Chickering 1974; Pascarella and Terenzini 1991; Astin 1993; Moeck 2007). It would be reasonable to hypothesize that this would hold true for on-campus housing at two-year institutions because students would spend less time traveling to and from school and would have more opportunities to create bonds with faculty and other students outside of their academic activities.

LITERATURE ON RESIDENTIAL COLLEGES

Universities and colleges have provided on-campus housing for their students on this continent as far back as Colonial times. Harvard, established in 1636, added its first student housing in 1645, almost four-decades before the second college, William and Mary in Virginia, 1693, was founded. The colonial educational model, later the America model, followed the traditional English archetype, where students and educator(s) lived and studied together. Community colleges have been in existence for approximately one-sixth the time of what we now know as, four-year institutions. This is reflected in the quantity of literature found on on-campus housing. Less than ten studies of on-campus housing for two-year institutions were found, while there was extensive literature for four-year institutions.

Four-year colleges. The Urban Design Lab found evidence of extensive literature for four-year institution on-campus housing relating to issues ranging from benefits, drawbacks, governance, and operations. The literature pertains almost entirely to four-year institutions (Pascarella and Terenzini 2005; Moeck et al. 2008). In both the 1991 and 2005 volumes Pascarella and Terezini's *How College Affects Students: A Third Decade of Research*, the authors references more than 524 (1991) studies on the effects of residence halls on students in four-year institutions, out of 2,600, the 2005 volume included 176 references to such studies. Moeck notes, "[that] none [of the studies] made reference to community college housing (Moeck et al. 2008).

The literature search for two-year institutions yielded quite the opposite in the quantity of sources found. In one article investigating student perceptions of the academic environment in residence hall on community college campuses, the UDL found "[that] in contrast to four-year colleges no research has been conducted on two-year campus [housing] as of 1998 (Murrell et al. 1998)."

Two-year colleges. A review of the literature has revealed several studies germane to on-campus housing at community colleges. One study, used from the 1980s until 1992, reported the result of CEOs at 244 community colleges. The findings were published as a chapter in a 1987 report issued by the members of the American Association of Community and Junior Colleges' Rural-Small Colleges Commission (AACJC). The survey, created by Summers

and Budig of Vincennes University, reported that a third of respondents who operated residence halls were coed, with an average of five hundred beds per institution. Roughly one half of the 77 colleges surveyed offered housing specifically for student athletes; 17 were dedicated to married student housing; and 12 were for international students (Summers and Budig 1988).

Three doctoral dissertations focus on community college housing. Doggett's study (1981) attempts to learn whether or not community colleges had a logical philosophy related to the roles of residences halls in education and student development. The second, by Catt (1998), focuses mainly on student development theory and how it translated into attitudes and policies that enable student's ability to learn. The third dissertation, by Moeck (2005), built upon these other studies and added questions intended to examine issues related to residential life on community college campuses. Moeck's follow up research on motivation and benefits of on-campus housing on two-year campuses is most relevant to this study.

Motivation and benefits. The UDL felt that it was important to understand some of the motivations of, and benefits for community colleges to develop and offer housing on their campuses since the results of this project yields plans for housing and further development on institutional land. A 2007 survey of community college leaders found five motives behind rural community college leaders reasons for getting involved with on-campus housing (Moeck

2007).

1. The top reason why colleges offer on-campus housing is in commitment to reducing geographic barriers to access.
2. Residential housing allows the college to serve students who live a long distance from the campus.
3. Rural community colleges also offer housing in order to increase the number of full-time enrollments.
4. To attract minority students.
5. To attract student athletes.

In addition, the student services that are offered to full-time residents also become available to commuter students who attend on either a full- or part-time basis. For these institutions, then, on-campus housing allows the college to offer a collegiate experience that includes a broad mix of programs and services that otherwise would be unavailable (Moeck 2005).

In her 2005 published doctoral dissertation, Moeck first pointed out the potential positive financial impacts on-campus housing could have on two-year college campuses (Moeck 2005).

Moeck's research and survey relied on U.S. Department of Education's Integrated Postsecondary Education Data

System (IPEDS) survey data focusing on residential living at rural community colleges. Of the 117 usable responses, "27 (23 percent) were small rural institutions, 75 (64 percent) were medium rural institutions, and 15 (13 percent) were large rural institutions" (Moeck et al. 2007). Her research found that 74% of respondents reported that on-campus housing "provides a positive impact on institutional finances" while lowering transportation costs to commuting students. (Moeck et al. 2007). Only a small percentage of respondents answered the question inquiring about how much money was generated by their on-campus residences halls. "Of the thirty-two that did respond, the average revenue generated...exceeded \$1 million per year." Moeck reports that since IPEDS 2000-2001 reporting indicated average total current funds revenues for all small, medium-sized, and large rural-serving colleges was roughly \$10 million, \$20 million, and \$48 million, respectively (Hardy, 2005), this may be highly significant since for small rural community colleges housing revenues may make up 10 percent of total current funds revenues.

Moeck postulates that this significant revenue stream may be the reason "why half of the rural community colleges responding to [her] survey indicated that their institutions were considering constructing new housing (Moeck, 2007)."

Dreaming of a new community college model. There are many forces upon community colleges that are influencing the rapid adaptation that we see today. The integration of contemporary innovations of on-campus housing

and sustainable initiatives coordinated within new facilities planning is, and has been, creating vibrant, active, educational settings that help create a milieu of collaboration and community. The Urban Design Lab postulate that by blurring the boundaries between corporate, academic, living, and learning, we have the opportunity to dream up a new development typology; to capitalize on community college's existing portfolio of land, while earning additional revenue and amplifying the quality of the user experience (Harrison, Wheeler, and Whitehead 2004). The next chapter will explore the evolution of human settlement and how social, environmental and economic conditions are reshaping the American campus paradigm.

