

SIEMENS

Preserving History while Creating a Sustainable Future

Westfield, Massachusetts tackles deferred maintenance and revitalizes its municipal and school buildings



Deferred maintenance is considered one of the most costly threats facing our cities and schools today. In Westfield, Massachusetts (pop. 41,301) deferred maintenance led to the near-demolition of two landmark buildings. The City faced enormous replacement costs and the loss of two sites central to its sense of community. But with big picture thinking and the implementation of energy-efficient infrastructure, Westfield is revitalized. Instead of losing a part of its history due to deferred maintenance, it has been preserved in a sustainable way for future generations.

When Westfield's Mayor, Daniel Knapik, took office in 2010, addressing the City's crumbling infrastructure was a top priority. Deferred maintenance was evident everywhere from City Hall to fire stations to Westfield's Schools. It was draining the spirit of City employees and negatively impacting the learning experience of students. "There was no advocacy for infrastructure" recalls Mayor Knapik. "It was very easy to push off to another day significant building needs." For Westfield, putting off repairs was no longer an option — every \$1 in deferred maintenance typically requires \$4 in repairs later on. Soon, the problem would be too big for the City to manage on its own.

Initial evaluations were not positive: two of Westfield's historic buildings, City Hall and the Westfield Technical Academy Upper Campus, were recommended for demolition. Replacement would cost well over \$100 million and result in the loss of two nationally listed historic buildings. It was not a step that Westfield could take in good conscience. With a smart approach to renovating its infrastructure, Westfield officials believed its historic buildings could be saved and the city transformed.

Westfield's first step was submitting an RFQ for an energy services company (ESCO). Instead of tying the RFQ to one or two problem buildings specifically, Westfield left the RFQ open-ended. This would allow Westfield to work with the selected ESCO to identify other challenges and solutions it wasn't aware of, and provided more options for addressing the City's overall infrastructure problems.

Westfield selected the Building Technologies division of Siemens as its ESCO for the project. "We were looking for a partner that could come on board and help us evaluate all our buildings," notes Tammy Tefft, Westfield's Chief Procurement Officer and Project Manager. "I could tell you that we needed a new roof, but maybe that's not all or not the best course of action for that building." Siemens did a comprehensive energy audit of the City's 40+ Municipal and School buildings. This process helped Westfield see the opportunities to address deferred maintenance and begin a plan to address their needs.

Based upon this big picture view, a plan was put in place to make over \$20 million in energy and infrastructure improvements at 18 buildings during 2012 and 2013. The plan focused on major mechanical improvements needed to save City Hall and the Westfield Technical Academy Upper Campus plus the implementation of a City-wide energy management system.

Close coordination of infrastructure improvements was another key to Westfield's success. For example, the Massachusetts School Building Authority (MSBA) was committing funds to replace old steam boilers at some of Westfield's public schools. When Siemens recommended high efficiency forced water boilers instead of steam, Westfield brought the two parties together. The MSBA committed to the new boilers and Siemens upgraded the rest of the HVAC system to make it compatible. The result is more effective systems, significant energy savings, and greater value for Westfield.

Similarly, Siemens infrastructure improvements at the 125-year-old City Hall were closely coordinated with other architectural improvements and structural repairs. A new HVAC system, updated electrical work and an energy-efficient lighting system installed by Siemens have upgraded conditions for City workers and visitors and preserved a historic landmark.

By focusing on energy-efficient improvements, like the projects done with Siemens, Westfield is creating a sustainable model for maintaining its infrastructure in the future. Reduced spending on utilities means more funds available for needed maintenance so repairs can be made today and not put off until later. "We started from the ground floor," recalls Tefft. "There weren't a lot of communities that had done this; now they are calling us, asking how we did it."

In just the first year alone, infrastructure improvements saved Westfield's Schools \$300,000 in spending on natural gas; significant savings that can now be used elsewhere. "In a lot of different ways the general public will never see, going down the path of energy efficient buildings will save this City significant dollars for the future," adds Mayor Knapik. "And, just as importantly, we were able to preserve the historic nature of these buildings for the next generation and generations after that."