

A photograph of a park path in autumn. The path is covered in fallen yellow and orange leaves. On the right side of the path, there are several wooden benches. The background shows trees with vibrant autumn foliage in shades of red, orange, and yellow. The overall scene is peaceful and scenic.

Coronavirus: Impact on Campus Planning



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What does the Covid-19 pandemic mean to the future of higher education, institutions, facilities and campuses? Data informs. Bigger may not be better. Flexibility and adaptability are key.

In May 2020, the corridors of higher education echo only with the memories of student laughter and faculty debates. Occasionally, a lone researcher will stoically wheel a piece of equipment past empty conference rooms and classrooms, but no crack of the bat, no squeak of the sneaker, and no cheer of the crowds disturb university sports fields, stadiums, arenas, or recreation centers. Almost every office in every building across vast college and university campuses in the U.S. is unoccupied. Yet the teaching and business of higher education continue without the benefit of the millions of square feet of facilities. Even so, those same universities and colleges still bear the costs associated with financing, maintaining, and operating those facilities. Higher Education institutions cannot remake the campus planning and capital construction decisions of the past, but what can universities learn from the pandemic to shape the campus planning decisions of the future?

ON SHAKY GROUND

Under growing financial pressure, and in the race to attract students, some institutions were on shaky ground before the pandemic hit. As universities continued to grapple with a troubled business model, online delivery models, reduced state funding, growing deferred maintenance issues, and declining enrollments, some institutions have merged or even closed their doors



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by Robert Zemsky, Susan Shaman, and Susan Campbell Baldrige, published just months before the pandemic, the authors observed 10% of America's colleges or universities face significant risk of closing.

Contributing to the stress on the higher education business model has been the cost of owning a growing number of buildings. Since the Great Recession, space growth has ranged from 8.5% to 19%, depending on the institution type. Initially, this expansion was needed to support continued enrollment growth. However, around 2011 a shift occurred, and enrollments began to decline – a change that seems to have gone unheeded by institutions relative to continued space growth. The highly competitive environment apparently only fueled the perceived need for more buildings to provide better housing, dining, recreation, and other amenities to attract students to campuses. In 2015, colleges and universities in the U.S. spent a record \$11.5 Billion on

construction for an estimated 21 million square feet of space. These projects were usually paid for by tax-free bond financing and sometimes driven by a donor 'naming gift' covering less than half of the total cost of the project.

By 2017, 9% of collegiate budgets across the country were used to pay debt service on capital projects. According to The Atlantic, colleges and universities owed \$240 billion based on Moody's bond rating service reports. That amount had risen 18% in five years at public universities. "Just the interest payments come to the equivalent of \$750 per student per year at public universities". Additionally, budgets for university facilities and maintenance had not increased since 2010, resulting in reduced regular maintenance for buildings and infrastructure, growing deferred maintenance backlogs, and an inventory of buildings difficult to repurpose - presenting yet another tough reality that was dragging down

the business plan.

ENTER A GLOBAL PANDEMIC

On 11 March 2020, the threat of the COVID 19 disease was designated as a Pandemic. A few major universities had already begun to transition to virtual instruction and had started to close their campuses. Over the next month, almost every educational facility and learning institution in the United States made a similar transition to virtual learning to accommodate the need for 'social distancing' due to the COVID 19 Pandemic.

When asked by The Chronicle of Higher Education about how the COVID-19 crisis might change that calculation, Bob Zemsky posited that weaker public institutions would undoubtedly be impacted due to reduced or delayed state funding and that anticipated enrollment reductions would also stress weaker colleges. His estimate of endangered institutions increased from 10% in

The College Stress Test to 20% in the short term.

Universities are each losing tens to hundreds of millions through summer 2020. If students do not return to campus in the fall, hundreds of millions more will be lost.

THE FUTURE STATE

Even if universities survive this crisis they will have to re-examine their business models and ask some tough questions. Hiring freezes are already in place at most institutions. Endowments have taken a significant hit in the market downturn, and institutions that rely on those endowments are examining how they can restore their principal and live on reduced distributions. Construction projects are being re-examined and delayed.

Many universities are already redesigning curricula, not only to provide the ability to go online in the fall if necessary, but to provide greater financial efficiency in the long run. Weaker programs will likely be cut, and larger classes will be taught by fewer faculty.



FLEXIBLE APPROACH

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Paradigms will shift as well. Most universities will quickly realize online teaching is not as difficult as they had believed, and many students do well in the virtual environment. As a result, the number of classrooms on campuses could be reduced or leveraged for other programs. Working from home can be efficient and provide focus. Connecting by Zoom or similar video technology can be effective as well. In this new shifted environment, universities may need fewer private offices for faculty, particularly if they are used only 20% of the time. In a more drastic shift and to attract more students, university facilities may,

finally, be used year-round, providing students and institutions flexible programs and degree options not available today.

A recent Harvard Business Review article proposed another flexible approach “...students could take commoditized courses online at their convenience and at much cheaper cost. They can use precious time they spend on campus for electives, group assignments, faculty office hours, interactions, and career guidance, something that cannot be done remotely. In addition, campuses can facilitate social networking, field-based projects, and global learning



expeditions that require F2F engagements. This is a hybrid model of education that has the potential to make college education more affordable for everybody.” Imagine a scenario where campus space use will be more clearly defined and more highly utilized year-round.

Sports programs and related facilities, as confirmed by the Covid-19 crisis, are a financial risk to universities, especially now that there are no basketball or baseball champions to bring in the big-ticket or TV revenues. Most institutions struggle in ordinary years to manage big sports business. Last year the NCAA reported only 29 programs had revenues exceeding expenses, and nearly \$8 billion in expenses had to be subsidized by other institutional resources across the country. Today, every program is losing millions of dollars in revenue, while institutions retain the costs of their largest and most expensive facilities.

Gordian (once Sightlines) was prescient when it reported in 2018, “Many institutions have above average space per student and below

average wealth per student. Any negative return on endowment assets could force these institutions to raise tuition, increase debt or implement austerity measures at a time when they can least afford it. It is crucial for institutions to square their campus growth ambitions with their financial realities to make certain they can afford the long-term costs associated with maintaining their existing institutional assets and today’s ongoing expansion. Their survival may depend on it.”

SUMMARY

The most important lesson learned by higher education during this pandemic is that the cost of infrastructure (energy plants, buildings, roads, landscape, technology, and debt service) is a heavy financial burden to carry when students and faculty are no longer around. Every college and university has looked hard at their business plan these last weeks and been stunned to learn that after salaries, the cost of financing, operating, and maintaining the physical plant is one of their largest expenses. Institutions

are also coming to the painful realization they have strayed far from their core businesses of teaching and research into facilities-intensive businesses of housing, dining, recreation, sports, parking, and transportation. All these can be lucrative but come with a high, inflexible infrastructure cost.

Smart universities and colleges will recognize the need to approach campus planning very differently in the future, starting with an understanding of how much physical plant an institution can and should afford within its business plan. Fundraising must be grounded in an understanding that although new buildings may be easier and sexier to sell, they come with long-term

permanent costs that must be fully understood and embraced before gifts are accepted.

Space must be strategically managed with a clear understanding of the cost impacts associated with poorly managed space that is seldom used. This approach means any space used less than 60% of the time should be repurposed. Most spaces should be thoughtfully designed to serve double or even triple duty.

In the Chronicle of Higher Education on 10 April 2020, Robert Kelchen noted financial flexibility must be a priority for higher education from now on. The traditional campus building owned by departments and deans and dedicated to a singular

function is rarely flexible. Bigger is not better for the physical manifestation of universities and colleges. If we in higher education learn nothing more from the pandemic than this, we will be in a better position to manage the future.

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