

OIG Issues Smart Building Technology Procurement Recommendations

The OIG recently issued a letter to State Treasurer Deborah Goldberg, who serves as Chair of the Massachusetts School Building Authority (MSBA), and MSBA Executive Director Mary Pichetti, recommending measures to mitigate the risks of procuring smart technology for school building projects.

The focus of the OIG letter was a “smart” lighting system installed in Minnechaug Regional High School in 2012. The school, located in Wilbraham, Massachusetts, was a participant in the MSBA’s “Model School” program. This program funds, in part, the construction of new schools based on existing designs the MSBA has deemed successful. When rebuilding Minnechaug Regional High School as part of this program, the Hampden-Wilbraham school district decided to install a network-based lighting system. The school district chose a proprietary software system that did not provide the district with access to the system’s server, backup software to restore the system or an override switch.



In August 2021, the lighting system’s server was corrupted by malware and went into default mode (lights on). Because the school did not have the ability to repair the system, the school could not turn off the lights until a vendor for the system repaired it in February 2023. The Hampden-Wilbraham Regional School District superintendent’s office informed the OIG that the excess 18 months of electricity and repairs cost the school district up to \$150,000.



Smart technology systems can lead to greater energy efficiency and cost savings. However, they can also lead to unforeseen costs if you are not aware of their operational requirements. To mitigate the operational and financial risks involved in smart technology, the OIG recommends the following measures to school districts – and municipalities generally – looking to upgrade their buildings:

1. Ensure that the smart technology system you choose is designed and installed by qualified, reputable vendors. Require prospective vendors to provide proof of prior work and customer references.
2. Consider utilizing open-source, rather than proprietary, smart technology software, if available. Open-source software may allow for easier adaptation to future updates the software requires and may give you more choices for repairs and upgrades. If you decide to procure proprietary software, look for proprietary software with guidance for administering and maintaining the software, and understand what the proprietary vendor maintains control over.
3. When procuring a smart technology system, determine what ongoing service needs may be necessary for the system, including hardware and software up-

Continued on next page

OIG Issues Smart Building Technology Procurement Recommendations, continued

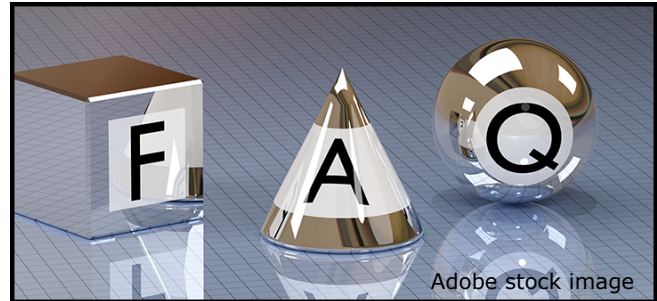
grades, and which of these services will need to be performed by an outside vendor. Be sure to budget for these anticipated service needs.

4. Consider entering into a service agreement for necessary preventative and regular maintenance that municipal employees cannot perform. Use a competitive procurement process in seeking a service provider.
5. Ensure your municipality retains some administrative control of the smart technology system it procures. This control should include manual override capabilities and administrative access to the server to update security and virus protection.
6. Ensure you have written operation and maintenance instructions for the system. Train your staff on how to use the system as much as possible without outside assistance from a vendor.
7. Require warranty information from the vendor and determine if the warranty covers only certain aspects of the system, such as hardware or software. Determine whether enhanced warranty protections are available and make financial sense for your municipality.
8. Upon installation, prepare response plans for problems that may arise with the smart technology system, especially instances of software corruption or failure, as well as a plan to replace the system once it becomes outdated.
9. As with any technology your municipality uses, keep smart technology software up to date, including the latest antivirus updates, and require regular cybersecurity training for your employees.

By following these recommendations and ensuring that adequate consideration is given to risks that smart systems pose, municipalities can maximize the benefits of innovation and energy conservation while also preventing the waste of public funds or

system failures that can jeopardize their operations.

The [OIG's letter](#) to Treasurer Goldberg and Executive Director Pichetti is available on the [OIG's website](#).



Frequently Asked Questions

Q: Our jurisdiction conducted an invitation for bids (IFB) where we required certain forms from vendors. After opening the bids, we noticed that one vendor had typed their name rather than signing the form. Can we still consider this vendor's bid, or must we reject it as nonresponsive?

A: You can accept the vendor's bid if the typed signature can be considered a minor informality. Under Chapter 30B, minor informalities are "minor deviations, insignificant mistakes, and matters of form rather than substance . . . which can be waived or corrected" without prejudicing full and fair competition. [M.G.L. c. 30B, § 2](#). Chapter 30B requires that you waive minor informalities or allow the bidder to correct them. *Id.* at [§ 5\(f\)](#). If the mistake and the intended bid are clearly evident on the face of the bid document, the procurement officer must correct the mistake to reflect the intended correct bid and notify the bidder in writing; the bidder cannot withdraw the bid. *Id.* However, if the mistake is clearly evident on the face of

Continued on next page