

# Transforming Facilities to Achieve Student Success

## PART 2

### Section 4:

## Using Facilities Modernization to Reduce Barriers to Success

One way to think about the role of facilities in supporting student success is to flip the question: How do facilities *hinder* student success?

Poor facilities can absolutely get in the way of student performance. Students won't learn well in a freezing classroom with a failed heating system. They won't rest comfortably in a residence hall with broken toilets. They won't feel a warm glow of community in a student center with buckets positioned to catch rain. To achieve student success, the first charge upon facilities staff is to **address the basics** and the last is to **do no harm**. Nevertheless, many buildings on colleges and university campuses today are doing harm by failing to meet the basics.

#### Data Point:

#### Campus modernization

#### *Why up-to-date buildings matter*

Effective buildings do not guarantee good programs, but it is very difficult to build good programs without them. . . . Renewal initiatives are essential to provide contemporary educational opportunities for students and competitive research opportunities for our faculty.

*Source:* Harvey Perlman, chancellor, University of Nebraska-Lincoln, "University of Nebraska Building Renewal Plan Would Invest in Facilities for Quality Education, Competitiveness," University of Nebraska.

#### A slow-motion campus crisis

The problem of deteriorating campus buildings has its roots in the baby boom. In the 1960s and 1970s, college enrollment rates soared to never-before-seen levels, kick-

ing off a building frenzy. Most colleges and universities invested heavily in new construction—in fact, **more than 35 percent of campus buildings today date from this period**. The builders were in a hurry, and so they cut corners—using low-quality materials and rushing construction. They didn't worry about energy use, since power was cheap. And, naturally, their designs suited the teaching styles of the time.

The result? Crumbling structures that cost too much to run and don't meet today's programmatic needs.

#### Data Point:

#### Defining student success

#### *Utah State University*

Student success is defined differently by each student and their parents, guardians, or families. Some define it as obtaining an undergraduate, graduate, or professional degree, while others consider success as having obtained value-added learning experiences that serve to further propel them within their chosen career or vocation. Still other students define success as the nourishment of their hunger for learning and their development as a well-rounded human being. All these definitions are appropriate and intrinsically right. The Student Affairs Division must be in tune with these definitions of student success and must foster the type of environment that will ensure as many of those definitions of success as possible. However, because of the mission of the institution and finite resources, not every definition can or may be fully served.

If institutions had kept up with maintenance on these buildings, they would at least be in better shape than

they are today. But colleges and universities have a long history of putting off unglamorous projects such as replacing roofs and updating water systems. New construction continued to attract funding dollars while maintenance backlogs inched up year after year. And so here we are in 2017, with **the backlog for facilities maintenance reaching an average of more than \$100 per square foot**, according to survey data gathered in the annual Sightlines *State of Facilities in Higher Education* report of 2016. The figure is slightly lower for private colleges and universities—\$88 per square foot—but is higher for public campuses, at \$108 per square foot. The total across the United States is a record \$30 billion.

What does that backlog look like for campuses? Peeling paint, yes, and scuffed floors—and a stark contrast to the new buildings constructed in the last decade. Buildings sitting side by side on the same campus can have vastly

different performance levels; in fact, a single building can present a schizophrenic appearance, depending on how funds were allocated over time. In a 2016 article titled “The Paradox of New Buildings on Campus,” *The Atlantic* draws a vivid picture of one such building:

Akerman Hall is a gateway to the complex that houses the University of Minnesota’s Department of Mechanical Engineering. But wandering through it is more like an experience in archeology.

First, there’s the former airplane hangar, built in 1948 and renovated five years ago with alumni contributions into a state-of-the-art student lounge, faculty office, and lab. Then come drab cinderblock corridors and classrooms that also date from the 1940s and don’t look anywhere near as glamorous. Behind them, however, are more than \$5 million of unseen upgrades the

### Data Point: Campus modernization *A historical perspective*

The burdensome problems of major maintenance and capital renewal/replacement have troubled higher education since the 1970s. The term *deferred maintenance* emerged in the early 1970s as college and university administrators began to recognize the serious nature of plant problems on their campuses. The deteriorated plant conditions produced by ignoring older facilities during higher education’s post-World War II expansion were compounded by the following:

- Poor designs for institutional durability
- Cost cutting that rapidly produced space with inferior construction techniques and innovative materials that showed early failures
- Soaring utility costs
- Inflation-induced reductions in operations and maintenance budgets

- Inadequate funding for capital renewal and major maintenance
- Increased government regulations, resulting in reallocation of resources and further deferral of maintenance

After many years, these factors produced a legacy of deferred capital renewal and the accrual of backlogs for major repairs, replacements, and renovations to facilities and infrastructure. By failing to fund renewal for building subsystems and infrastructure with expired life cycles, higher education began its slide on the slippery slope of failing facilities. Today, the problem is acute for the many institutions that may have as much as 75 percent of their facilities in the range of 30 to 40 years old — and be past a first cycle of major renewal expenditures.

Source: Harvey H. Kaiser, “Capital Renewal and Deferred Maintenance,” *Body of Knowledge*, APPA, 2015.

university was forced to make to elevators, sprinklers, fire alarms, and ventilation systems so old the school was buying replacement parts on eBay.

These hallways lead to another handsomely appointed wing for which a dean scraped up some wealthy donors to make the kinds of improvements that are essential to compete for students in a hot field such as engineering.

But just upstairs from that are offices for English faculty with cracked and peeling window frames, sputtering air conditioners poking through walls, and plywood over some of the glass. This floor is still waiting for a badly needed overhaul—but there isn't any money in the budget.

**Institutions pay a high price for failing buildings.** The structures generally cost more to operate, and even the most bare-bones maintenance of temperamental systems will take longer and cost more. Aging infrastructure dis-

rupts the operations of the campus and can threaten the work of faculty researchers.

Failing buildings and infrastructure also threaten enrollment. Students are **deeply influenced by their first impression of a campus**; multiple surveys of college-bound students point to the campus visit as the most significant factor in choosing an institution. APPA's own research reveals that roughly a quarter of prospective students will reject a college or university if they consider an important facility inadequate, and about 15 percent will reject an institution if an important facility is poorly maintained. ("Important facilities" are generally those related to a student's major.)

### Supporting success with facilities modernization

Senior facilities officers understand the problem, and they know how to fix it: Reinvest in failing structures. The problem is finding the dollars. Facilities operating

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#### Data Point:

#### Campus modernization

##### *The high cost of failing structures*

"Most people think of innovation as requiring shiny new equipment, which it often does, but it also comes with the far more mundane requirement of clean, functional buildings to house it. Years of federal belt-tightening have starved laboratories of funding for routine maintenance, and the deterioration has reached the point that some researchers say the nation's ability to conduct cutting-edge science is being damaged.

"At the very least, these failures can cause delays in research work and add extra costs," a 2015 report on deferred maintenance at public agriculture colleges by the Association of Public Land-grant Universities found. "At worst, we are entering an era when the condition of facilities will limit our ability

to conduct world-class research that is needed to keep our leadership edge.'

"While the United States has been the envy of the research world, that prowess, at least in some areas, is starting to slip, [experts] say. China now spends 6 percent more on agricultural research than the U.S. does, for example, and other countries are catching up. If the maintenance backlog isn't addressed, domestic researchers could fall even further behind.

"Much of that problem comes down to old buildings."

Source: Jenny Hopkinson, "Innovation vs. the Ants: When Cutting-edge Research Labs Get Old, They Face a New Kind of Challenge: Upkeep Is Expensive, and It's Not Sexy," *Politico*, July 6, 2017.

budgets have inched up since the Great Recession, but they're not keeping pace with inflation or growth of campus square footage. Capital expenditures have also marginally increased, but many haven't yet returned to prerecession levels.

What's a campus to do? Most facilities leaders have adopted a variety of strategies. They're managing operations on a shoestring and increasing efficiency across the board. They're making better use of the functional space on campus and reducing demands on aging, failing buildings. In addition, they're making the case for campus modernization projects that breathe life into existing facilities. That's where this report will turn its focus: **supporting student success through facilities modernization.**

Modernization and revitalization is a program of upgrade and reinvestment in existing facilities and infrastructure. Essentially, modernization resets the clock and gives aging buildings a new lease on life.

It's a process that is critically different in both goals and means from the deferred maintenance programs of previous decades. Deferred maintenance has gotten a bad reputation on campus because the sums involved are so large and the task never-ending. **"Trustees take a very dim view of deferred maintenance,"** said Steven Thweatt, a consultant and invited subject matter expert in campus modernization who spoke at the 2017 Thought Leaders symposium. "And as senior facilities officers, we don't like it either. It implies that we can't keep up with our campuses."

The goal is not to simply rebrand deferred maintenance with a term fewer people will find objectionable. The goal is to change the conversation entirely. Instead of going to chancellors with long lists of maintenance needs, facilities leaders should be discussing institutional goals and how to achieve them through targeted facilities investments. Nevertheless, new terminology is also important. Words matter—how we discuss issues in our industry matters. It is time to embrace language that will engage the entire institution and encompass broad institutional goals.

Of course, if you are updating a building with classrooms that will better meet the demands of the 21st century, you'll also fix the leaking roof—but the goal is not maintenance. Of course you'll get new carpet—but the goal isn't surface modernization to bring a building back into style. The goal is to better serve students. To better support faculty. To better serve the needs of the institution. The goal is revitalization of a campus resource so that it can play an essential role in the future of the institution.

Revitalization programs target dollars where they will accomplish the most. **Facilities modernization is highly strategic, prioritizing projects based on both need and impact.** It stretches capital dollars by extending the life span of existing investments and promotes good stewardship of campus resources. Rather than looking back at overdue maintenance logs, it looks ahead to anticipated needs. It is forward-thinking, proactive rather than reactive, and tied directly to the institution's vision of its future.

### Making the case for facilities modernization

Pursuing a modernization program is a major undertaking that will require buy-in from a wide range of constituents, Thweatt observed. Senior facilities officers will need to persuade the leaders of the institution to back the plan; state institutions might require the support of the legislature. Convincing so many stakeholders that precious institution dollars should go to modernization is a daunting task.

Strategies that have proven successful include the following:

**Demonstrate how facilities modernization will support institutional goals.** The key, noted Jay Pearlman, associate vice president of Sightlines, a higher education facilities consulting firm, is to move the discussion away from the needs of buildings. "The conversation regarding what to fund and what not to fund should be done in a context of a greater university strategy, and it should be set from the top down," said Pearlman. "So we're not engaged in a conversation about leaky roofs. We're

engaged in a conversation about how we support facilities to drive the institution forward.”

For example, as vice chancellor for administration at the University of Colorado at Boulder, Thweatt helped create a **decision-making framework that tied modernization to campus priorities**. The organization evaluated projects according to the following criteria:

- Alignment with campus strategic goals, the chancellor’s priorities, and the university’s facilities master plan.
- Potential to provide distance-learning opportunities and/or generate new revenue.
- Impact on academic needs.
- Responsiveness to enrollment needs (current and projected).
- Alignment with future programmatic needs.
- Status of the structure on the campus building facility condition index.

Metrics were developed for each of these factors; for example, impact on academic needs was determined by the number of credit hours of classrooms in each building. While the modernization program sought to revitalize failing space, a new space optimization program was introduced at the same time to better utilize operational space. Combined, the two programs are leveraging the campus’s investment in its facilities.

**Make the argument clear and simple.** Facilities departments deal in data that are unfamiliar to most campus leaders. While it may be vital for the senior facilities officer to know a building’s maintenance deficiencies as divided by its current replacement value, this level of detail might be beyond what most stakeholders need. It’s best to **make the case for facilities modernization with simple, straightforward data** that everyone can understand.

For example, Daniel King, facilities manager at Auburn University, in a May 2012 article for *Academic Impressions*, recommends a chart that measures campus buildings in terms of academic value (as ranked by the provost) and maintenance and modernization needs (de-

termined by a facility condition index). Campus leaders get a snapshot of the entire campus and can see immediately that the buildings with the highest academic

**Data Point:**  
**Campus modernization**

*Making the case for modernization*

Daniel King of Auburn University uses a simple chart to put the condition of buildings in the context of their academic value.

Academic Value – Low to High	<p><b>High academic value, low maintenance and renewal needs</b></p> <p>High-value buildings that need little operations and maintenance investment</p>	<p><b>High academic value, high maintenance and renewal needs</b></p> <p>Facilities that are the highest priority for reinvestment</p>
	<p><b>Low academic value, low maintenance and renewal needs</b></p> <p>Lower-priority buildings where it is safe to defer renewal</p>	<p><b>Low academic value, high maintenance and renewal needs</b></p> <p>Facilities that might be good candidates for demolition and replacement</p>
<p>Maintenance and Renewal Needs – Low to High</p>		

Source: Daniel King, “How Do You Make the Case for Funding Maintenance and Renewal for Campus Facilities?” *Academic Impressions*, May 18, 2012.

value and greatest modernization needs are the highest priority. King advises making the situation as simple as possible for busy campus executives:

If you can rank your facilities within each of these quadrants, you can use such a chart as a tool to convey



a fairly complex situation in a readable manner. They don't want to see 55 charts on 55 buildings and their problems; they can't absorb all that. You need to find a way to quickly tell the story about the institution's renewal and replacement needs.

**Promote a culture of stewardship.** "Organizations that are effective at managing the physical assets of facilities and infrastructure work within a developed culture of stewardship," wrote Rodney Rose in the executive summary to the APPA publication *Buildings...The Gifts that Keep on Taking: A Framework for Integrated Decision Making*. "The culture is rooted in a deep understanding of how the physical assets provide the environment to achieve the mission and program objectives of the institution."

Cultivating stewardship isn't so much a strategy for promoting a one-time facilities modernization campaign as it is a long-term philosophy inculcated into the institution that **recognizes both the value and the long-term costs of the campus built environment**. Senior facilities officers can't create this culture on their own, but they can take steps to encourage it by promoting the concept of total cost of ownership (TCO) and advancing long-term strategies for facilities management.

Brigham Young University (BYU), for example, maintains 40-year predictions of possible facilities expenditures for existing structures, and when new buildings are presented to BYU leadership, figures are calculated using a 75-year TCO framework that includes estimated maintenance, operating, and replacement costs. The result is a constant awareness of the lasting nature of facilities and a sense of both their costs and their benefits.

## Facilities modernization priorities and opportunities

Thought Leaders symposium participants developed the following list of general priorities for colleges and universities when planning modernization programs:

- **Increase the life span of existing buildings.** Modernization should reset the clock on facilities and extend their useful life span at least ten years into the future—if not 30. In other words, even if a building was constructed in 1965 (or 1985, or 1915), after revitalization and modernization, that building is effectively brand new. New internal systems such as lighting, heating/cooling, and power will breathe new life into the structure while reducing operating costs and increasing sustainability.
- **Reduce disruptions.** Spaces should be free from distractions caused by leaking roofs, electrical outages, and too-hot or too-cold temperatures.
- **Expand useful space on campus.** Many campuses have enough space on paper but still feel pinched for classrooms, labs, and offices. Modernization allows institutions to update less-desirable spaces so that the campus can be used to its potential.
- **Increase flexibility.** Facilities modernization should reduce barriers to current pedagogy while building in flexibility that allows for even more change going forward.
- **Meet student and parent expectations.** Families paying tens of thousands of dollars a year for an education don't expect students to rough it in outdated campus housing. Residence halls and dining facilities in particular need to meet current expectations.
- **Improve accessibility.** Most campus buildings today are ADA-compliant, but that doesn't mean that they are truly open to every student. Modernization pres-

**Data Point:****Campus modernization***Doing more with what you've got*

Cuba Plain, assistant vice president of budget planning and development for the University of Missouri System (UMS), discusses the challenges of aging facilities:

"We want to examine how we're using space on campuses, with a goal of reducing net overall space. If we have less space to manage, we can do a better job of taking care of it. One way to reduce deferred maintenance is to take a building down. If the level of required repair or refurbishing is significant, it's better to tear down the existing facility and build another one that will be more efficient to maintain.

"[A maintenance backlog] impacts the entire university in all its different aspects. For instance, by addressing it, you'll be able to attract and retain students and enhance their academic performance by providing upgraded facilities, which also helps with faculty recruitment. You want to show that you offer competitive facilities.

"We have to be more efficient and effective and do more with less. We've been saying that for 20 years, but now it's come to fruition. Without space, we are not a research institution. Students and faculty need labs and facilities that are up-to-date. We can't just go along with business as usual in terms of facilities."

*Source: Apryl Motley, "The Download on Upkeep," Business Officer, NACUBO, December 2015.*

ents an opportunity for campuses to adopt universal design concepts that make buildings not just accessible but welcoming to all.

- **Promote collaboration and interaction.** Designers have learned a lot in recent years about how to draw people together. Renewed buildings should include spaces for meetings, cross-discipline collaboration, and student projects along with casual spaces that invite interaction.
- **Increase safety.** Modernization creates opportunities to integrate new security systems and measures such as key-card access into existing buildings, including labs, offices, and classrooms, not just exterior doors.
- **Reflect the identity of the institution.** Many colleges and universities have one or two buildings that don't fit with the rest of the campus—a single tan brick building in a sea of red or a failed modernist experiment surrounded by colonial-style structures. Today, institutions have a strong sense of how their visual identity reflects their brand. Modernization programs give colleges and universities a chance to remedy design errors of the past and unify the appearance of facilities.

Embarking on a modernization program will likely be a multiyear effort that requires hard work, commitment, collaboration, patience, and perseverance. But when done with care and driven by the priorities of the institution, modernization can support the success of students and the entire campus community.

## Case Study in Facilities Modernization: University of Massachusetts at Amherst

A mix of structures make up the 13-million gross-square-foot, 1400-acre campus of the University of Massachusetts Amherst. Some are historic structures, including one listed on the National Register of Historic Places. Others—many others—were built in the campus boom of the 1960s and 1970s. And by the early 2000s, most of them needed investment. In addition, state funding for this investment has been limited, with the university paying for 70 percent of the cost of renovations and new buildings.

Embarking on a major facilities modernization program required Shane Conklin, associate vice chancellor for facilities & campus services, and the entire facilities department to make creative choices. “We tried to find a balance between replacing really poor spaces that would have a high impact and, at the same time, investing in areas targeted for growth on campus,” Conklin says.

Understanding the condition of each building and cost of needed improvements was critical. Equally important was determining campus needs. For example, in the case of the Hills Building, an assessment revealed it would cost less to tear down and replace the building than to renovate it to desired standards; demolition began in summer 2017.

Some buildings were too important historically to demolish, but renovation posed major challenges. The South College building, for example, was constructed in 1886, and bringing it up to code seemed almost impossible. Right next door was a post-World War II building, Bartlett; in poor condition, it would have cost more to renovate than to demolish and start fresh. The solution? Tear down Bartlett and build a new structure attached to South College in its place. “We came up with a ‘buddy building’ concept,” says Conklin. The new addition includes the features South College needs, including modern air handling equipment, elevators, and accessible entrances, while leaving the historic structure intact. “We were able to enable the demolition of a failing building and gut-reno-vate a historic building that now has a fresh start,” says Conklin.

To determine their priorities, the facilities organization drew on studies including an academic space study and a science and engineering study. The academic survey looked at the classrooms available on campus and estimated current and future needs. The science and engineering study identified the deficiencies in research buildings that were preventing the institution from growing desired programs and attracting and retaining top researchers. “One general recommendation was that the deferred maintenance backlog had to be addressed to maintain our competitiveness as a leading research institution,” says Conklin.

Increased accessibility was a priority of the modernization program, as was working with UMass researchers. Conklin was able to do both when Facilities worked with engineering professor Aura Ganz and her colleagues in the university’s 5G Mobile Evolution Lab to install their PERCEPT navigation system in the Whitmore Administration Building, which houses the university’s disability services office. The PERCEPT system allows the blind and visually impaired to navigate unfamiliar environments using their smart phones; RFID tags communicate the user’s location to the phone, and the system provides directions that allow an individual to find any location in the building. “We had a unique opportunity to support the great work of our faculty while helping out our students,” says Conklin.

The connection between facilities modernization and student success couldn’t be more clear at the UMass campus, says Conklin. The institution completed a Student Experience Master Plan last year to better understand the needs of students. “We looked at what should we be doing to help student success? How do we make the campus welcoming and engaging?” Conklin says. Part of the UMass commitment to student success is a planned renovation to a building in the core of the campus. Designed as the student success hub, it will include a variety of services that help students achieve their goals. “We’ve just started planning on this, and it’s pretty cool,” says Conklin. “We recognize the importance of being deliberate about student success.”



## Section 5:

# Building Support for Facilities Modernization with Collaboration

Senior facilities officers spearheading a facilities modernization program will need to forge strong relationships with leaders across the campus—from the president’s office to deans and department chairs, from the CFO to IT and student services. It’s an undertaking that might intimidate the most well-prepared facilities officer, who will be required to walk into conference room after conference room armed not only with data demonstrating the need for modernization but also confidence, enthusiasm, and commitment.

Let’s face it, this level of collaboration can be *hard*. When facing a body of campus leaders with their own priorities and agendas, how can facilities leaders build consensus around modernization?

### Data Point:

#### Defining student success

##### University of South Florida

The University of South Florida will empower students to succeed through educationally purposeful activities, initiatives, and accountability measures that will ensure that students are retained and graduated at higher-than-predicted rates, with higher degrees of satisfaction and minimal financial indebtedness, and are employed or enter graduate, professional, or postdoctoral programs at high rates, having acquired the skills, knowledge, and dispositions to succeed in any of those endeavors they pursue.

### Achieving true collaboration

The Arbinger Institute’s answer to achieving true collaboration: Change your mindset.

The Arbinger Institute, founded in 1979, is an international consulting and training firm based on research into the social sciences and philosophy. Arbinger focuses on helping organizations and individuals resolve conflicts and improve personal interactions to better achieve their goals.

A key concept for Arbinger is mindset.<sup>2</sup> Mindset is how you view the world and the other people in it; it’s the lens through which you see your work and your relationships. Individuals have either an inward mindset or an outward mindset:

- **Inward mindset:** A focus only on one’s individual goals and objectives. People with an inward mindset are blind to what others want or need. They only see others in relation to themselves. Individuals with an inward mindset might work incredibly hard for their organization, but they fail to recognize how their actions are affecting others.
- **Outward mindset:** An understanding that others have their own goals and needs and a focus on achieving the results of the organization as a whole. People with an outward mindset take the priorities of others into account when considering their own goals; they are aware that they might inadvertently get in the way of another individual or department and seek to limit their harm.

It’s key to emphasize that having an inward mindset doesn’t make someone a bad person. “It isn’t that you woke up wanting to ruin someone else’s day,” said Andrea Hoban, Arbinger senior consultant/facilitator, who spoke at the 2017 Thought Leaders symposium. “It’s that you may not even know that you are making life difficult for other people.”

<sup>2</sup> For more information, see the Arbinger Institute publications *Leadership and Self-Deception* and *The Outward Mindset*.

Nor does having an outward mindset mean letting other people walk all over you. “It’s not about being soft,” noted Hoban. Listening to the concerns of others doesn’t require you to do what everyone else wants. It may be you do not have the time or funds to meet their requests, or there is a good reason for saying no. But even if you don’t give people what they want, you can show that you hear them and have an honest conversation about what you can and can’t do.

Further, an outward mindset does not mean giving up your own priorities—it doesn’t make you a doormat. Rather, an outward mindset helps you better achieve your goals in the context of the mission of the organization. Nor is it necessary that everyone at an organization or within a department have an outward mindset. (Although it would be nice.) **Operating outwardly will allow you to work better with others, no matter how inward their mindset**, because you will see them as individuals with needs and goals.

An inward mindset, on the other hand, tends to reduce other people to objects. You might see others as objects that block your path or vehicles that you can manipulate to help you on your way. If they are not useful to you, other people can become simply irrelevant. In any case, you will be blind to their motivations because you are so focused on your own.

An outward mindset creates an environment that furthers collaboration and helps unite individuals around a goal. Collaboration with an outward mindset requires the following steps:

1. **Reach out.** Invite representatives from another campus department to a meeting where the agenda is for them to explain what they do and what problems they have. Your job is to sit there and listen—without defending yourself or your department and without casting blame elsewhere.
2. **Identify the objectives and challenges of others.** Learn how others understand their responsibilities and identify specific ways in which your organization is making it difficult for other people to do their jobs.

**Data Point:**  
**Collaboration**

*How am I a problem for you?*

If you want to build better relationships with your colleagues, ask them this simple question: How am I a problem for you?

Key to an outward mindset is being aware that your actions affect others. You can jump-start collaboration and cooperation by reaching out and asking how your actions are creating harm.

It takes courage to ask the question and discipline to listen to the response. You are making yourself vulnerable, but “There’s strength in vulnerability,” noted Arbingers’ Hoban. “If you’ve had strife with another group, and you walk in there asking how to do better, your intent is so pure they can’t attack you.”

3. **Adjust to be more helpful.** Start taking concrete steps. Tackle the low-hanging fruit first to get some easy wins that will make everyone happy. If the IT department is frustrated because it needs to be involved earlier in the design process for modernizing buildings, then get them in the room. Be aware that some challenges will require more time and effort. If the entirety of communications between Facilities and IT is broken, it will take sustained effort to build, or rebuild, trust.
4. **Measure what the institution is able to accomplish as a result of your efforts.** Look for metrics that you can use to monitor your progress. Can you find cost savings in streamlined processes? Can you demonstrate that the number of help tickets successfully closed has increased? Are response times improved? Is customer satisfaction on the rise? Measuring results helps you see where you’re making a difference.

Hoban works with colleges and universities across the country, and she has seen this sort of collaboration succeed. Higher education, she says, has the advantage

that it is “really focused around mission. **It’s wonderful to work with people who are all about their mission of supporting students.**” She generally finds that the commitment to mission permeates the institution and motivates staff at all levels. However, she says, “One of the things I find curious about higher education is how siloed their areas of focus are. Everyone is focused on one mission, and yet the view of the world is wrapped around where each individual sits within the organization.”

Being deliberate about cultivating an outward mindset and promoting collaboration helps campus leaders see beyond their narrow viewpoints. It helps them “find ways to support one another that they can’t see themselves,” Hoban said.

## Facilities modernization through collaboration

Bringing the focus back to facilities modernization, adopting an outward mindset can jump-start the process of understanding campus needs and building consensus around a modernization program.

Often, facilities department leaders think they know all there is to know about the campus. But that inward focus can put blinders on. Reaching out to the faculty, staff, and students who use the campus can reveal a whole new side to buildings. Building flaws might be having unexpected negative effects unforeseen by facilities directors. Academic deans, residence hall directors, or IT staff might have needs facilities didn’t expect.

### Data Point:

#### Student success through collaboration

##### *Collaboration to drive student success*

Collaboration spurs innovation because bringing together groups of people who have different ideas, approaches, experiences, and areas of expertise creates a fertile environment for generating new concepts and methods. Sharing insights allows ideas to be refined and improved. Charging a group with developing a promising idea incentivizes the group—not just a single individual—to commit to its success and paves the way for trusted collaboration.

The challenge for leaders in higher education, then, is to figure out how to incentivize collaborative behavior to drive innovation that meets the needs of the country and of students—namely, by helping more students access opportunities for higher education and attain degrees and skills to advance their own and the nation’s economic success. It’s time to share what we know about how to serve students

better, so that the beneficial effects of innovation can multiply rapidly across academic cultures, across regions, and across the diverse student populations striving for a college degree at thousands of postsecondary institutions throughout the United States.

This requires a new kind of collaboration that is intentional, self-forming, and based on shared values and goals, bringing together institutions with limited competitive interaction. Most importantly, this new kind of collaboration necessitates thoughtful coordination to bring more value to each institution than is taken from each institution.

*Source:* Bridget Burns, Michael Crow, and Mark Becker, “Innovating Together: Collaboration as a Driving Force to Improve Student Success,” *Fresh from the UIA (University Innovation Alliance)*, March 4, 2015.

Gathering insights from across the campus gives facilities staff a new and powerful source of information that can be combined with metrics in, for example, a facility condition index. Campus leaders will get a clearer understanding of the facility needs when they understand how building failures affect people. At the same time, seeking input from a range of stakeholders will build support for your efforts. The communication process needs to be sustained over time, and facilities needs to communicate back the process it is using to prioritize needs. Making the entire process transparent will reduce frustration, increase trust, and build consensus around the final program outlines.

Participants at the Thought Leaders symposium agreed that the advantages and opportunities of a collaborative process include the following:

- **Increased stakeholder engagement** from all generations and types of campus users (that is, students, faculty, and staff of all ages).
- **Campus-wide agreement on facilities priorities** and how they support the college's or university's mission.
- **Alignment of facility efforts with the student success efforts** of the institution.
- **Strong buy-in** of the program, even during tough patches when construction is inconvenient or bills come due.
- **Shared ownership** of the outcomes.
- **Increased confidence and trust** in the facilities organization as a partner in the goals and mission of the college or university.

*Not* collaborating, on the other hand, has tremendous costs. Failing to engage stakeholders can mean that the facilities modernization program never gets off the ground. Thought Leaders symposium participants considered the following factors the greatest risks of *not* collaborating:

- Lack of perspective or knowledge outside the facilities sphere.
- Investment in buildings and systems that aren't needed.
- Failure to invest at all if consensus on the process is never achieved.

- Frustration of stakeholders who feel their needs are ignored.
- Blame and finger-pointing when things go wrong.
- Missed opportunities for innovation or progress, which occurs when the people necessary to seize an opportunity are not in sync.
- Distrust between facilities and different stakeholders on campus.

Collaboration **takes the pressure off facilities leaders**, says Peter Zuraw, former assistant vice president of facilities management at Wellesley College. "You're not putting your agenda forward—you're putting the institutional agenda forward." If the buildings selected for renovation and modernization are identified by the facilities department, the facilities department must defend those decisions. But when the priorities for modernization are based on institution goals and have been confirmed at the highest levels, facilities directors don't have to defend those choices because leaders such as the CFO, the president, and the board own those decisions, Zuraw says.

### Remaking the facilities organization to be more collaborative

While the Arbinger Institute's ideas are straightforward and easy to understand, fostering collaboration requires effort. Participants at the Thought Leaders symposium considered how internal facilities operations should change to encourage collaboration. They started with simple changes; for example, **restructure meeting agendas to create more opportunities to listen**. The same one or two people shouldn't do all the talking at every meeting. Instead, meetings can be deliberately structured to draw out the insights of others at the table.

Participants believed senior facilities officers should **model outward behavior** for their staff. Organizations take their cues from the top, and if staff see their managers actively listening and responding to the input of others, they will respond. The senior facilities officer can also identify key individuals within the organization who have influence and **help them develop an outward mindset**.

Facilities leaders should **create or reaffirm a common purpose** within their organization. The call should be to work toward fulfilling the mission of the institution. Staff should be encouraged to think outside their own narrow role and immediate task and embrace a wider goal—a goal such as student success.

Finally, senior facilities officers need to **reward staff for working collaboratively**. Individuals should be encouraged to share ways in which they helped others within the organization and should be recognized for moments of joint success. Instances where facilities staff adapt to better serve other departments should be framed as opportunities rather than annoyances.

Ultimately, failure of collaboration and an inward mindset can hurt the mission of the institution: If the relationship between facilities and rest of the institution is dysfunctional, the institution is itself, in some way, dysfunctional.

However, the reverse is also true: A truly collaborative process can help the facilities staff organization advance the college or university by enabling facilities staff to make smart decisions about facilities modernization. Facilities leaders and staff can help students succeed by undertaking modernization in an outward, collaborative way.

#### **Data Point:**

#### **Defining student success**

#### *Cape Cod Community College*

Based on the awareness that student success is unique to every individual, Cape Cod Community College defines student success as a series of stepping stones and milestones, which could include being prepared for college, establishing clear and realistic goals, completing courses, developing the ability to monitor academic progress, earning certificates and degrees, transferring to another institution, acquiring necessary occupational training, and gaining skills useful for future learning.



## Section 6:

# Ten Questions to Drive Student Success through Facilities Modernization

How do we support student success with facilities modernization? Participants at the 2017 Thought Leaders symposium developed the following questions to help senior facilities officers think through the issues discussed in this report and strategize their next steps. We encourage facilities departments to consider these questions for themselves and to share them with others within the institution.

TLS  
26

### Data Point:

#### Defining student success

*University of North Carolina, Chapel Hill*

We believe student success includes:

1. Exploring and growing intellectually.
2. Appreciating diverse perspectives as well as developing one's own identity.
3. Developing social and emotional skills.
4. Engaging in meaningful activities, roles, and relationships.
5. Cultivating a sense of purpose or vocation.

### 1. How does our institution define student success? How can the facilities organization specifically support student success at our college or university?

Student success can be defined in many ways, and it's difficult to know if you're contributing to success if you don't know how your institution defines it. If your organization hasn't formally defined success, facilities can turn to the mission and vision of the organization.

They can supplement that information with goals and priorities expressed by the institution and come up with a working definition of success that will give the facilities organization a sense of where the leaders of the college and university want to go. A good check of this working definition is to present it to different campus leaders and see if they agree with its aims.

### 2. How does facilities revitalization and modernization contribute to student success?

Senior facilities officers need to assemble a solid argument for facilities modernization in the service of student success. Assembling data is the first step; institutions need metrics that quantify the performance of each building. The experience of other colleges and universities has shown the importance of summarizing information in a way that is easy to understand.

Making the case for infrastructure projects can be particularly challenging. Facilities departments understand the importance of these projects, but hot-water lines and power cables lack natural stakeholders who will lobby for their modernization. It is hard to appreciate if all is working well. It may take significant education and outreach to make clear the need for investment in facilities.

### 3. How is the facilities organization a barrier to supporting student success?

Flipping the question can reveal significant information about where facilities and facilities operations are getting in the way of the institution's mission. Remember that one of the essential calls upon facilities is to "do no harm."

Facilities organizations should ask this question when engaging with stakeholders across campus and document instances in which classes were interrupted, faculty were

**Data Point:****Supporting success with campus modernization***Making the case for modernization*

Facilities leaders at different campuses were asked by NACUBO's *Business Officer* magazine how they argued the case for facilities modernization investment. Here's what they recommended:

- **Show the damage.** "We're on borrowed time, and we have to provide real, factual, visual explanations," says Sal Chiarelli, physical plant department director at the University of Vermont, Burlington. "I've had my staff bring big chunks of marble and concrete to me or place a piece of corroded pipe on my desk so that people can touch and feel the corrosion. You've got to get the people around you to see the problem." And it needs to be seen as broader than the facilities staff alone.

Similarly, at the University of California, Irvine, Wendell Brase, vice chancellor of administrative and business services, uses photographs to document failing facilities. "CBOs [chief business officers] may not realize that they see things that others on campus do not, since most people have never been in a mechanical room or utilities tunnel." He notes: "The picture speaks for itself; you don't have to say anything. Images help illustrate problems in areas in which most people are unfamiliar."

- **Present data.** Cuba Plain, assistant vice president, budget and planning, for the University of Missouri

System (UMS), has found value in gathering hard data to explain the facilities' problem to constituency groups. "We've changed our communication strategy to be very data-driven," she says. "We focus on demonstrating the most critical needs." In addition, Plain notes that data help in presenting the case for UMS to receive additional state funds: "When we ask the state to fund deferred maintenance, we give them a fact sheet that outlines the ROI for the state and its citizens."

- **Document stakeholders' concerns.** According to Brase, one of the most compelling factors is that of leading researchers who begin to express concern that the research environment on campus isn't stable enough to support their work. "When they start to speak up, it's pretty clear that this is a problem the university must face," he says.
- **Be straightforward.** "We haven't done a good job of communicating the impact of certain decisions," Plain says. "People forget that by not making a decision, you're really making a decision. We have to take action, so we have to be honest about the fact that there are tough choices to make."

Source: Excerpted from Apryl Motley, "The Download on Upkeep," *Business Officer*, NACUBO, December 2015.

forced to deal with a facilities crisis instead of teaching, or student activities were cancelled. A metric such as the number of classroom hours lost to facility failures is a powerful statement to senior campus leadership of the need for modernization.

#### **4. How will investment in modernization support long-term institutional success?**

Facilities modernization involves significant financial resources, and the results should justify the cost. Modernization isn't about short-term fixes. It's a way to

extend the life span of campus facilities and leverage existing investments.

As such, facilities modernization programs should be based on strategic decisions and draw on the consensus of campus leaders. Modernization should focus on buildings that combine the greatest need with the greatest impact. Senior facilities officers may need help in seeing that impact with the second part of that equation. Facilities must draw on space utilization information while tapping the insights of other campus leaders to get this level of insight.

Modernization programs should also be tied to the institution's long-range plans. If the plan of the college or university is to increase on-campus housing, modernization of residence halls should take a higher priority; if the plan calls for expanded investment in biomedical research, research facilities should rise to the top of the list.

**5. Where do we start in making our processes more collaborative? What is our plan for adopting a collaborative approach to facilities revitalization in particular?**

Remaking the facilities organization to be more collaborative may seem like an overwhelming task—but you've got to start somewhere. It's essential to make a plan, write it down, and revisit it regularly, especially when a program as critical as campus modernization is on the line.

The call to adopt an outward mindset is deceptively simple: While it is easy to decide to be outward-focused, it is more difficult to maintain that mindset over time. Facilities leaders need to create reminders to engage in outward thinking and provide rewards for collaborative actions. Organizations must be deliberate about structuring their facilities modernization program to incorporate collaboration. Otherwise, it will be all too easy to fall back into outdated ways of thinking and acting.

**6. How do we select and engage stakeholders in a collaborative modernization process?**

Building support for a modernization program will require the backing of representatives from across the institution. It's worth the time to carefully consider the right players on this team. Facilities officers should draw upon a wide variety of departments and disciplines in making their case. Consider which groups will be able to further *their own* goals through investment in modernization, and be sure to include students as key stakeholders.

Facilities can take the question a step further and consider which individuals within key departments are likely to be open to collaboration. Staff with a history of working cooperatively with facilities should rise to the top

of the list. Equally important when selecting partners is finding those with the right level of responsibility. You want players on your team who can act to further modernization rather than those with good intentions but no authority to make decisions.

**Data Point:**

**Defining student success**

*Nazareth College*

The true measure of student success is how well students are prepared to accomplish their current and future academic, personal, and professional goals through the development of knowledge, a sense of responsibility and self-reliance, and a connection to the college and wider community.

**7. How do we prioritize facilities modernization needs?**

The criteria used to determine modernization priorities, and making these needs transparent to the university community, will depend on the institution and how it has defined student success. Generally, the top priority isn't necessarily the buildings with the greatest renovation needs but rather the buildings and systems with the greatest potential for fulfilling campus goals.

It's essential that the criteria for prioritizing modernization projects are transparent, so that the entire college or university understands the decision-making process. You may never get everyone to agree on where you're putting your dollars, but at least you can show that the process was fair and even-handed.

**8. How do we establish and maintain discipline in the facilities renewal and revitalization process?**

Modernization programs are marathons, not sprints. They require sustained effort over years, and at the beginning, the hard work has very little to show for it. It's easy under those circumstances to become distracted by new ideas and proposals. At the same time, we must be flexible as technologies change.

It takes a firm commitment of key leaders to keep modernization programs on track. Keep the underlying problem in your sights. Keep reporting on building needs, keep assessing facility conditions, and keep reminding yourself and other campus staff of the cost of failure.

### 9. How do we say “no” without alienating those who have partnered in collaboration?

One challenge of seeking input from a wide range of sources is that sometimes you must disappoint your partners and supporters. When you reach out to a campus department to learn about its needs, you raise hopes and expectations that those needs are finally going to be met. Leaders in those departments confide in you—you gain a measure of their trust. However, some projects must take priority over others. Inevitably, you will need to tell a group that has rested its hopes in you that their project didn't make the cut.

#### Data Point:

#### Defining student success California Community Colleges

Acknowledging the varied educational goals of students, the CCC Task Force adopted a set of student success outcome metrics, and recommended that the system define success using the following metrics:

- Percentage of community college students completing their educational goals
- Percentage of community college students earning a certificate or degree, transferring, or achieving transfer-readiness
- Number of students transferring to a four-year institution
- Number of degrees and certificates earned

The only solution is a transparent, data-driven process. You will build credibility for your decisions by making

all information freely available, and you need to be prepared to justify every dollar you spend. Be clear upfront about the process, and don't make promises you can't keep. You won't make everyone happy, but with patience, you can justify the trust individuals have placed in you.

### 10. How do we communicate the risk of using capital dollars for work that does not further modernization?

One irony of facility failures on campus is that new construction has continued at the same time maintenance backlogs have soared. After all, donors like to see their names on gleaming new state-of-the-art buildings; a repaired underground parking garage or updated utility tunnel doesn't have the same cachet.

It will take commitment from the highest levels of the institution and consensus from a broad base of campus leaders to stay the course. Institutions need to make the financial case for modernization to their boards and trustees and secure the continuity of long-term plans so they will survive leadership changes. Institutions can also appeal to the entire college or university community, including alumni, when making a case for reinvestment in existing buildings.

Campus buildings and spaces carry the affection and loyalty of the community, and alumni in particular want future generations of students to share the experience of taking classes in historic buildings or living in iconic residence halls. When a building needs to be demolished, there should be a clear explanation of the “why.” Alumni may well have an emotional attachment that should be acknowledged and celebrated, even as the building is removed from campus.

At the same time, institutions need to emphasize the risk of diverting spending away from modernization. Senior facilities officers must make the impact of proposed projects crystal clear. Find ways for campus leaders to compare apples to apples and to highlight the connection between campus goals and capital expenditures.

## Case Study in Facilities Modernization: Triton College

Triton College defines itself as an institution dedicated to student success—it says so right in its mission statement. The 100-acre campus, located 14 miles from downtown Chicago, serves nearly 18,000 students with 130 two-year degree and certificate programs.

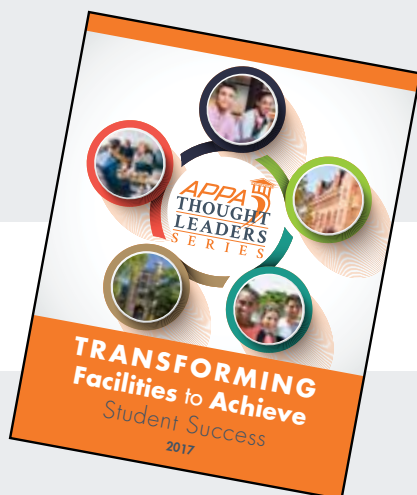
Triton sought to modernize its facilities with the goal to “promote and support sound educational environments by updating facilities and creating flexible learning spaces that incorporate technology and sustainability.” The institution also wanted to develop new education programs based on community and workforce needs and improve recruitment, retention, and graduation.

To prioritize its investments, Triton developed a smart-growth plan that incorporated findings from multiple studies, surveys, and meetings. Five workshops and two campus-wide planning sessions generated 371 specific ideas for campus improvements. At the same time, the facilities organization conducted facilities and infrastructure condition assessments to understand the needs of the campus built environment. Finally, the college outlined future curriculum needs and established guidelines for updated spaces. New classrooms, for example, needed to be flexible, with furniture that could be easily moved to accommodate various teaching styles. The end result was a comprehensive modernization plan driven by the needs of academic and student services that was highly flexible and future-ready.

Triton sold \$53 million in bonds to fund its campus renewal projects in 2014, and work has been ongoing ever since. Projects range from cosmetic upgrades to a brand-new athletic complex, from remodeling the college cafeteria, to renovating the Child Development Center Lab School. The Cernan Earth and Space Center, which includes a planetarium and exhibits alongside classrooms and labs, was updated and modernized. Solar panels were creatively mounted on the exterior of the building, with one set of panels painted with a mural of NASA astronaut Eugene Cernan walking on the moon and another set installed to resemble a satellite orbiting the earth.

Triton has earned a reputation as a military-friendly college, and the institution wanted to use facilities modernization to support the success of student veterans. The campus opened its new Veterans Resource Center (VRC) in 2015 with the goal of creating a space on campus for veterans to call their own. VRC houses academic, career, and community services as well as a quiet study area and meeting space for the Student Veterans Club. The overall goal is to help veterans successfully transition to civilian life and to the classroom. “As a military-friendly institution, we are here to support our student veterans’ education as well as their professional and personal goals,” said Triton College President Mary-Rita Moore at the opening of VRC in 2015. “Our new Veterans Resource Center continues our mission toward all student success.”

TLS  
30



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