APPA THOUGHT LEADERS SERIES

The Landscape, Framework, and Strategies for

MANAGING & MITIGATING RISK

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The Landscape, Framework, and Strategies for Managing & Mitigating Risk

Section 1:
Executive Summary

The college or university campus sometimes feels like an incredibly risky space. Headlines shout about sexual abuse scandals, campus demonstrations that veer toward riots, and active shooters who threaten lives.

Hazards can be physical—fires or floods that the modern campus, for all its technical sophistication, is still unable to withstand. Threats can also be virtual—attacks by hackers from halfway across the globe, or whispers on social media that turn into rants. Both types of risks can leave the institution damaged, vulnerable, and struggling to return to normal operations.

If there is a silver lining to these threats, it's that their prominence has made campus leaders more aware that they walk every day along the edge of a cliff—and that maybe they should put up some handrails before someone falls off. In other words, colleges and universities are taking seriously the challenge of risk and implementing processes to help prepare and protect their institutions.

Assessing and mitigating risk across the campus

The hard-earned experience of other campuses suggests a framework for effective risk management: enterprise risk management (ERM). ERM is an institution-wide, proactive approach toward risk. With the support of the board and the oversight of the CEO, ERM helps colleges and universities assess all types of risks to the institution, including the following:

- **Strategic risks:** Risks to an organization's ability to achieve its goals.
- **Financial risks:** Risks that could result in loss of assets.
- **Operational risks:** Risks that affect the institution's ability to do everyday work, including instruction.
- **Compliance risks:** Risks that involve externally imposed laws and regulations as well as internal policies and procedures.
- **Reputational risks:** Risks to the organization's brand or reputation.

ERM takes a strategic and comprehensive approach. Risk is understood as a part of doing business—no operation is without risk—and something that must be managed for the college or university to achieve its goals. However, not all risk is equal—some threats are more dangerous than others. ERM incorporates risk assessment in which hazards are formally evaluated. Different colleges, universities, and schools employ different assessment methods, but at the most basic level, risks are ranked by their likelihood and potential impact. The most likely and most significant risks are those that receive greatest attention.

ERM also emphasizes a truth sometimes forgotten: that with risks come opportunities. Changing political or social situations can harm the institution but also help it; new initiatives carry the risk of failure but also the potential for success. Colleges and universities should beware of becoming so rigid—or so fearful—that they fail to seize the opportunities that present themselves.

The ultimate goal of ERM on campus is to increase the flexibility and adaptability of the institution; the college or university should be able respond to disasters while recognizing potential victories.

Risk and the facilities management organization

As the professional association for higher education facilities staff that ensures excellence in today's educational environment, APPA recognizes the role that risk plays in the work of its member institutions. The 2018 Thought Leaders symposium focused on risk both across the campus as a whole

and as it impacts the facilities organization in particular. APPA invited both senior facilities officers and representatives of multiple campus constituencies to the symposium, including presidents and chancellors, chief finance officers, leaders in both academic and student services, and senior risk managers. Together, the symposium participants learned about ERM, assessed the risks confronting their industry and institutions, and reviewed strategies for mitigating threats.

Symposium participants identified six major risk areas that higher education institutions must consider for their campuses:

- Revenue and investments
- Brand and reputation
- Health and safety
- Innovation
- Facilities
- Changing political/cultural environment.

They also considered the role of facilities in managing risk, concluding that the facilities department has much to offer the institution. The facilities operation has one of the largest workforces on campus, and facilities staff are out in the community every day. They often see what no other faculty or staff would be in the position to notice, and they mitigate risks by alerting the appropriate offices to signs of depression or other mental illness in students, to damage or vandalism to institution property, and to potential facilities failures. At the same time, this workforce is uniquely positioned to help the campus in the case of a crisis or emergency. Facilities staff have a customer-service attitude combined with in-depth familiarity with every corner of the campus.

Symposium participants also looked at the risks and opportunities facing the campus built environment. They identified the following risks to facilities and facilities operations:

- Financial shortfalls and facilities failures
- Natural disasters
- Lack of a qualified workforce
- Technology failures
- Utility infrastructure failures
- Compliance issues
- Institutional curb appeal/first impression.

Then they evaluated the following opportunities for improving the contribution of facilities to the institution:

- Energy conservation
- Fuel and utility strategies
- Green technology
- Facilities supporting student success
- Resources to respond to emergencies.

This report concludes with a list of questions developed by participants to encourage discussion and debate on *your* campus. We encourage institutions to evaluate their existing risk management strategy and consider where it succeeds and fails. No matter where your campus finds itself, improvements can be made. If your institution has made little commitment to risk management, what concrete first steps can you take to move the campus forward? If your institution has embraced enterprise risk management, where are efforts still falling short?

A hard look at risk on APPA member campuses

Shortly before the Thought Leaders symposium, APPA decided to better understand the state of risk on its member campuses. APPA released a survey asking members about risk preparedness, effectiveness, and roles and accountability. The results of this survey are found throughout this report. You're encouraged to benchmark the results of our membership with data from your own institution.

To gather even more data, symposium participants were asked how they would rank their institution's risk readiness on a scale of 1 to 10, with 10 the most prepared and 1 the least prepared. The average score from participants was 6.89. Some simple statistical analysis finds that the median (the dividing point between the greater and lesser halves of the dataset) was 7 and the mode (the most frequent value in the dataset) was 8.

It's interesting to combine this number with the results of the survey question, "How effective is your institution at managing risk?" More than 60 percent of respondents found their institution was doing either "very good" (21.47%) or "good" (41.72%).

This suggests that overall, facilities leaders believe their institutions are paying attention to risk and taking steps to improve their readiness—they are confident that a solid foundation of risk management has been laid.

But like waves in the ocean, risks never stop pounding on colleges and universities. Inevitably, risks that you never anticipated will strike. And you never want to turn on the news one morning and find that your campus is the headline—for the wrong reason.

Data Point:

Risk communications

Risk = Hazard + Outrage

One of the greatest challenges in managing risk is that people tend to underestimate certain threats while overestimating others. Risk communication expert Peter Sandman has spent most of his career helping his clients understand this challenge.

"If you distinguish two characteristics of a risk—how dangerous is it versus how upsetting is it—let's give 'em labels. Let's call how dangerous it is 'hazard.' Let's call how upsetting it is 'outrage.' The correlation between hazard and outrage is extremely low," said Sandman in a 2013 interview on public radio's *On the Media*. "What this means is if you know a risk is dangerous, that tells you almost nothing about whether it's upsetting. If you know a risk is upsetting, that tells you almost nothing about whether it's dangerous."

In practical terms, that means people are more likely to be afraid of terrorists hijacking their airplane than having their car crash on their way to the airport—or slipping in the shower before they leave the house.

Sometimes the role of risk managers is to increase attention to hazards that people tend to ignore. Sandman calls this "precaution advocacy." "The paradigm in precaution advocacy is 'watch out, this could kill you. Do something. Wear a seatbelt, wear a hard hat,'" he said.

Other times, the job is to manage outrage about unlikely threats. Sandman emphasizes that outrage is mitigated by trust ("If I trust you, I'm going to find the risk that you are exposing me to much more acceptable than if I don't trust you.") and control ("If it's under my control, I'm going to be less upset than if it's under your control.")

Outrage has a tendency to shut down rational thought, Sandman explained, and when someone is outraged they need to feel like they are heard and their fears acknowledged before they can calm down enough to start to think logically. "When people don't understand the data, it's not because they can't. It's because they choose not to. And that's a function of outrage. So if you can reduce the outrage, then they're more interested in the data. Then you can begin to educate them," said Sandman.

Source: Excerpts from "Terrorists vs. Bathtubs," *On the Media*, WNYC Studios, June 21, 2013.

Section 2:
Identifying Enterprise Risks and Opportunities

Taking an enterprise-wide approach to risk management

Colleges and universities have always faced risks, but it wasn't until the 1980s that institutions began thinking systematically about managing threats to their organization. Today, college and university leaders can draw on several decades of research and best practices that have clarified our understanding of risk.

A widely used definition of risk is one proposed by the National Association of College and University Business Officers (NACUBO):

> **Risk is any issue that impacts an organization's ability to meet its objectives.**

This is a necessarily broad definition. Institutions face a bewildering variety of risks—competitive, financial, operational, environmental, technological, regulatory, reputational, political. Risk can be as small as a slippery tile floor and as large as the funding process for the entire institution. The size and complexity of college and university campuses and the number of people who walk their grounds every day are factors that combine to create countless risks.

Attempting to identify all of these risks would be an exercise in exhaustion—but too often colleges and universities become bogged down with cataloging threats. It's certainly important to classify risks, and this report will explore ways to do so. Institutions can spend enormous energy and capital trying to enumerate every single risk they could possibly face. **Yet a lengthy and detailed list of threats does nothing on its own to prepare an institution to deal with those threats.**

The first step of risk management should not be creating lists but rather developing an institution-wide framework for addressing risk and change. This is the message of risk experts such as Janice Abraham, President and CEO of United Educators Insurance, who emphasizes the importance of **enterprise risk management (ERM)**. ERM is defined as a business process that takes a strategic and campus-wide approach to risk.

"When colleges and universities first started thinking about risk, the process was transactional and reactionary," said Abraham, speaking at the APPA Thought Leaders symposium. "It was focused on transferring risk away from the college or university." Over time, risk management became more integrated into college or university processes. "People began to think of risk as an expense that should be minimized. It was driven by issues of compliance."

Savvy institutions go beyond integrated risk and seek to transform risk management into a strategic, enterprise-wide business process. **"ERM emphasizes optimizing risks to achieve enterprise goals,"** said Abraham. "And it includes the understanding that alongside risks come opportunities. Colleges and universities need to be open to new possibilities at the same time they prepare to face threats."

The primary goal of ERM, according to Abraham, is culture change. When an institution is practicing ERM, it has incorporated a well-organized approach to risk management, one that addresses the entire organization. The college or university has the skills and capacity to be flexible and adapt to an ever-changing environment. When an unexpected crisis hits, the institution takes it in stride; when an

Data Point:

Enterprise risk management

How effective is your institution at mitigating risk?
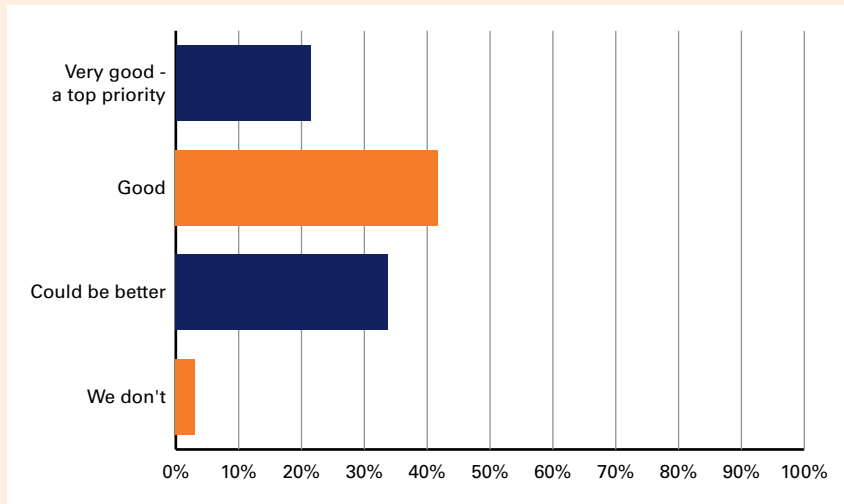
Most Senior Facilities Officers responding to the APPA Thought Leaders Risk Survey believed their institutions were doing an effective job managing risk. Only 3 percent—five respondents—believed they didn't do well at mitigating risk.

Source: APPA Thought Leaders Risk Survey, January 2018.

unexpected opportunity arises, the institution takes advantage of the situation. **The goals and mission of the college or university are unshaken by whatever the world throws its way**, and the institution can do what it *wants* to do, not what it *has* to do.

"This is the goal," said Abraham. "Maybe you'll never quite get there, but it's what you can aim for."

Creating the ERM framework

Effective enterprise-wide risk management requires institutions to create a framework—a structure that supports the basic components of ERM. This is a central step in ensuring that risk management is adopted across the entire college or university, and it is the only real way to achieve culture change.

Many models of ERM frameworks have been employed, and each institution will need to shape a framework that works for its campus. Some key elements of effective frameworks include:

1. **Ensure support of senior management.** Risk must be championed from the highest levels of the institution. If the board and senior leadership aren't invested in ERM, efforts will eventually stumble.

2. **Develop and communicate a risk management policy.** For example, the University of Regina's policy on ERM, according to URMIA's report, *ERM in Higher Education*, states that its objective is to "incorporate a consistent approach to risk management into the culture and strategic planning processes of the University, supporting the setting of priorities and making of decisions at the institutional level."

3. **Establish accountability and authority.** Risk is ultimately everyone's responsibility, but that creates a situation where it can be *no one's* responsibility. Clear authority needs to rest in key figures who will be accountable for their actions.

Data Point:
Enterprise risk management
Keeping risk assessments up to date

Risk assessments at most campuses are fairly up to date, according to the APPA Thought Leaders Risk Survey. About 58 percent of Senior Facilities Officers reported that their most recent risk assessment was between one and four years old. Some were older, and three respondents (1.84%) said their assessments were more than a decade old. More than a quarter didn't know how old their assessments were, but most alarmingly, 14 respondents (8.59%) said their institution had never conducted a formal risk assessment.
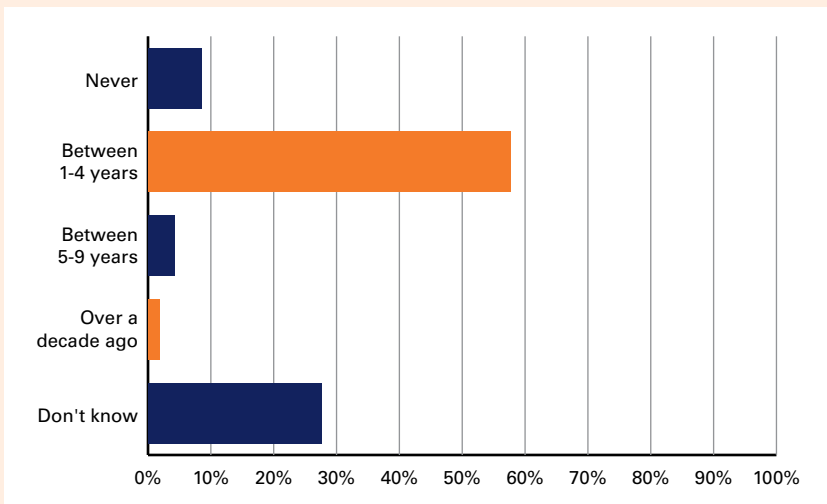
Source: APPA Thought Leaders Risk Survey, January 2018.

Implementing an ERM process

One of the most important words in the definition of ERM is "process." ERM isn't something that an institution does once. **It is an ongoing effort in which the college or university is always engaged.**

Abraham presented ERM as a cycle. Different institutions have developed their own process, but all share, at their core, the following steps:

1. Identifying threats and opportunities across the enterprise.

2. Categorizing and ranking risks and opportunities related to the institution's plans and mission.

3. Mitigating risks and responding to emergencies.

4. Monitoring risks and opportunities and responding to changing circumstances.

Step 4 leads right back to step 1. Emerging risks and opportunities must be assessed, and mitigation plans must be developed and tested. Over time, as situations change, some risks will fade in significance and new threats will take their place. College and university leaders must constantly cycle through the process, keeping up with change as it happens.

We'll look at each step in this process, focusing first on risks and then on opportunities.

Data Point:

Enterprise risk management

Institutions with a formal strategic plan to mitigate risk
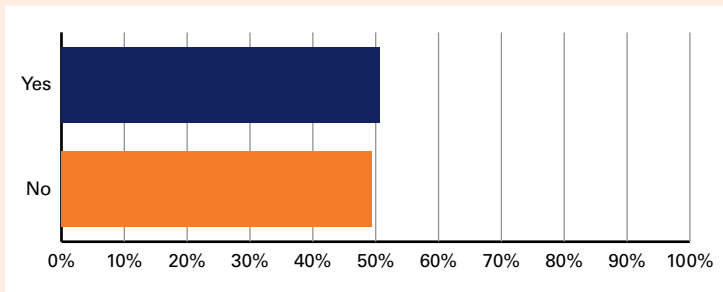
The APPA Thought Leaders Risk Survey found that about half (50.62%) of 162 respondents had a formal risk management strategy, leaving about half (49.38%) without such a strategy.

Source: APPA Thought Leaders Risk Survey, January 2018.

Managing risk in higher education

Step 1: Identifying threats. Understanding the threats facing the campus requires both an eagle's-eye view of the big picture and attention to the most mundane—but possibly explosive—details.

Participants at the 2018 Thought Leaders symposium were asked what mechanisms their institutions rely on to define and identify risk. Their responses fell into several categories:

- **Individuals or teams within the college or university responsible for some facet of risk management.** The campus leaders tasked with risk management play a major role in bringing threats to the attention of the campus. About half of the colleges and universities represented at the Thought Leaders symposium have a chief risk officer or someone with a similar title in their organization. But many others within the institution also play a role, including the executive leadership team and emergency management committees. Experts in specific fields contribute assessments of specialized risks, such as economic forecasting or political affairs.

- **The campus community.** Many institutions seek input from faculty, staff, students, and parents to better understand threats and how they are perceived. Information can flow through social media or via formal processes such as town hall meetings. Hotlines and fraud lines give indi-

viduals direct and sometimes anonymous ways of reporting problems or concerns.

- **Outside experts and resources.** Emerging threats are often best understood by tapping the wisdom of experts outside of the institution. Insurance companies can be helpful, as well as outside firms or consultants. Campuses maintain relationships with local law enforcement, and some reach out to the Federal Bureau of Investigation. Institutions can also draw on published resources such as risk registers that list common campus threats.

- **News and trends.** Smart campuses work to stay on top of local, national, and international news and apply that news to their institution while paying attention to social, demographic, and economic trends.

- **Real-life incidents.** While you might hope to anticipate all possible threats, inevitably situations will arise that you never expected. Any time a scandal or crisis hits another campus, the smart strategy is to think through how your own campus would be exposed in a similar circumstance.

Risk management experts warn **against spending too much time listing risks**. In the report *A Practical Approach to Institutional Risk Management: Getting Risk Right in an Era of Constrained*

Administrative Resources, the University Business Executive Roundtable states,

> Many universities are reluctant to undertake enterprise risk management (ERM) because of its administrative intensity, which has only become more pronounced after the Great Recession. When looking at their peers, many university administrators are confronted with a wasteland of horror stories of universities spending 18 to 24 months on risk identification and assessment, only to come up with a risk register of 200 to 500 risks. Of course, this concerns the average senior administrator who wonders, "Can our university actually begin tackling that many risks?"

A register with 200-plus risks is so vast that it is useless to the institution—and the time devoted to generating such a list could have been better spent. Risk experts suggest jump-starting the risk identification process by relying on published risk registers from higher education organizations and peer institutions. For example, the University Risk Management and Insurance Association (URMIA) offers a risk inventory that its members can use in identifying and ranking threats.

Data Point:
Risk identification
Inverting the 80/20 rule

"Institutions tend to spend 80 percent of their risk management time identifying risks and 20 percent doing something about those risks, such as assessing the impact of risks, assigning owners to the risks, developing plans to reduce risk, and tracking risk. But best practice calls for reversing the 80-20 allocation of effort. . . . Using [resources] gleaned from other institutions, institutions can jump-start the risk identification effort and limit it to 20 percent of the effort. Spending the remaining 80 percent on assessing the likelihood, impact, and risk mitigation strategies (rather than reinventing the work done by others) is a far more efficient use of everyone's time."

Source: Janice M. Abraham, *Risk Management: An Accountability Guide for University and College Boards*, Association of Governing Boards of Universities and Colleges, 2013.

Step 2: Categorizing and ranking risks. The other mistake institutions make with their 200-plus list of risks is to treat them all equally. Failing to make annual copyright infringement disclosure in a timely way is a compliance violation and, therefore, a risk—but it ranks nowhere near a bomb threat at the biggest football game of the year.

Risks should be grouped into categories that make clear both who should be accountable for a particular risk and its potential impact to the institution. NACUBO proposes five broad categories of risks:

1. **Strategic risks.** These risks affect an organization's ability to achieve its goals. They will depend on the institution's mission and goals and should include any threat to achieving those goals.

2. **Financial risks.** These risks are those that could result in loss of assets. They will be heavily dependent on the institution's funding strategy. Pushback against high tuition will dramatically impact some institutions, while others will be put at greater risk by declining international enrollment.

3. **Operational risks.** These risks affect ongoing management processes and can include the failed rollout of a new payroll system or a major utility break that cuts water to half of the campus.

4. **Compliance risks.** These risks involve compliance with externally imposed laws and regulations as well as internal policies and procedures concerning safety, conflict of interest, etc. Compliance risks fall on many different divisions in the institution—from accounting to facilities to research.

5. **Reputational risks.** These risks affect an organization's brand or reputation. They can encompass any of the above risks—mismanagement of a natural disaster such as a hurricane can be as devastating to a college or university as a scandal over failure to comply with Title IX requirements. Reputational risks are the hardest to quantify—how do you place a value on an institution's good name?

Risks should also be assessed so that the institution can **focus its attention on the most serious threats**—those with the greatest potential impact and the greatest likelihood of happening soon. If a whiteout blizzard hits your campus in South Florida, it would be a catastrophe and you would be unprepared—but it's not very likely, so you shouldn't spend much time worrying about it. However, a hurricane will almost certainly land nearby, and you need a plan for managing the situation.

Institutions use a variety of methods to assess threats. One of the most straightforward is the "heat map," a chart used to rank threats by their impact and probability. For example:

Impact →	High impact/Low probability • Intermediate priority for the institution	High impact/High probability • Greatest priority for the institution
	Low impact/Low probability • Lowest priority for the institution	Low impact/High probability • Intermediate priority for the institution
	Probability →	

This is an immediately understandable approach to risk assessment that allows campuses to quickly see which threats deserve the greatest attention. Some institutions, such as the University of North Carolina at Chapel Hill, add a third factor to the heat map, time of likely occurrence. This creates a three-dimensional matrix (imagine a Rubik's Cube) in which the highest impact, highest probability, and most immediate risks rise to the top.

Other organizations have proposed different risk assessment strategies. NACUBO, for example, suggests a chart that **tracks risks by whether the risk is increasing, declining, or remaining the same, and by the status of institutional actions set up to manage that risk**. A newly identified risk for which the risk management processes are clearly deficient will therefore take priority over a risk for which the processes in place are appropriate to the need.

Another strategy was developed by Brown University to better understand the potential impact of risk. Unlike at a private sector company, where risks can be assessed using the bottom line, colleges and universities have many risks that are extremely difficult to quantify or compare. How can you put a dollar figure on students and faculty, or the pedagogical mission of the institution? What is the value of deeply beloved historic campus structures or the art in a campus museum? Brown addresses this challenge by **assessing each risk according to its potential human impact, asset impact, and mission impact**. Each of these impacts is defined and given a score on a scale from 0 to 3. This provides a common language for all stakeholders and allows the institution to measure impacts that don't have an easy dollar figure attached.

The specific strategy each institution uses to assess risk will depend on its unique culture and needs. A critical principle to keep in mind, however, is to keep the process simple. Time devoted to fine-tuning the risk assessment process is time taken away from actually preparing for threats. **What matters is that the institution understand which threats demand the greatest attention.** You're looking for a priority list, not a dissertation.

Data Point:

Risk assessment

Clarifying "impact"

Brown University uses risk assessment definitions to evaluate impacts that cannot be easily translated into dollar figures. The goal is to identify the risks with the greatest impact, even when that impact is hard to measure.

Human Impact	Asset Impact	Mission Impact
Possibility of injury, illness, or death to Brown community members, visitors, or guests	Physical and/or financial losses and damages to campus facilities, infrastructure, reputation, and/or balance sheet	The disruption of and/or adverse impact of University operations, including the essential mission of research and teaching
0 = Not Applicable	0 = Not Applicable	0 = Not Applicable
1 = Injuries are treatable with first aid	1 = Isolated, minimal damage or loss, or none at all	1 = No disruption or adverse impact to University operations
2 = Injuries/illnesses treatable with medical care, injuries do not result in permanent disability or disfigurement	2 = Sporadic damage or loss to building and facilities and/or other assets, including reputational damage	2 = Faculty, students, staff temporarily unable to carry out University operations
3 = Injuries lead to permanent disability, disfigurement, and/or death	3 = Widespread, critical financial loss and/or damage to buildings, infrastructure, and/or other assets, including reputational damage	3 = Significant damage to campus and/or loss of other essential facilities or people requiring temporary or permanent suspension of normal daily University operations

Source: University Business Executive Roundtable, *A Practical Approach to Institutional Risk Management: Getting Risk Right in an Era of Constrained Administrative Resources*, The Advisory Board Company, 2012.

Step 3: Mitigating risks and responding to emergencies. One of the first steps in developing a risk mitigation strategy is understanding the institution's risk tolerance—**how much risk is the institution willing to accept**? According to Abraham, "A board can agree, for example, that an institution's finances can absorb a 10 percent decline in enrollment or a rise in interest rates of its variable rate bonds by 300 basis points." Mitigation plans should be prepared for risks that go beyond the stated limits. (This strategy does not apply to health and safety risks, where there is no acceptable level of risk.)

Several options are available to institutions when addressing specific risks. Gallagher Higher Education Practice breaks them into five choices:

1. **Reduction.** Reduce the likely frequency or severity of loss. This might mean improving the campus drainage system to reduce the likelihood of flooding or installing additional backup systems for core university IT systems to prevent outages.

2. **Control.** Minimize damage after a loss has occurred. This could include planning for backup housing in case high winds damage a residence hall, or a crisis communication plan to deal with the press in the event of a public relations scandal.

3. **Transfer.** Assign responsibility for an activity to another party. Insurance is a form of risk transfer, and so are some types of design/build contracts.

4. **Acceptance.** Assume responsibility for a risk. This is most often the case for low-impact and/or low-probability risks and is the right choice when mitigating a risk's costs, even more so than dealing with the consequences of the risk itself.

5. **Avoidance.** Eliminate or never launch an activity because the risk appears too great. This is a difficult choice for higher education institutions but nevertheless must be on the table.

Risk reduction and control plans **always need an owner**. Unless someone is responsible and accountable for a particular risk, the risk won't be adequately addressed. Other elements of successful risk management plans include the following elements, according to the Federal Emergency Management Agency (FEMA) report, "Building a Disaster-Resistant University":

■ Goals—General statements of what you want to achieve. For example:
  • Minimize interruption to instruction.
  • Protect research activities on campus.

■ Objective—Strategies or steps to attain identified goals. For example:
  • Inform the campus community about potential hazards and appropriate actions.
  • Protect lab equipment valued at $5,000 or more.

■ Mitigation actions—Specific actions to achieve your goals. For example:
  • Retrofit lab equipment.
  • Develop annual training sessions for lab directors on hazard mitigation.

While FEMA focuses on natural disasters, the same elements are appropriate for many types of mitigation plans. We will discuss more detailed mitigation strategies for specific types of threats later in this document.

Data Point:

Enterprise risk management

Who "owns" risk

The APPA Thought Leaders Risk Survey asked Senior Facilities Officers who was responsible for risk at their institution. Out of the 144 responses received, the Chief Financial Officer (CFO) was most likely to be identified as the owner of institutional risk (at 38.19%). However, 29.86 percent of respondents said risk wasn't owed by any one department or

individual. This sounds worrisome—is no one accountable?—but comments from respondents paint a more detailed picture. Several institutions placed risk under the CFO, but not directly on the CFO. Several other respondents said the facilities organization was responsible for risk. Other institutions relied on risk management teams or committees, and others described a structure where risk is distributed across different departments.

Source: APPA Thought Leaders Risk Survey, January 2018.

Step 4: Monitoring risks and responding to changing circumstances. ERM is never done. Colleges and universities must constantly monitor identified threats and scan for emerging risks. Periodically the entire ERM framework should be assessed to see how well it's working for the institution. Needs change, staff change, the priorities of the institution change, and the ERM framework needs to change to keep up.

Meanwhile, execution and follow-through are the point where many risk management plans fall apart. In its 2012 report on institutional risk management, the Education Advisory Board states that three pitfalls often hamper effective implementation:

- **Plans lack accountability.** Managers develop unachievable "pie-in-the-sky" plans without confirming if they could actually be executed, while lack of follow-through means plans get dusty sitting on office shelves.

- **Incentives are insufficient to spur unit-level action.** Without institutional incentives and support, unit-level leaders don't see risk mitigation as a real priority.

- **Inability to reallocate resources to institutional risks.** Unless the cost for risk treatment efforts is estimated and budgeted, administrators have to guess how much money is needed and try to draw it from other sources. If the process is too difficult or the funds aren't available, risk mitigation will fall by the wayside.

The solution requires creating an ERM process in which plans are developed in cooperation with different campus constituencies to ensure that they are practical and achievable, that accountability is built into the system, and that risk is adequately funded. Otherwise, mitigation plans will almost inevitably come up short.

Plans should also **include the creation and use of metrics so that progress can be measured and managed**, says Gallagher Higher Education Practice. "The metrics may address total cost-of-risk, claims trends, or other numerical measures," they state in their report *Road to Implementation: Enter-*

Data Point:
Enterprise risk management
ERM on K-12 campuses: Case study in San Francisco

When campus leaders broaden their focus to consider both risks *and* opportunities, new possibilities open up for colleges or universities—and for K-12 school districts.

For example, the San Francisco Unified School District (SFUSD) needed to better manage the risks and liabilities posed by community-based organizations working on school campuses. These community groups provide tutoring, mentoring, health, wellness, and after-school programs to San Francisco students.

The district developed a process and workflow for identifying and outlining contractual obligations and ensuring compliance with regulations requiring background checks, drug screening, and insurance. At the same time, driven by an ERM philosophy that incorporated opportunity as well as risk, individual campuses were encouraged to assess the community organizations working in their schools. School principals were urged to determine if the work of community groups aligned with the priorities of the campus.

"From a risk management perspective, what began as a focus on compliance (MOUs, insurance, etc.), expanded into an ERM model that provided support for strategic objectives and services to better serve the needs of students. It resulted in a process that was broader than simply managing risks through insurance or other similar risk tools."

Source: Excerpt from "Enterprise Risk Management in the Great City Schools," Council of the Great City Schools, Spring 2016.

prise Risk Management for Colleges and Universities. "Qualitative measures might include opinions about the impact of risks on the institution's progress in advancing its mission." Senior leadership and board members should receive regular updates on risk metrics to ensure the institution is moving in the right direction.

Boards and campus leaders also need to **implement a process to ensure new risks rise to their**

attention. Senior staff responsible for risk management, such as the Chief Risk Officer or equivalent, and any risk management teams on campus, need to stay on top of trends and issues and regularly survey outside experts for insight into emerging threats. Abraham also suggests going deeper into the institution by surveying a wider range of staff and faculty leaders. (She suggests asking the simple but telling question, "What keeps you up at night?") This approach can give the institution insight into risks senior administrators might not have realized were significant.

One of the most important times to consider risk is when the college or university considers pursuing new initiatives. It's easy to get caught up in the excitement of a new plan or program—and hard to put on the brakes if significant donor funding is involved—but the **best time to assess risks is at the start of a project**. Risk assessment should be incorporated into the campus planning process and employed by senior leadership and board members before signing off on new initiatives.

Embracing opportunities

We tend to think of unexpected circumstances as bad or dangerous things, and certainly they can create risks that threaten the college or university's ability to achieve its mission. But new circumstances can also create opportunities that institutions can seize to advance their mission. **Effective risk management, according to United Educators' Janice Abraham, includes the flexibility to respond to both negative and positive events *and* turn them to your institution's advantage.**

It's important to emphasize opportunity. Institutions are inherently cautious and averse to change. But leaving opportunities on the table in favor of the status quo *is itself a risk*. History is full of stories of organizations who came to regret letting opportunities go. Remember that an engineer at Kodak invented the first digital camera. Kodak failed to capitalize on the invention, and the Eastman Kodak Company is now a shadow of its former self.

Finding and assessing opportunities mirrors the steps of addressing risks:

Identifying opportunities. Institutions should look for opportunities at the same time they seek out risks. Sometimes they are two sides of the same coin. A financial decline can threaten an institution's goals, just as a financial upswing can jump-start them. Many risks create opportunities in their wake. The risks of creating a new scientific research program (e.g., "Will it attract enough students? Will it attract high-quality staff? Can we get donor support for renovations to existing facilities?") must be balanced by potential opportunities (e.g., "We have a chance to establish ourselves in this new field and prepare students for a promising new career.")

Categorizing and ranking opportunities. An endless list of opportunities is as useless as an endless list of risks. Opportunities should be ranked just like threats. Heat maps, for example, can assess the potential impact and probability of opportunities, and the most likely and high-impact opportunities should be given the most attention.

Responding to opportunities. Institutions often feel little need to prepare as thoroughly for opportunities. Certainly, a solid emergency plan is a greater priority, but if the institution sees an opportunity on the horizon, it would be wise to be ready for it. For example, the campus might keep its eye on a declining shopping center adjacent to campus, understanding that traditional malls are closing down across the country. Even if the owners are currently committed to keeping the property, the institution could still include the property in its master planning process and consider what the college or university would do if it suddenly came available.

Best practices for managing risks and opportunities

Drawing on her experience helping college and university campuses across the United States identify and mitigate risks, Abraham presents the following as best practices for effective ERM:

- **Start from the top.** Champions are essential to making enterprise risk management a priority for your campus. And those champions need to be among the most senior leaders of the institution.

"You won't create a strategic risk management system if the president doesn't care," explains Abraham.

■ **Understand and embrace specific roles.** No single individual can understand the complexity of an entire campus. Effective risk management programs rely on experts in different disciplines to guide the institution.

■ **Understand, respect, and appreciate differences between business and education.** Board members and other campus leaders from the private sector may want to push the college or university to a more business-based assessment of risk, but to do that is to misunderstand the nature of higher education. The safety of students and the academic reputation of the institution cannot be quantified with a simple dollar figure.

■ **Build on the work of others.** "We all think we're unique. But we have more in common than we like to admit," says Abraham. Colleges and universities don't need to start from scratch developing lists of risks or creating assessment systems. Save time by studying the work of experts and relying on the experiences of peers.

■ **Incorporate risk management into board committees and the full board's work.** The board needs to ask questions, require regular updates, and establish accountability for risk.

■ **Question sacred cows.** Every institution has them, and the tendency is to not look too closely at them. But how often has the greatest damage to an institution's reputation—let alone damage to human lives—emerged from deeply beloved individuals and well-entrenched campus organizations? No one should be above scrutiny. The beloved coach, the championship team, the Nobel Laureate, the favorite professor—all need the same attention. Failure to question these sacred cows leaves institutions vulnerable and does their students, faculty, and staff a disservice.

Data Point:
Enterprise risk management

Tips from United Educators and the Association of Governing Boards of Universities and Colleges

1. **Define risk broadly.** Risk should include any impediment to accomplishing institutional goals.

2. **Recognize both the opportunities and downsides of risk.** Weigh risks against potential rewards and remember that all successful organizations take risks.

3. **Develop a culture of evaluating and identifying risk at multiple levels.** Presidents and board members rarely see the first warning signs of emerging risks. Draw on the insights of multiple levels of the institution to get the big picture.

4. **Look at the total cost of risk.** Risk is not just about dollars and cents. Institutions must consider all consequences of risk, including lost productivity, distraction from mission, and negative publicity.

5. **Emphasize collaboration between boards and presidents.** Presidents and boards need to engage in candid discussions at the strategic level and work together to fulfill their shared responsibility for the success of the mission and the stability of the institution.

Source: Adapted from Association of Governing Boards of Universities and Colleges and United Educators, "The State of Enterprise Risk Management at Colleges and Universities Today," AGB, 2009.

Section 3:
Strategies for Responding to Major Risk Categories

To get a sense of the types of risks and opportunities currently faced by their institutions, participants at the 2018 Thought Leaders symposium conducted their own heat map exercise. They evaluated threats and opportunities by potential impact and probability, and focused attention on the top major risk categories that emerged from the exercise:

1. Revenue and investments
2. Brand and reputation
3. Health and safety
4. Innovation
5. Facilities
6. Changing political/cultural environments.

Participants then discussed each category in depth and proposed strategies that institutions can use to mitigate these risks.

1. Revenue and Investments

Colleges and universities have faced unprecedented financial upheaval in the last 20 years, and the situation remains uncertain. While state appropriations for higher education rose nationwide by 2.1 percent between 2016 and 2017, public colleges and universities are relying heavily on tuition to make up for ground lost in the Great Recession, according to the annual State Higher Education Finance report. A symbolic line was crossed in 2017, when more than half of states relied more on tuition dollars than public appropriations. In 2008, net tuition was only 35.8 percent of total education revenue across U.S. public education; in 2017 it accounted for 46.6 percent.

These figures are only a single data point in the **evolving picture of higher education financing**, which no one expects to stabilize anytime soon. Colleges and universities of all types and sizes—

from sprawling suburban community colleges to small private liberal arts institutions, and from massive land-grant state flagship campuses to historically black colleges and universities—must be prepared to adapt to the changing economic environment.

Thought Leaders participants outlined several steps their institutions are already taking. These include:

- Ramping up fundraising.
- Striving for competitive tuition rates.
- Managing endowments.
- Controlling costs.
- Strengthening recruitment and retention efforts.
- Experimenting with new course delivery methods, including new campuses and online instruction.
- Increasing the institution's flexibility to deal with market demands.
- Assessing the long-term viability of non-revenue generating programs.

Then participants looked at new strategies that more colleges and universities should consider going forward:

- Adopting differential pricing.
- Making it easier for students to transfer credits.
- Reducing the time to a degree.
- Better managing indirect costs.
- Leveraging real estate investments.

None of these risk mitigation strategies are themselves without risk. For example, differential pricing is spreading across campuses, particularly in public research universities, according to the report "Unmasking College Costs: Challenges in the Era of Differential Tuition Practices," published by the American Educational Research Association (researchers Glen R. Nelson, Gregory C. Wolniak, and Casey E. George). The report found that 86

out of 143 surveyed public research universities charge students different prices based on their major and their year of study. Tuition prices can vary by 40 percent or more. These price increases cover the additional cost to the institution of programs such as engineering, studio art, and nursing, and allow inexpensive courses, such as those in the humanities, to remain at their traditional rate. But differential pricing can be a blow to students who don't expect it, and students complain that colleges and universities have made little effort to explain the extra fees and higher costs per credit hour, so that the higher price only becomes clear when the bill arrives. It's unclear if differential pricing hurts enrollment or graduation rates; university leaders questioned in AERA's report say they've seen no difference. On the other hand, a separate analysis by a University of Michigan researcher in 2013 found that differential pricing in an engineering program may have lowered the number of women and minority students who enrolled. Critics also maintain that differential pricing practices exert negative pressure on some fields, such as technology and medicine—fields for which states and institutions should be encouraging student en-

rollment, in order to meet broader societal needs. Clearly, the benefit of financing costly degree programs must be balanced with the risks.

2. Brand and reputation

The risks to a college or university's reputation are impossible to list and have the potential to be uniquely damaging. Decades of hard work building a solid brand can be undone in an instant by the work of a single bad actor. It's easy to assume that it couldn't happen to you—but that's a dangerous assumption. Smart institutions prepare for the "unknown unknowns"—**those factors that can bring your college or university to its knees**—by emphasizing individual accountability and putting mechanisms in place that can be activated in a worst-case scenario. However, in a recent survey by United Educators, only 26 percent of participants believed that their institution's response to reputational risk is consistently proactive, while 54 percent believed they did not have the ability to withstand a major reputational risk event.

Thought Leaders participants looked first at what institutions are already doing to safeguard their brand and reputation:

- Hiring effective public information and communications teams to manage brand and identity.
- Educating campus stakeholders on brand and reputation.
- Investing in the community to build an "account" of trust that can be drawn upon in tough times.
- Implementing controls and systems that create accountability throughout the institution.

Going forward, participants believed colleges and universities need to take further steps to protect their reputations, including:

- Establishing a monitoring system—especially for social media—to track emerging reputational damage to the institution.
- Identifying owners and lines of communication for specific reputational risks.
- Improving the culture of the institution by articulating the values and mission of the college or university, communicating clear expectations for behavior, and ensuring transparency.

Data Point:
Disrupted revenue
Hope and denial are not strategies

"Today a great many American colleges and universities—ranging from those that, at least for now, seem reasonably secure to those that are hanging on by just a slight financial thread—are faced with a series of threats. Some institutions are involved in thoughtful, data-informed, and effective planning, but others are not directly confronting such challenges and are failing to engage in such planning. . . .

"Ultimately, institutions cannot predicate their planning on the hope that, in time, external realities will change, and they will once again regain their previous stability. Nor can they deny external realities and their own circumstances. In short, they must understand that hope and denial are not strategies."

Source: Susan Resneck Pierce, "Hope and Denial are Not Strategies," *Inside Higher Ed*, January 31, 2017.

- Focusing attention on the sacred cows on campus, those individuals or programs that are perceived to be above reproach, and reminding the campus that no one can act without accountability.
- Preparing communications strategies and mitigation plans to implement in the event of a reputational crisis.

The best reputational risks are those that are avoided. "People understand that crises are going to happen," said Gene Grabowski, senior vice president at Levick Strategic Communications, LLC, in Washington, DC, "It's the cover-up that's optional" ("Penn State Scandal Sharpens Focus on Reputational Risk," *Business Insurance*, Mike Tsikoudakis, January 1, 2012). In many of the recent scandals that have damaged institutional reputations, the warning signs were there. In some of the most disturbing sexual assault cases, individuals reported concerns or even outright offenses for *years* before they were taken seriously. Institutions need rules for

conduct, procedures to deal with misconduct, and reporting systems that take victims seriously.

3. Health and safety

The greatest challenge to ensuring the health and safety of students, faculty, staff, and visitors is that the risks never stop coming. Every day seems to bring new hazards, which can range from rowdy crowds at the biggest basketball game of the year to slippery tile floors in residence hall showers, volatile gases in a chemistry lab, and students driving under the influence. **It doesn't take much to put lives at risk.**

Participants at the Thought Leaders symposium felt their campuses were taking solid steps toward managing health and safety, with their existing efforts including the following:

- Responding to requirements of accreditation agencies and regulations.
- Incorporating risks raised by recent headlines and events into their risk management plans.
- Conducting tabletop exercises to test and improve response procedures and crisis management plans.
- Creating and regularly revisiting policies and plans.
- Educating the community about risks.
- Engaging with local law enforcement.

Nevertheless, participants believed their institutions could be more proactive in managing health and safety risks. They emphasized the following steps going forward:

- Addressing emerging risks before they reach the headlines.
- Conducting better assessments to predict risks.
- Seeking out funding to use better technology to predict and respond to crises and to increase staff levels.
- Increasing transparency to campus stakeholders about risks.
- Conducting more mandatory training to prepare a wider group of campus staff and leadership.
- Simplifying risk response strategies so that individuals know what to do in a variety of circumstances instead of creating enormous binders full of detailed plans.

Data Point:
Reputation risk management
Need for crisis communications expertise

"The complexity and intensity of some of the most prominent scandals to hit higher education require expertise in response that is well beyond any campus. John Burness, visiting professor of public policy at Duke University, notes, "No campus is prepared for the media spotlight that accompanies a crisis of the size and scope that occurred at Duke University or Penn State. Even the most experienced campus public relations staff need outside help." The need for immediate responses—via multiple channels—and the viral potential of events and any additional missteps calls for specialized expertise beyond the experience and talent of internal staff. Having an external communications firm or consultant familiar with the institution, its culture, and its circumstances can provide much-needed additional support for managing the message in the midst of a crisis."

Source: Janice M. Abraham, *Risk Management: An Accountability Guide for University and College Boards*, AGB, 2013.

Taking a proactive approach to risk management can mean flipping the question from "What risks do we need to fear?" to "What would a safe and healthy situation look like, and how do we move in that direction?" For example, participants in a Gallagher Higher Education Practice think tank focused on risks to student health by asking, "What defines a healthy student?" The report considered the importance of student health to the institution's mission, the availability of student health and mental health services, and the impact of chang-ing demographics on students and their health. (Demographics matter because international students, minor students, older students, and veteran students may face different health challenges than traditional students.) The report concludes by recommending that institutions create student health advisory committees, provide special health services for at-risk and economically disadvantaged students (who may arrive on campus with existing health challenges), and target healthcare outreach to international students.

This is only one example, but similar steps can be taken with other health and safety issues. Envisioning the best laboratory safety program or the most effective response to an outbreak of flu on campus can help expose where reality falls short and be the first step in creating a safer, healthier institution.

4. Innovation

The pressures on higher education demand response from colleges and universities, who must innovate to survive. This pressure has grown over the last two decades, **but innovation remains incredibly difficult for many institutions**. Resistance to change, combined with the inherent difficulty of steering a new direction for vast higher education organizations, has left senior leaders struggling to successfully innovate.

Participants in the Thought Leaders symposium reported that their institutions were taking steps to promote innovation, including the following:

- Engaging in professional development conversations with peers to share innovative strategies and successes.
- Creating innovation grants to encourage innovation within the classroom.
- Updating search processes to select creative and innovative job candidates.
- Developing new degree programs and course delivery methods.
- Building partnerships with community colleges.
- Increasing cooperation with businesses to support job placement of graduates.

Areas where participants believe their institutions could advance innovation include the following:

Data Point:
Institutional risk
The risk of minors on campus

"In the aftermath of the 2011 Jerry Sandusky child sexual abuse scandal that rocked the higher-education community, colleges and universities across the nation began realizing that they were not fully aware of just how big and dangerous a risk they were embracing in offering programs for minors. In the wake of this realization, universities across the nation have been hard at work to evaluate, develop, and implement system-wide changes. And through this work, many universities discovered that seemingly simple questions such as 'How many minors do we serve on campus? In which programs are we serving minors? What safeguards do we have in place to protect minors?' are not so easily answered.

"Many universities began by attempting to quantify their exposure but quickly realized they lacked a process to identify and track all youth-serving programs, and were unable to determine the actual number of minors served. Those universities that were able to get an estimate were surprised—even shocked—to realize that they actually served far more minors than university students. Between summer camps, recreation events, childcare, laboratory research, mentoring programs, 4-H, campus tours, and community outreach, the numbers kept growing.

"Today, university awareness of this risk has increased tremendously and most have begun systematically addressing the exposure."

Source: Candace Collins, Richard Dangel, and Aaron Lundberg, "Six Lessons Learned in Managing the Risk of Minors on Campus," 2014 *URMIA Journal* Reprint.

- Developing a clearer picture of effective innovations in pedagogy.
- Using data more effectively and embracing business intelligence to support decisions.
- Taking a hard look at tenure and promotion from the perspective of doing the best for our students.
- Investing in student success.

Carl J. Strikwerda, president of Elizabethtown College in Pennsylvania, points out that two competing and even contradictory management trends are currently dominating discussion in higher education: risk and innovation ("Risk Managing or Risk Averse? Neither Approach is Fully Suited for Higher Education," *The Chronicle of Higher Education* November 10, 2014). On the one hand, institutions have become more aware of the risks that threaten their operations and reputations and are embracing enterprise risk management to mitigate those threats. At the same time, many college and university leaders believe that disruptive change is the path to success. "We have, in other words, two views of risk before us: as a threat to be warded off and as a value to be celebrated," says Strikwerda.

How to balance these competing impulses? Strikwerda suggests the following strategies:

- **Institutions should never "bet the rent money."** Embracing innovation doesn't mean ignoring risk—it means confronting it head on.

Colleges and universities must hedge against risks even while taking risks. If new initiatives are truly risky and disruptive, not all will succeed. Some, in fact, will go down in flames. "A risky innovation that pays off is the holy grail we all seek. Until you find it, don't risk losing the only thing that's supporting your quest," Strikwerda says. That means protecting successful traditional operations from the fallout of any failures.

- **Enterprise risk management is the reverse of, and complement to, strategic planning.** Strategic planning rises in importance the more ambitious and innovative an institution's undertakings become. Colleges and universities should go into new initiatives with their eyes open to both the risks and opportunities. That doesn't mean that all risks can be predicted—there will always remain the "unknown unknowns." Strikwerda notes, "The new directions toward which the institution is headed are the most likely areas in which unanticipated risks will happen and also the ones with the most potential to free the institution from the constraints of scarce resources."

- **Disruption is a side effect of innovation, not a goal.** Innovation can be disruptive, but that doesn't mean that disruption is always innovative. New initiatives should be carefully thought-out and well-executed, not thrown together in the hope that innovation will arise

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Data Point:

Institutional risk

Working toward compliance with Title IX

The requirements of Title IX pertaining to sexual harassment and sexual violence remain so complicated for institutions that even the website of the professional association of Title IX administrators admits, "Title IX compliance is all over the map," adding, "We're still not entirely sure what the appropriate role, functions, and expectations of coordinators are."

Some institutions have teams of more than a dozen people working full-time on Title IX, while others have one person who might wear multiple other hats. On some campuses, Title IX has its own office, while in others Title IX falls under student affairs, human resources, or risk management.

It's also difficult for colleges and universities to predict where Title IX will go. "The minute we get our brain around what Title IX is, it changes," says Brett Sokolow, executive director of the Association of Title IX Administrators. In such an uncertain environment, institutions must walk with care.

Source: Excerpts from Jennifer Fink, "Untangling Title IX in Higher Ed," *University Business*, May 2017.

spontaneously out of chaos. Strikwerda says, "Create the best-thought-out, promising new initiatives, whether or not they're disruptive, but don't seek disruption for its own sake."

While it may seem that higher education is a deeply conservative and entrenched industry, Strikwerda asserts that "the most successful colleges in America have continued decade after decade to innovate—developing computer science, undergraduate research, environmental studies, neuroscience, community-based learning, interfaith understanding, and, yes, online education—while nurturing their best traditions." He continues, "Academe has its own special challenges and its own special strengths. We have too often been better at fostering our core operations than branching out in new ways. Yet we have also done well blazing our own path that builds on our strengths."

5. Facilities

The buildings, grounds, and infrastructure in which higher education operates carry risks that colleges and universities must manage. **A well-prepared and risk-savvy facilities operation can soften the blows of natural disasters and prevent or contain threats to health and safety.** At the same time, facilities failures can disrupt institution operations like nothing else. A power outage or water main break can bring college or university life to a screeching halt.

Thought Leaders participants described their institutions as taking many positive steps toward managing facilities risk, including the following:

- Planning for power outages by investing in power generation and creating campus micro-grids.
- Partnering with utilities to keep the campus operational under a variety of circumstances.
- Lobbying for state funding (for public institutions) to update outdated facilities and infrastructure.
- Creating performance-based service contracts to share risks.
- Implementing Total Cost of Ownership standards to ensure that long-term maintenance of facilities is considered during planning and design.

- Educating stakeholders on the role of facilities in student success in order to make the case for facilities investment.
- Creating, testing, and revising emergency management and business continuity plans.

Participants also considered where they could do better:

- Making better use of existing space through strategic space optimization.
- Investing in condition assessments of existing facilities.
- Making building commissioning part of every new project.
- Moving toward predictive rather than reactive maintenance and energy management.
- Educating senior institutional leaders on facilities issues, including Total Cost of Ownership.
- Expanding professional development for facilities staff, and sharing successes and best practices with peers.

Total Cost of Ownership (TCO) was a recurring theme in the discussion of minimizing facilities risks and can play a significant role in reducing facilities risk. The TCO concept optimizes financial investments by evaluating the "comprehensive impacts of a specific asset decision on the entire facility and infrastructure of an organization from inception onward," according to APPA's standard, *APPA 1000–1: Total Cost of Ownership for Facilities Asset Management.* "This applies to future expenditure decisions but also to the continuing cost of ownership of existing assets that aid in the determination of repair, renewal, or replacement decisions." The benefits begin during construction and extend as long as the facility is in use. For example, low-cost materials or systems may look good on paper (i.e., first cost or least cost), but if materials are cheaper because they are of lower quality, they may increase the risk of injury during construction and create regulatory risks if their performance standards are low. Furthermore, cheap materials can increase maintenance costs, posing risk to the facilities budget, and create operational risks if materials or systems fail. In other words, a cheap air conditioning system isn't really cheap if it goes out during the hottest week of the summer and shuts down all summer classes. Making the best decisions

for the life cycle of a building reduces risk by ensuring quality materials and systems that will operate efficiently over the long term.

6. Changing cultural/political environments

Some of the most challenging risks to higher education are those arising from political and cultural change. They imperil the institution because they are hard to predict and hard to assess—it's difficult to envision how the installation of a new Secretary of Education will affect an individual college or university campus. Yet no one doubts that a new Secretary can have a dramatic impact. **These challenges require institutions to be adaptable, flexible, and attentive.**

Institutions work to remain on top of cultural and political changes through the following mechanisms:

- Monitoring of large-scale economic trends by financial experts.
- Tracking of political change on both a state and national level by public affairs experts.
- Analysis of regulatory changes by national and international higher education professional associations.

However, colleges and universities need to expand their assessment of cultural and political risks, through steps such as the following:

- Assigning owners to broad areas of political and cultural change and making those owners responsible for monitoring, assessing, and reporting on trends.
- Creating or strengthening relationships with professional associations that track trends affecting higher education.
- Conducting "what if" exercises on newspaper headlines to see how they could affect the campus.

For an example of "what if" exercises based on newspaper headlines, look at the trend toward widespread adoption of ride-share services, the rapid development of self-driving vehicles, and the declining rate of driving among younger Ameri-

Data Point:
Institutional risk

Immigration policies threaten U.S. higher education

"University leaders are concerned about how federal government policies are affecting higher education in the U.S., one prominent university head told CNBC.

"Max Nikias, president of the University of Southern California, discussed the education sector's fears for overreaching regulation by the government.

"'There hasn't been a major impact yet, but it's something we're concerned about . . . .,' he said.

"The Trump administration's perceived hostility to immigration and what that might mean for international student enrollment in U.S. universities is a particular point of worry for the educational establishment.

"Donald Trump's presidency has been seen in part as a result of a mounting backlash against immigration with opponents of increased international arrivals believing that they could take jobs from American citizens. . . .

"According to a report published last year by the Institute of International Education, new foreign enrollment in American universities was about 291,000 in 2016—a 3 percent drop from the previous year, representing the first backtrack in growth the organization has recorded since it first started tracking those figures.

"It separately received feedback from 500 schools in the fall of 2017 who reported an average 7 percent drop in new international enrollment, though the researchers said it was too soon to know whether the 'Trump effect' is squarely to blame."

Source: "American Higher Education at Risk from Immigration Policies, Says USC President," CNBC, February 21, 2018.

cans. Colleges and universities have designed their campuses specifically to accommodate cars. If these trends hold and car use and ownership decline markedly, what will institutions do with all of those parking lots and parking garages. What if?

It's particularly important to consider the opportunities as well as the risks posed by broad cultural and political trends. In the above example, a campus can probably think of many exciting uses for the space now taken up by parking garages.

A comprehensive list of trends and issues institutions should consider alongside traditional threats is probably impossible to develop, but the following issues should be among those most institutions consider:

- Cyberattacks in general and ransomware attacks that can hold institutional data hostage in particular.
- Changing transportation technologies and trends.
- Unionization of graduate students and faculty.

- Changing expectations from students, parents, and government agencies.
- Demographic shifts reducing the size of the population under age 25 and increasing minority populations.
- Shifting attitudes toward immigration, including those that might place new limits on international student visas.
- Concerns about head trauma in contact sports.
- Shifting perceptions about athletics in general.
- The #MeToo movement.
- New focus on sorority and fraternity hazing and drinking.
- Free speech concerns conflicting with public protests against controversial speakers.
- Student mental health concerns.
- Evolving debate on gun safety and concealed-carry laws.

Section 4:
Institutional Risk and the Facilities Organization

Turning attention to higher education facilities, the staff and leadership of the facilities organization play a large role in helping the campus prepare for and respond to risks. Facilities experts often think about risk as much as any Chief Risk Officer—they are regularly engaged with questions of how to manage building systems failures, prepare for outages, and conduct preventive maintenance to extend building life.

Role of the facilities organization in managing risk

Participants at the Thought Leaders symposium separated into groups based on their role at their colleges and universities to better understand how the facilities organization can support their institutions' ERM efforts. Three groups—security and risk managers, academic affairs and student affairs, and CEOs and CFOs—considered the question: **What do you need from facilities to respond to risks?**

Security and risk managers. Risk experts said one of the most important roles of facilities is to be the **eyes and ears of the campus**. Facilities staff such as groundskeepers and custodians are everywhere on campus, all the time. For example, they might be the first to notice that a student is behaving in an unusual way, perhaps showing signs of serious depression. The facilities organization needs to encourage and empower staff to keep their eyes open and give them an easy way to report what they've noticed.

The second request of security and risk managers is for **better cooperation with facilities staff**. When risk managers can be involved with the planning, design, and construction of buildings, they can add input that will make it easier down the road to secure these buildings. Relatively straightforward design choices, such as ensuring sight lines and providing good lighting, are easy up front but difficult to correct once a project is complete.

Academic and student affairs. Experts in academic and student affairs say they look to facilities as **content experts**. The dean of students or provost of a campus likely has little formal knowledge about how to manage facilities to reduce risk. They need help understanding challenges and developing strategies to minimize threats and maximize student health, safety, and academic success. Effective institutions build partnerships with the facilities organization and their academic and student affairs counterparts.

CEOs and CFOs. Senior financial and managerial leaders on campus also rely on the expertise of the facilities organization. They look to senior facilities officers to keep campus leaders informed of the

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Data Point:
Institutional risk and the facilities organization

Facilities risk case study: University of Washington

With 49 percent of the facilities on the Seattle campus of the University of Washington 50 years or older, the institution's ERM program identified aging infrastructure and operational systems as one of its top risk areas. The 2013-14 ERM Report noted, "Older facilities present potential safety risks, energy inefficiencies, and technology that does not meet current operational and program needs." The report detailed several top risks and their mitigation focus, including an improved prioritization approach for deferred maintenance and enhanced debt-financing approaches.

Source: Excerpt from "University of Washington Enterprise Risk Management (UW-ERM): 2013-2014 Annual Report."

needs of the campus in terms of facilities risks, as well as strategies for addressing environmental and sustainability challenges. Facilities leaders are also uniquely able to inform staff about changing regulations and how the campus needs to respond.

Facilities can also support financial leaders in **making the case for facilities investments**. CEOs and CFOs recognize that preventive maintenance and strategic facilities renewal reduce the risk of building and infrastructure failure, but they need help proving their point. Facilities leaders can provide the hard data that convinces boards to invest in long-term facilities funding.

How the facilities organization can support the institution in managing risk

Facilities participants at the Thought Leaders symposium looked at risk from the other side of the equation: What can the facilities organization offer higher education to manage and mitigate risk?

The Senior Facilities Officers in attendance listed numerous ways their organizations serve their institutions:

- **Hands-on, in-depth knowledge of the campus built environment.** Facilities staff have been in every corner of the campus, including the utility tunnels, sub-basements, and attics where no president, board chair, provost, or dean has ever gone. This sort of knowledge is critical in mitigating risks and managing disasters. If a blizzard is about to hit, or 20,000 fans are showing up for the big game, the preparations of the facilities organization will keep the campus running smoothly.

- **A responsive staff.** The facilities organization is one of the largest on campus, and one of the most responsive. Staff are accustomed to being sent out to mop up spills, repair broken sinks, and diagnose power interruptions. It's only one more step to respond to emergencies.

- **Eyes on the ground.** Facilities leaders agree with security and risk managers that this is one of the organization's strengths. The facilities organization is an embedded workforce, closely engaged with the operations of the rest of the campus and alert to changes. They can and do speak up when they recognize unusual or alarming behavior.

Facilities participants were also divided into groups by the size and type of their college or university to see how different Carnegie Classifications would respond to the question. While there was significant overlap in the answers, a few differences stood out:

- **Private colleges and universities.** Representatives of private institutions emphasized the strong relationships they've formed with the local community. Campuses have worked with local governments and built good town/gown relationships, the sort of relationships that benefit the institution in the case of a natural disaster or crisis. Facilities organizations also have connections with local vendors and subcontractors that they can draw upon when needed.

- **Public research institutions.** Participants from large public colleges and universities pointed to the strength of partnerships with research faculty on their campuses. The facilities organization can serve as a living lab in cooperation with engineering, architecture, planning, and environmental programs, just to name a few.

- **Smaller public institutions.** Representatives from smaller public colleges and universities highlighted the facilities organization's familiarity with cross-functional teams. While many units of the campus tend to congregate in silos, facilities must work across disciplines every day. As well as forming teams of planners, architects, designers, and engineers, facilities organizations regularly work with the finance organization to fund new projects, with the IT organization to integrate technology, and, of course, with risk management to assess and mitigate risks.

Data Point:
Risk and the facilities organization
How much time is devoted to risk assessment?
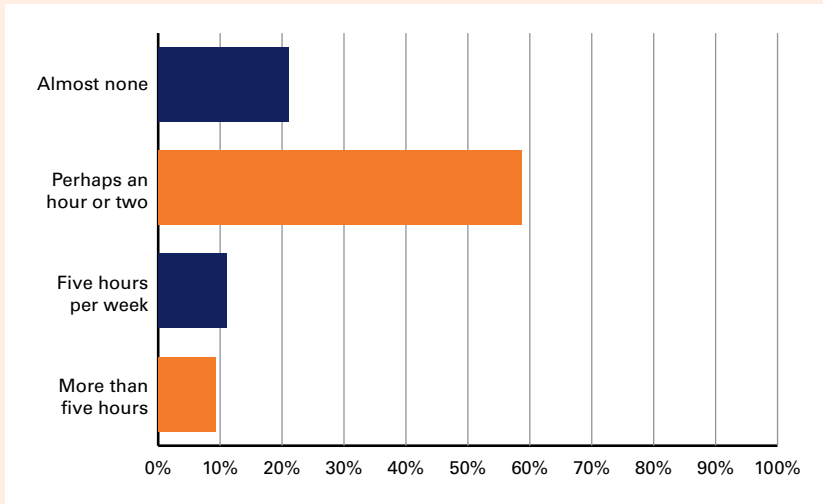
The APPA Thought Leaders Risk Survey found that for the majority of Senior Facilities Officers, risk management takes up about an hour or two of every week.

Source: APPA Thought Leaders Risk Survey, January 2018.

Filling the gaps

When Thought Leaders symposium participants compared what the institution needs from facilities with what facilities has to offer, they identified a few gaps between the two. To close these gaps, the facilities organization needs to take the following steps:

- Hire insightful and empathetic leaders and employees that can communicate the strengths and limitations of their department and discipline.

- Collect data and provide analytics, metrics, and benchmarks to the campus community.

- Include a wide range of campus stakeholders in the decision-making processes.

- Build a customer-service minded, response-oriented workforce.

- Create opportunities for feedback from students, faculty, and staff.

- Emphasize a facilities culture that is integrated into and engaged with the broader campus community.

- Help senior campus leaders build the case for investment in facilities renewal.

- Formulate a succession-planning strategy to ensure continuity and prevent the loss of critical facilities information.

Section 5:
Risks and Opportunities for the Higher Education Facilities Organization

Senior Facilities Officers are responsible for preparing for both risks to the college or university as a whole and to the facilities organization in particular. Facilities leaders participating in the Thought Leaders symposium conducted their own risk identification and assessment process to discover the risks *and* opportunities facing facilities.

The risks with the highest probability and highest potential impact were as follows:

- Financial shortfalls and facilities failures
- Natural disasters

- Lack of a qualified workforce
- Technology failures
- Utility failures
- Compliance issues
- Institutional curb appeal/first impression.

The opportunities with the highest probability and highest potential reward were as follows:

- Energy conservation
- Fuel and utility strategies
- Green technology
- Facilities supporting student success
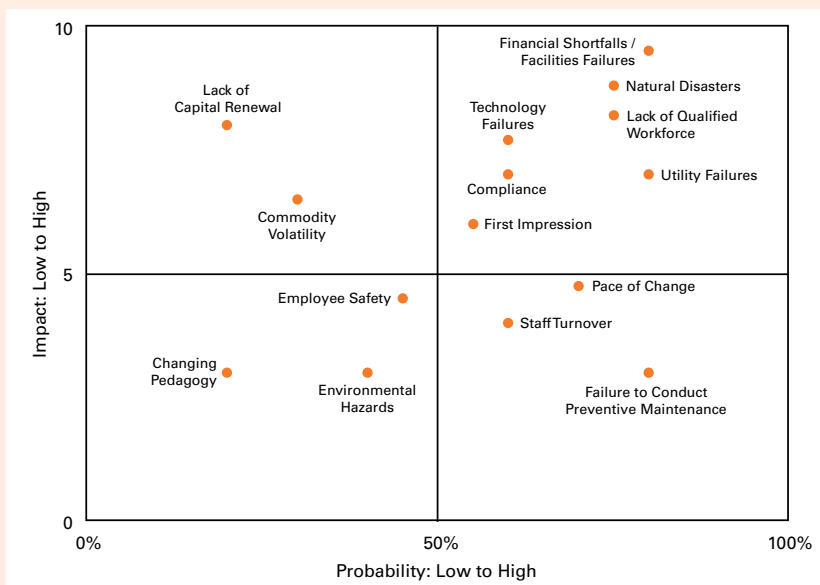- Resources to respond to emergencies.

Data Point:

Data Point: Facilities risk and opportunities
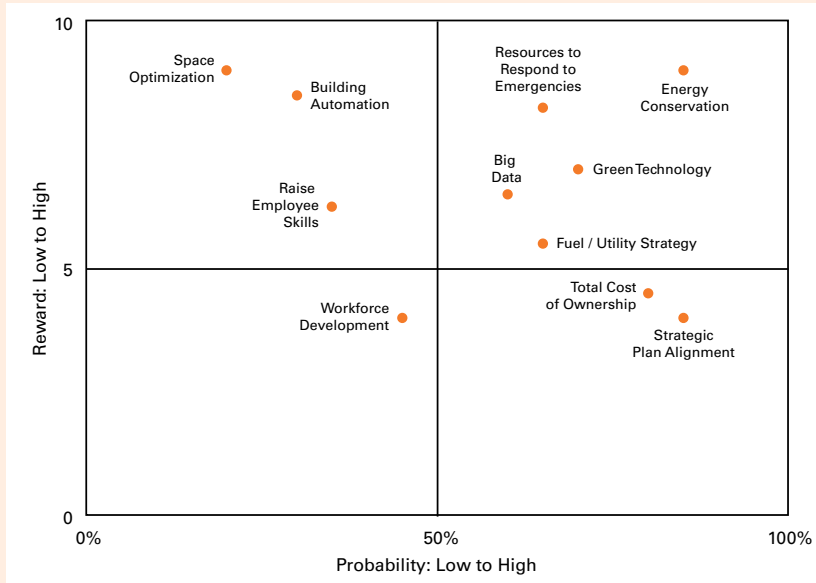
Heat maps from the Thought Leaders symposium

Risk Assessment:

Senior Facilities Officers at the APPA Symposium conducted risk and opportunity assessment exercises, with the mapped results to the left and on the following page.

Source: APPA Thought Leaders Risk Survey, January 2018.

Opportunity Assessment:

These two charts (Risk Assessment and Opportunity Assessment) focus on the highest probability and highest impact risks and opportunities.

Source: APPA Thought Leaders Risk Survey, January 2018.

Greatest risks to the facilities organization

Financial shortfalls and facilities failures. Inadequate funding for campus facilities can have lasting implications for the college or university. Failure to invest in the built environment means that maintenance issues pile up, easy fixes deteriorate into significant failures, and the whole campus drags along on the edge of catastrophe. Institutions where funding has been cut short year after year remain operational only with the nonstop work of facilities staff, who hunt down parts for antiquated equipment on eBay and position buckets under drips every time it rains. This poses a huge risk to both the facilities organization and the institution as a whole. What will the campus do when the aging heating system finally fails—and fails catastrophically on the coldest day of the year? **Financial shortfalls create both operational and strategic risks for colleges and universities** and threaten the institutions' ability to fulfill its mission.

Mitigation strategies suggested by Thought Leaders participants include the following:

- Conduct Facility Condition Assessments so you know where you are and what you need.

- Communicate the real risks to senior campus leadership in terms they understand.
- Change the dialogue away from talk of deferred maintenance (the term has too much baggage) and toward the idea of strategic renewal and reinvestment.
- Identify the most pressing needs, prioritize solutions, and put the costs in terms of risk mitigation.
- Design new structures and systems using Total Cost of Ownership standards so long-term costs are manageable and predictable.
- Investigate options for alternative financing methods to expand options for the campus.

Natural disasters. Earthquakes, hurricanes, blizzards, floods, fires—everything the planet can throw at you, higher education campuses have endured. To some degree, natural disasters can be predicted. The University of Florida should anticipate hurricanes, the University of North Dakota blizzards, and the University of California earthquakes—and there's not much point in North Dakota worrying about earthquakes or Florida prepping for blizzards. But disasters can and will strike out of season and where least anticipated. **The best strategy is to be prepared for chaos, whatever its source.**

Thought Leaders participants proposed the following strategies for managing the risk of natural disasters:

- Assess the probability of potential disasters.
- Design structures and systems to be resilient to failure and easy to repair.
- Establish a clear incident command structure and communications protocol.

Data Point:
Facilities risks

Confronting catastrophe: Business continuity planning

In her chapter for NACUBO's *College and University Business Administration*, Janice Abraham notes that it can be difficult to see the big picture of what the institution needs to protect on campus. She recommends the following steps:

- **A mapping exercise** of the campus identifies structures and infrastructure and the hazards that might accompany them. Maps should show all structures, essential services, locations of hazardous materials, critical infrastructure, and important off-campus sites including fire stations, hospitals and student housing.

- **An asset inventory** prioritizes the physical components identified during the mapping exercises. The goal is to identify assets that will be critical to maintaining the institution in the event of an emergency, including which buildings or portions of buildings house critical functions.

- **A business impact analysis** identifies the likely implications of risks to the institution's business processes—which, in higher education, include housing and feeding students, continuing instruction, caring for lab animals, maintaining telecommunications, etc. Each unit of the institution must identify the maximum allowable downtime, cost associated with downtime, and objectives for achieving recovery.

Source: Adapted from Janice M. Abraham, "Confronting Catastrophe," *Business Officer*, January 2018.

- Develop simple and straightforward plans for response and recovery.
- Perform drills, simulations, and tabletop exercises to rehearse plans and anticipate roadblocks.

Lack of a qualified workforce. The number of people qualified to work in higher education facilities is in decline. Researchers have found that the profession as a whole "desperately needs influx of new blood," according to the International Facilities Management Association. At the same time, institutions are facing labor shortages in skilled trades. Across the facilities organization, **the workforce is aging, senior staff are retiring, and colleges and universities are struggling to fill open positions.**

These shortages threaten institutions, who need teams with skill and experience. Solutions proposed by Thought Leaders participants include the following:

- Build strategic partnerships with unions, suppliers, contractors, and trade schools.
- Create training programs to build the workforce from within.
- Communicate the need to senior leadership, so the institution understands the needs and risks.
- Collaborate with HR to create internships and apprenticeships and to update retention and benefit plans to attract needed staff.
- Define the skills needed for the future workforce in order to clarify your needs.
- Promote facilities as a profession.

Technology failures. Technology is increasingly integrated into buildings and infrastructure systems, to the benefit of colleges of universities. However, **the more campuses rely on these systems, the greater the risk if they fail**. Institutions need to integrate fail-safes and redundancies into building technologies that will keep the campus operational even if new smart systems fail. The technology behind these systems is still fairly new, so institutions need to ask a lot of "what if" questions. What if there's an extended power outage? What if sensors are flooded? What if WiFi goes out?

One of the major risks of advanced facilities technology—and the Internet-of-Things (IoT) in particular—is cybersecurity. Many IoT systems

have either no security or poor security, and as recently as 2015, a survey by FacilitiesNet found that only 29 percent of facilities professionals surveyed were taking or had completed any measures to improve the cybersecurity of their building systems. Awareness of the problem is growing, and vendors are responding with more secure systems, but the risk of a bad actor either gathering information or interfering with your campus remains real.

Steps to mitigate risks from technology failures include the following:

- Create continuity operations plans that include options for alternate services.
- Improve the redundancy and resiliency of systems.
- Pre-establish emergency service contracts so that if or when a crisis occurs, you need only to make a phone call to get expert help.
- Institute alternative communications plans and procedures in case primary systems fail.
- Review the security of Internet-connected building technologies and adopt best practices for securing systems from cyberattacks.

Utility infrastructure failures. Utility failures pose enormous risks for colleges and universities. As well as interfering with normal instruction and operations, utility failures pose many other problems: Student safety becomes an issue when lighting failures throw campuses into darkness; research programs are threatened when power shuts down to critical vent hoods and pumps; the lives of research animals are put at risk when climate control systems fail; and human lives are on the line when water or power shuts off to university medical centers.

Fortunately, most campuses have experienced utility failures before and have invested time in preparing mitigation plans. But participants at the Thought Leaders symposium urged colleagues not to get complacent. **Every utility outage plays out in different ways, and institutions need to keep their plans fresh.** They also need to regularly conduct drills and practice exercises to reinforce procedures and determine where changes to the campus—new systems, new buildings, or a new stakeholder group—need to be accommodated in the plans.

Specific steps urged by Thought Leaders participants include the following:

- Design systems for redundancy and resiliency.
- Pre-establish emergency services contracts to ensure the support you need is available as soon as you need it.
- Create and test communications protocols.
- Conduct preventive and predictive maintenance on campus infrastructure to try to prevent failures.
- Regularly assess the condition of infrastructure, including risk to the campus.

Data Point:
Facilities risks
Coordinating contingency plans

"While many universities have developed space contingency plans at the department or college level, most universities lack a coordinating mechanism to identify conflicts between such plans.

"For example, multiple academic or administrative units often designate the same building as their backup space in case current facilities become unusable (e.g., from flood or storm damage). However, in the event that multiple facilities across campus shut down, backup plans conflict, leaving the institution scrambling to improvise a solution (which is often quite expensive or disruptive). In addition, as the recession has significantly dampened new building construction (while enrollment has continued to grow), administrators have far less flexibility with which to handle a sudden, unexpected need for temporary space."

Source: University Business Executive Roundtable, *A Practical Approach to Institutional Risk Management: Getting Risk Right in an Era of Constrained Administrative Resources*, The Advisory Board Company, 2012.

Compliance issues. During every election cycle, politicians announce they will reduce regulation, but the regulatory burden on colleges and universities only seems to grow. A survey of higher education presidents found that 85 percent believe the federal government is likely to significantly increase regulations, according to a report by the University Business Executive Roundtable. Enforcement is also increasing, especially for international activities, notes the same report. The number of individuals on campus who fall under

regulations has also grown to include faculty and staff who have never dealt with compliance issues. **Colleges and universities need to be deliberate about compliance** and seek to create a culture in which compliance isn't a burden, but rather part of how the campus does business.

Steps recommended by the Senior Facilities Officers at the Thought Leaders symposium included the following:

■ Identify responsible stakeholders—"owners"—for different areas of compliance and give them both authority and accountability.
■ Regularly review compliance protocols to identify gaps and weaknesses.
■ Prioritize and coordinate compliance efforts to reduce confusion.
■ Tie your compliance efforts to your institution's values.
■ Create a culture of excellence, not merely box-ticking.

Institutional curb appeal/first impression. Research by APPA and other organizations has confirmed that the condition and appearance of facilities plays a significant role in the recruitment and retention of students at colleges and universities. Prospective students rarely choose an institution solely because of the quality or appearance of their buildings and grounds, but facilities play a part in their decision making, especially facilities that will play a significant role in their academic path (for example, a nursing student cares a great deal about the facilities devoted to practical education.) And facilities certainly cause students to *reject* a college or university because important spaces were missing, inadequate, or poorly maintained. **Poorly maintained facilities, therefore, pose a risk to the institution.** They can drive away students and discourage faculty and staff.

Thought Leaders participants urge institutions to take the following steps to mitigate the risk of making a bad first impression:

■ Make the case to senior campus leadership of the value of the first impression of the campus, pointing out both risks and opportunities.
■ Develop a relationship with the admissions department to strategize where to focus efforts on creating the best impression.

Data Point:
Facilities risks
Compliance matrix program

"With ever-increasing compliance requirements, the average university chief business officer is often left wondering if local units are keeping up with compliance activities, or if they are even aware of the requirements at all...."

"To keep the campus abreast of ever-rising compliance requirements, Washington and Lee University developed a full suite of compliance initiatives. At the core of the initiatives is the compliance matrix. The matrix delineates responsibility and oversight for key compliance activities. Each of the university's compliance areas is assigned to a cognizant policy officer and compliance partner. The cognizant policy officer is a member from the President's Cabinet and has overall responsibility for that compliance area. The compliance partner is generally a unit-level administrator assigned day-to-day responsibility of the compliance area.

"The compliance matrix is enveloped by a suite of services offered by the Office of General Counsel. Compliance calendars provide an overview of federal reporting requirements by functional unit. Additionally, push notifications from the Office of General Counsel keep local units abreast of compliance modifications, while optional compliance worksheets are available to units to assess potential compliance gaps."

Source: University Business Executive Roundtable, *A Practical Approach to Institutional Risk Management: Getting Risk Right in an Era of Constrained Administrative Resources*, The Advisory Board Company, 2012.

■ Regularly review your wayfinding plan and ensure that the campus is pedestrian-friendly.
■ Conduct daily inspections to keep spaces looking their best.
■ Remember that all aspects of facilities come under public scrutiny, including the appearance of equipment, vehicles, and people.
■ Promote the idea of stewardship of the campus both within the facilities organization and to the campus community. Encourage everyone to take pride in the campus and keep it looking its best.

Opportunities for the facilities organization

Energy conservation. Senior Facilities Officers can create new opportunities for flexibility and cost savings for their institutions by conserving energy. Energy costs fluctuate widely over time, making it difficult to predict energy expenses for institutions in the long term. This creates uncertainty that poses a risk. By reducing energy demand on campus, the facilities organization can reduce risk exposure from volatile energy markets.

Fuel and utility strategies. A related opportunity for colleges and universities is the creation of fuel and utility strategies. Smart planning can limit the impact of sharp spikes in any particular fuel type, so if oil prices rise suddenly, the institution isn't devastated. Fuel strategies can also increase reliance on renewable energy sources and create new opportunities for the institution to generate its own energy and become less dependent on public utilities, reducing risk if those utility systems fail.

Green technology. Green technologies create opportunities to improve the lives of students, faculty, and staff while using resources efficiently, reducing environmental impacts, and improving ecosystems. Green buildings are designed to improve indoor air quality and increase natural light, both of which have been shown to support learning. At the same time, green systems reduce water consumption, increase the use of recycled and renewable products, and limit the emission of greenhouse gases. Out of all stakeholders on college and university campuses, facilities organizations have the greatest opportunity to make a real impact on the institution's environmental footprint.

Facilities supporting student success. Student success is usually framed in terms of instruction, academic advising, and academic support services, but facilities also play a role. It's difficult to learn well in a classroom that is too hot, too cold, or filled with buckets to catch the rain. Well-designed and maintained facilities, on the other hand, help students navigate the campus, improve student security, integrate technology, and promote inclusivity. The facilities organization has an opportunity to improve the campus built environment in ways that make the needs of students the number one priority.

Resources to respond to emergencies. As previously discussed, facilities organizations have a large and well-trained workforce that is able to step in when the campus is in crisis.

Data Point:
Risks and opportunities for higher education facilities organizations
Identifying emerging risks

The APPA Thought Leaders Risk Survey asked Senior Facilities Officers to identify risks they believe could come to threaten the institution as a whole and facilities in particular. Their responses include the following:

- Cybersecurity
- Mental health challenges
- Aging workforce/loss of institutional knowledge
- Managing social media
- Traumatic brain injury
- #MeToo movement
- Title IX issues
- Free speech/demonstration on campus
- Security risks including terrorism and active shooter situations
- Affordability
- Student loan debt
- Changing cultural attitudes about higher education
- Changing demographics
- Declining enrollment
- Financial uncertainty
- Regulatory overreach
- Campus growth putting pressure on aging infrastructure
- Competition
- Failure to maintain a standard to compete for top researchers
- Failure to grow endowment to meet funding needs
- Sea-level rise
- Aging buildings and infrastructure
- Declining number of skilled trades
- Attracting and retaining staff
- Lack of succession planning critical functions.

Source: APPA Thought Leaders Risk Survey, January 2018.

Section 6:
Questions to Promote Discussion

It has always been a goal of the APPA Thought Leaders Series to encourage discussion and debate on campuses across the United States and Canada. Participants at the symposium developed the following questions about how facilities can help manage risks and opportunities on your college or university campus.

We encourage readers to share these questions within your facilities organization and across campus departments. Take a hard look at your campus and consider what facilities can do to make the institution more adaptable to risk and change.

Managing risk across the campus

■ How much risk is your institution willing to tolerate?

■ How are you building resilience on your campus?
■ How do you create a campus culture that deters risk?
■ How does your campus define risks and opportunities?
■ Who is responsible for risk? Who *isn't* involved in the risk conversation but should be involved?
■ What are the sacred cows on your campus? What challenges do they pose? How can you mitigate those challenges?
■ Does your campus have a defined ERM strategy? If so, how well is it working? If not, what would it take for the campus to commit to ERM?
■ How often do you test and update your emergency plan?

Data Point:
Promoting campus discussion
How does your institution view risk?

In NACUBO's report "Developing a Strategy to Manage Enterprisewide Risk in Higher Education," the authors advise ranking your institution's approach to risk management. Understanding how your campus views risk is the first step toward reducing threats.

Level I: Sees little value in proactive risk management. Implements risk control mechanisms only when an unmanaged risk turns into a problem or crisis.

Level II: Has some conceptual appreciation for the value of risk in ensuring that not all uncertainties become problems, but lacks any centralized processes or monitoring and has no defined accountability for risk.

Level III: Is aware of risk management and sets up some monitoring mechanisms. May promote risk self-assessments or the internal audit function may audit for risk.

Level IV: Has a broader understanding of risk and considers both qualitative and quantitative risk factors. Regularly reviews hot topics, assesses risks within business units, and assigns risk to a senior institution officer.

Level V: Risk is a CEO-level concern. The institution believes that risk management should be embedded in every part of the organization. Each business unit designs its own risk mitigation plans. Training is in place, and internal audit monitors the risk management program to ensure it is working effectively.

Source: Adapted from Dale Cassidy *et. al*, "Developing a Strategy to Manage Enterprisewide Risk in Higher Education," NACUBO, 2003.

Strengthening the facilities organization to better manage risk

- What risks threaten your facilities organization?
- What is the role of facilities leadership in managing risk for the entire institution? For campus facilities?
- Does your facilities organization have adequate funding to harden facilities and infrastructure against failure? If not, how can you make the case that this is critical?
- What is the role of facilities in the case of a natural disaster on campus? What opportunities exist for facilities to better support the institution?
- Is your campus facilities organization threatened by workforce shortages and skill-set deficiencies? How can you communicate this risk to senior campus leadership? What steps can you take to recruit and retain qualified staff?
- What strategies are in place to mitigate the risks posed by advanced building technology and the IoT? Where are those strategies falling short?
- How does your facilities organization keep track of regulatory requirements? What processes could improve regulatory compliance?
- How can facilities improve the appearance of the campus to attract and retain students and faculty?

Seizing opportunities for the entire institution

- How can your campus better assess opportunities alongside risks?
- Does your institution have a mechanism to identify opportunities and bring them to decision makers?
- Does your campus have the flexibility and adaptability to seize opportunities as they present themselves? What would improve the institution's nimbleness?

Taking advantage of opportunities within the facilities organization

- What steps can you take to prepare your staff to be ready to respond to a campus crisis?
- How important is energy conservation on your campus? Within the facilities organization? How can you make the case that reducing energy use lowers risk for the institution and creates financial opportunities?
- Does your campus have a fuel and utility strategy that reduces risk? How can you implement such a strategy?
- What is your campus's commitment to green technology? Would increased investment in green materials and systems improve quality of life on campus? What would it take to create a greener campus?
- How can you make the case to campus leaders that facilities investment supports student success? How are you seeking to improve the student experience now? What gaps do you need to fill?

Section 7:
Conclusion

There's a truth about risk: The more you know, the more overwhelming the task of managing risk can feel. It's easy to get discouraged when looking at the long list of threats to colleges and universities and the monumental efforts required to mitigate those threats. It's easy for a sense of fatalism to creep in—what can any one individual do against fires, floods, scandals, economic downturns, political movements, cultural shifts, technological transformations, and negative social media campaigns?

The answer, surprisingly, is a lot.

One of the underlying themes of this report is leadership. It takes leadership to recognize the risks to higher education and to have the courage to confront them. It takes leadership to own risk and to be accountable for change. It takes leadership to see an opportunity when it arises and to seize that opportunity.

We at APPA encourage campus leaders in general and Senior Facilities Officers in particular to step up and become the leaders their colleges and universities need in this time when risks seem so daunting. Because even if one individual cannot prepare an institution for all of the risks it faces today, one leader *can* give that institution the confidence it needs to face the future.

Appendix A:
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