

Whitepaper

Rising school trend of deferred maintenance

When it comes to budgets, practically every school has the same dilemma: doing more with less. Shrinking budgets are causing more schools to delay general maintenance, system upgrades or building repairs to a future budget cycle—or even postponing them indefinitely until funding becomes available. This trend in deferred maintenance is concerning, though. U.S. schools are an average of 40-plus years old. If maintenance continues to be deferred year after year, schools will face much more than the cost of making those repairs.

Magnitude of the problem

[American School & University](#) magazine reports the backlog of deferred maintenance exceeds an estimated \$500 billion. Clearly, school buildings nationwide are in a cycle of deterioration. Administration and facilities management personnel seek to reverse this deterioration and provide students with a quality environment that promotes—or at least doesn't hinder—learning. Yet, new requirements for documentation, site environmental protections and security, however, make maintaining building assets a literal tightrope act.

"Guidelines for Life Cycle Cost Analysis" report from Stanford University states that as a building or campus ages, the cumulative cost of operating and maintaining facilities significantly impacts the overall institutional budget—not just the maintenance budget. Even more, funds set aside to construct new campus buildings rarely extend to ongoing operational costs—necessary costs to maintain the facility and slow the decline of building utility and performance.

The greater issue with deferred maintenance is that it only grows in scope—and cost—the longer it is prolonged. When a repair is delayed, it is still subject to the daily use and abuse of students and staff. In fact, it's not uncommon for a "repair" to turn into a "replacement" because, in the process of being deferred, it becomes completely broken. Replacing a door, lock, window, etc., is much more costly than simply repairing it.

According to the *Handbook of Facility Assessment*, this phenomenon is particularly evident when repairs to mechanical and electrical systems are deferred.

Deferring maintenance, especially in mechanical and electrical systems, frequently turns minor problems into major system failures. As the number of system failures increases, building owners and occupants push to have those systems replaced. Those facilities that have implemented comprehensive preventive maintenance programs have found that not only are the operation of their systems more reliable, but also those systems last longer.



Preventative maintenance measures

Projects that are put on hold, repair that is neglected or maintenance that is ignored adds up to a costly and complex problem. Consider this:

- **\$1 deferred planned maintenance equals \$4 cost of failure/replacement.**
- **The cost of deferred maintenance could potentially be 30 times that of the early intervention cost.**

Those costs underscore the importance of preventative maintenance. Experts estimate that between two and six percent of an annual operating budget should be spent on preventative maintenance.

An effective preventive maintenance program helps minimize a facility's rate of decay. It not only saves money, but it helps schools to avoid replacement—which requires capital assets and often an extensive process from evaluation, design, funding and implementation. By nature, preventative maintenance is the least disruptive, singular in resolution, planned for in advance and often includes training for future maintenance. Most of all, it helps reduce building failure and poor conditions that impact teaching and learning.

Smart security strategies

When it comes to door hardware and security solutions, schools should invest in solutions that are designed for specific purpose, use and abuse, and expected lifecycle. Additionally, you'll want solutions and brands that:

- Offer repair/replacement parts for heavy use components
- Provide training on ongoing management and maintenance
- Easily expand in scale to accommodate future growth/expansion
- Offer flexibility to transition technologies, such as credentials and integrated applications

Sources:

http://lbre.stanford.edu/sem/sites/all/lbre-shared/files/docs_public/LCCA121405.pdf

<http://www.interiorsandsources.com/article-details/articleid/3161/title/paying-for-deferred-maintenance.aspx>

<http://www.schoolfacilities.com/uploads/files/23.pdf>

Periodic facility assessments

Schools should periodically use facility assessments to identify, evaluate and report on the condition of their building. Facility assessments evaluate existing conditions and identify any deficiencies. With this information, schools can identify existing problems, develop budgets for future maintenance and capital renewal projects, and track deferred maintenance backlogs. All building components and infrastructures should be evaluated during an assessment. This includes mechanical and electrical equipment, building shell, interior structures and finishes, transportation systems, and building site.

Making the case

According to *Interiors & Sources*, a trade publication for the commercial design industry, the most convincing argument against deferring maintenance is one that includes the following:

- **Estimated risk potential:** Demonstrate how deferred maintenance could result in increased liability and safety hazards, decreased productivity or inefficient school operations.
- **Subsequent escalation of costs:** Calculate and predict future expenses resulting from postponed maintenance.
- **Historical data:** Provide examples from the past that prove the significance of the long-term costs of deferred maintenance.

Bottom line, the faster you conduct a repair, the better. The likelihood of incurring greater costs increases with each deferred maintenance. By making the business case for funding and proactively managing maintenance every day, you're less likely to develop a deferred maintenance backlog that seems too overwhelming to overcome. Most serious of all, forsaking preventative and routine maintenance will lead to buildings failing prematurely—and that's the most expensive of all.

[Contact an Allegion sales consultant](#) for smart security solutions for your school. In addition to providing some of the leading products in the education market, we offer product training and free consultation on building standards, code compliances and more.

For more information about deferred maintenance costs, visit us at us.allegion.com/industries/education or call 866-516-1597.

About Allegion

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises 27 global brands, including strategic brands CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. For more, visit www.allegion.com.



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