

## Maximizing Facility Results

by Jeff Roepsch

Higher Education in the United States spent over \$12 billion on new construction in 2004 while struggling with \$26 billion dollars in deferred maintenance. Clearly, colleges and universities around the country need to consider not only the upfront costs of construction projects, but also the costs associated with a building's operations and maintenance over the life of the facility.

Faced with increased competition, colleges and universities can become institutions of choice by taking a holistic picture of campus facilities and developing a plan that will allow them to grow strategically.

With many campus buildings aging 50 to 100 years, creating an equal balance among the following areas and understanding how they play a role in each facility on campus will help optimize financial and operational results. To maximize the benefits to institutions of higher learning, all five areas should be analyzed as part of the project development. These areas include:

**1. Capital Investment** The dollars required to build any facility on a campus are considerable. Capital investment refers to designing, constructing and completing the construction project. A critical question should be asked here: "Are the investment dollars being used in a way that will not only minimize the construction costs, but at the same time, maximize the building's efficiency?" Future costs of running, operating, and



maintaining the facility should be controlled from the very beginning.

- 2. Future Operational Cost** Once the building is completed, it becomes the responsibility of the college or university to operate the facility. While many donations to colleges are earmarked for new or modernized buildings, rarely do those donations cover the cost to operate the facility over its life. With proper planning and foresight, the complexities of operating a modern campus facility can be greatly reduced along with the associated costs. Building management systems, space planning and scheduling, and using the appropriate products for the intended environment all help to control the operating costs of a facility.
- 3. Future Utility Cost** With rising energy prices around the country, utility costs are a primary concern in new construction. Understanding how a building will be heated and cooled will have a major impact on the future utility costs of the building. And, by using the appropriate technology for the building along with energy efficient boilers, chillers, and other HVAC equipment, colleges can plan for future utility costs more effectively. Having a utility purchasing strategy in place will also help save money.
- 4. Asset Life** The cost of maintaining a building and providing for upgrades

and improvements 10, 20, and even 40 years down the road must also be factored into the development of a facility. Will equipment need to be replaced more often, or can technology, proper service, and maintenance be used to optimize equipment life and keep up with the demand that is placed on the building? Knowing what major equipment services and replacements will be needed can help with budgeting and forecasting capital campaigns in the future.

- 5. Quality Environment** At the heart of any campus building is the quality of the environment. Are the building's objectives truly being met? Is the atmosphere conducive to the intended use of the space? Providing a quality learning environment optimizes the use of a building, allows occupants to maximize their potential, and raises student and staff productivity.

The ability to capture the thoughts, priorities, and satisfaction levels of key stakeholders, administration, staff, and even faculty and students can help ensure a sense of unity and understanding. To assess facility-related needs and practices, many colleges have utilized a structured, interactive process with college and university personnel. The key is to truly address the specific business and financial goals up front, and to get the best value (guaranteed service, project management, procurement and purchasing capabilities, design, engineering, and mobilization ability, etc.).

Developing a long-term vision that focuses on the performance of buildings and the financial and business goals of the college will allow a more strategic way of looking at facilities in the future. ♣

*Jeff Roepsch is in the advanced solutions business at Johnson Controls in Milwaukee, Wisconsin. He can be reached at [jeffry.j.roepsch@jci.com](mailto:jeffry.j.roepsch@jci.com). This is his first article for Facilities Manager.*