MANAGED RISK
In the broadest sense, risk is anything that keeps an organization from achieving its objectives. Risk management is the process of determining what can go wrong and developing strategies to prevent these events from happening (and if they do happen, mitigating loss). According to Glenn Klinksiek, content manager for the knowledge center at the University Risk Management and Insurance Association in Bloomington, Indiana, URMIA has identified more than 250 areas of risk for colleges and universities. “Of these, nearly 30 are facilities related and are associated with institutional strategy, operations, and compliance,” he says.

As defined by www.businessdictionary.com, managed risk is the “identified probability of loss, or exposure to a danger, that has been minimized to an acceptable level through careful planning and implementation of effective countermeasures.”

Managed risk is centered on proactive troubleshooting for operational problems that could result in disruption, loss, or injury. “It is the end state of a process that includes objective assessment of risk, consensus agreement to a point of completion (a ‘planning frontier’ or point where the stakeholders agree that the risk is acceptable), implementation of the mitigation measures to which the process stakeholders have agreed, and sustained funding for ongoing costs to maintain the mitigation strategies,” states John DeLaHunt, risk and life safety manager for the University of Texas at San Antonio.

It is important to integrate managed risk into a campus-wide plan that is applied to key areas of operation where disruption could have major adverse impacts. Examples include preventive maintenance, business continuity planning, and adequate planning around enterprise risk management, emergency response planning, and storm preparedness. Risk is managed through training staff adequately, managing processes effectively, and keeping campus physical assets in top working order. Failure to sustain these efforts will result in increased risk. “In fact, managed risk is a process endpoint that in itself requires regular maintenance,” says DeLaHunt.

A few examples of managed risks include electrical and mechanical equipment, uneven sidewalks, deteriorated handrails, broken windows, pedestrian crossings, poor lighting or visibility, and large trees that are not maintained. Issues that are often shifted toward deferred maintenance include leaking roofs and pipes, envelope gaps, asbestos and lead exposure, poor indoor air quality, and environmental exposures in labs.

In a campus context, managed risk may be the institution’s prioritized list of capital reinvestment (deferred maintenance/ component renewal) that brings the higher-impact investments to the top, or it may be the day-to-day choices that determine which problem to address first. Both areas deal with some of the more direct risk management strategies. “The subtle risks on campus that may fall into the managed-risk category are insource versus outsource decisions, capital investment decisions that take on a higher risk of failure in order to reduce initial construction costs, or the practice of stretching out maintenance intervals during reduced funding cycles,” says Nina Wollman, national director of asset management assessment services for Jacobs, a professional services company based in Fort Worth, Texas.
A BALANCING ACT

Managed risk is essentially a balancing act. It involves a number of variables (often interconnected and quickly changing) that are combined with a complicated mix of priorities, including funding. It is the “best guess” determination of the trade-off between an incident happening and the consequences that could result—such as deferring maintenance in one area in order to focus on another investment area—as well as what actions are needed to keep that risk under control.

Although organizations develop overarching goals for asset management, tactical implementation is a function of manpower and budget, often resulting in the short-term fix being selected. “When this happens, facilities managers may forget to ‘price in’ or monetize the risk they are taking when they defer or trade off investment choices,” says Wollman. This, of course, often results in higher costs down the road.

That’s why it is important to “get ahead of potentially reactive issues and make them more predictable,” states Michael Johnson, associate vice chancellor for facilities at the University of Arkansas in Fayetteville. “Because there are never enough resources for everything at once, this helps ensure that resources can be found quickly through prioritization against other needs with lower priorities.”

Some colleges and universities are challenged by not having an ERM system that is fully capable of identifying and prioritizing risks and supporting mitigation strategies. New and improved ERM systems are constantly being developed. “Other risk management approaches include incorporating strategic risk into ERM, getting project management offices involved with capital planning to evaluate risks, and strategic planning that focuses more on risk factors,” states Randall D. Gentzler, vice president for finance and treasurer for Loyola University Maryland in Baltimore.

Another metric to consider is total cost of ownership (TCO). There is currently a strong emphasis on reducing TCO; but what if the institutional outcome of a higher TCO results in greater throughput? “Shouldn’t a higher TCO be acceptable if the productivity supports the cost?” asks Wollman. “Understanding the relationship between value delivered and cost is the future lens of risk associated with any asset and is the great equalizer for assets of all types—for example, buildings versus roads versus utilities.”

Additionally, sometimes there is simply too much information to process. Assessing current asset investments and plans for future facilities and infrastructure in the context of lifecycle viability, TCO, and mission goals for energy generation and sustainable consumption represents a challenge for data collection and management.

“Volume often degrades quality when it comes to data,” Wollman adds. “It is the scenario of being data rich, yet information poor. Facilities managers need to define the right variables and tools that will inform consequence management. In an environment of diminishing resources, such as in higher education, it becomes critical to maximize the effectiveness of asset resources investments across the entire portfolio.”

Examples of Managed Risk Points

- Creating a walkway behind a student center to keep students from taking a shortcut through a hazardous loading dock area
- Replacing a roof at a residence hall that was at the end of its useful life but not yet leaking
- Discussing action plans before and after weather-related events and assessing buildings and walkways after storms
- Investing in occupational safety programs to improve safety and reduce operational and medical costs
- Installing a fire sprinkler system, even though the fire code does not require a fire sprinkler system for the building
- Having enough heating and cooling capacity to cover the loss of the single largest unit, should a mechanical failure occur
- Installing redundant systems in research institutions to prevent the loss of research data in the event of a failure
- Outsourcing dangerous maintenance work such as plumbing work on buried piping, rather than using staff
ARE YOU READY?

Some facilities officers do not fully understand the cost and consequences of being unprepared, especially when it comes to preventive maintenance and deferred maintenance: Something as simple as a pipe break can flood a building and cause considerable damage. Therefore it is critical that the facilities managers take a broader, more holistic approach to operations management. “Facilities managers should know all the options, including both the short- and long-term impact of new building decisions,” says Gentzler. “For example, should they construct, buy, or lease new facilities? Institutions have been doing off-balance sheet housing and mixed-use projects. Knowing the financial risk associated with each option is critical to the long-term health of the university.”

Matt Adams, a principal with FM Squared in Dunwoody, Georgia, teaches managerial effectiveness at APPA’s Leadership Academy. His students are up-and-coming senior administrators who may have little or no understanding of complex management issues, including risk management. During the Academy’s week-long course, his students work on case studies, nearly all of which involve some form of evaluating managed risk. “Their results gradually improve from poor at the beginning of the course to relatively competent by the end of the week,” says Adams. “I have to continually push them to drop their perceived boundaries in order to solve the problems, which is very hard for them to do. For example, they have great difficulty in considering external contractors as partners for anything outside of construction activities; that’s a very limited viewpoint when it comes to managed risk.”

It is important for facilities managers to measure risk in two ways: risk to the facility as well as risk to the business process in the facility. What many facility professionals miss is how to align risk to the institutional mission and the business of higher education. “When should consequences matter to the greater institution?” asks Wollman. “Facility managers need to be risk-informed, not risk-adverse. Applying a heart matrix, where one axis is probability and the other is consequence, helps to physically represent trade-offs.” (See diagram below.)

Another key principle of managed risk is opportunity cost. Resources applied to mitigate a risk will not be available for other opportunities. This increases the cost of mitigation measures to include foregone opportunities. “Facility managers must engage the campus community as a whole when implementing risk-mitigation strategies to ensure that the process best serves the interests of the institution, writ large,” says DeLaHunt. “Public-benefit organizations, like nonprofit or state agencies, pay for everything with opportunity cost. What we do not spend on risk mitigation can be spent on deferred maintenance, capital improvement, compensation, program expansion, or at the very least, lowering the cost of attendance.”

MOVING FORWARD

Components to a robust risk management program include assigning responsibility for risk at the appropriate levels of the organization, providing resources to address the risk, and reporting on the success of the risk-mitigation strategies. Success also requires staff training and excellent communication. For example, because facilities officers, supervisors, and front-line workers may be focused on quick results, they may not fully understand their responsibilities or have the resources they need to deal with the issues.

Teamwork, proactive collaboration, and communication are essential for securing resources for risk management. Annual reporting to senior leadership is always helpful to keep resources flowing in some manner. “Some type of agreed-upon strategy for the blending of risk categories is also necessary at times, or the minimal, low, and medium risks will not be accomplished in a timely manner, increasing those risks over time—through too much deferred maintenance, for example,” says Johnson.

Gentzler recommends getting the entire facilities management team involved in risk identification and prevention. “The people on your team who are in buildings on a daily basis can keep you informed of what risks might be on the horizon,” he says.

Anyone with a concern should be encouraged to raise the issue to the appropriate person for evaluation and action. This is sometimes easier said than done. Universities should provide various mechanisms to assist and encourage all employees to come forward in good faith with reports or concerns about suspected compliance or risk issues, without fear of reprisal or retaliation. “These [mechanisms] should include avenues that provide for anonymous reporting, such as whistleblower hotlines,” says Klinksiek. “The sad fact is that circumstances that lead to adverse events are often known to those closest to the situation but were not communicated and so went unaddressed.”

For many institutions, the current approach to facilities management imposes a consistent level of detail on the entire portfolio, regardless of the criticality of the asset or component. Although this approach is desirable from a consistency and work-management basis, it can lead to higher administrative costs on low-risk or supporting assets, taking money away from
other areas that are critical to the success of the institutional mission.

“In contrast,” says Wollman, “a risk-informed asset management approach that enables strategic investment decisions at the institutional level will maximize the value to the institution from every dollar invested.” An example would be developing an institutional framework that considers life cycle as well as system trade-offs for a portfolio, rather than a project-by-project approach to strategic investments. In addition to an internal shift to strategic asset management, she says, “institutions should continue to pursue a multiyear approach to resource investments that allows them to improve the efficiency of investments to meet the challenges of today’s higher education marketplace.”

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**Parting Thoughts**

“Facilities managers and risk managers should establish working relationships that support each other in the process of managing institutional risk.” —Glenn Klinksiek

“For higher risks, ensure that your facilities management team is specifically empowered to take on-site action to stop life-threatening events.” —Mike Johnson

“Managed risk is seldom a one-time activity: Whether it is maintenance of current risk-mitigation programs, or undergoing new risk evaluations, there is always risk to manage.” —John DeLaHunt

“Facilities managers assign or even mentally develop a risk profile to a building and then forget to modify it as circumstances change: The shift of use can have a dramatic impact on the consequences of failure.” —Nina Wollman

“Perform regular walkthroughs. It is amazing how much you see and learn if you just walk through spaces and listen to people’s concerns or suggestions.” —Randy Gentzler

“Public-private partnerships with service vendors provide one form of managed risk for facilities management departments with very dynamic activities on campus.” —Matt Adams

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