

Case study

Parma City School District

Parma, Ohio



Service protects existing BAS assets while paving way for new technologies

The Parma City School District is the 10th largest school district in the State of Ohio, serving more than 13,000 students. Faced with rising repair and utility costs and deferred maintenance, the district called upon Johnson Controls, Inc. for a solution. Through a series of service agreements and performance contracts, the district maximized the life of its existing Siemens system while updating building infrastructures, and will save nearly \$20 million dollars over the life of the contracts.

Encompassing three communities, the Parma City School district consists of 24 facilities including elementary schools, middle schools, high schools and administration buildings. Budget constraints had limited the district's spending on critical building infrastructure equipment throughout these facilities. Since no capital improvement dollars were available to replace equipment on a proactive basis, it was only done in an emergency.

In addition, the district's building controls provider was charging additional fees for state-required reports on the results of upgrades done in previous performance contracts. The district then decided to issue a request for proposal to support, maintain and repair its existing Siemens building controls system. Johnson Controls responded with a proposal that resulted in a two-year renewable service agreement. "We were looking for a company we could trust, that would give us the best value for our dollar. Johnson Controls quickly demonstrated their knowledge and ability," states J. Kevin Kelley, president of the Parma City School Board.



The Johnson Controls proposal included the installation of a UNITY system. This addressed the district's desire to tie its security and fire systems and other multi-vendor equipment to its existing controls system. Pleased with the success of this project, the district expanded its service agreement and initiated a series of performance contracts to make significant equipment and controls upgrades at all 24 facilities.

worry about deferred maintenance," adds Ric Ganyard, director of facilities for Parma.

Facilitating new technologies

With some facilities in excess of 50-years old, the district was faced with equipment that was beyond its useful life. Still other equipment was better off replaced as a result of deferred maintenance. "Johnson Controls did an excellent analysis of our existing equipment and systems. They established credibility by not only showing us our needs but also by offering reasonable methods to address them," states Kelley.

Choosing to start small, the district initiated a pilot performance contract with Johnson Controls involving three buildings. The contract included new HVAC equipment, lighting retrofits, water conservation measures and installation of Johnson Controls Metasys® building management system. The upgrades were funded through the resulting energy savings, which are guaranteed by Johnson Controls.

The pilot project served as a model for a series of performance contracts that followed, involving similar upgrades in the remaining 21 facilities. Johnson Controls conducted a study of energy-using equipment throughout the district then prioritized equipment repair or replacement based on its condition. In total, the district is guaranteed savings of nearly \$20 million over the 15-year term of the performance contracts.

Extending useful life of Siemens system maximizes ROI

Under the initial service contract, Johnson Controls technicians were trained to maintain and repair the existing Siemens system. This maximized the district's return on their investment by extending the useful life of the system until a planned replacement could be done. In addition, upfront costs associated with an immediate system replacement were avoided.

The district later expanded its contract with Johnson Controls, adding mechanical equipment to the list of responsibilities under a planned service agreement. "Previously, we learned of equipment problems after something broke-down instead of in advance. The planned service agreement alleviates the 'band-aid' approach to repairs that we once had," says Kelley. "The expansion of the agreement has been a blessing. It allows me to make better use of my internal resources. Our custodians are able to focus on what they do best and I no longer have to

"We see our performance contract with Johnson Controls as a very effective way of operating. It allows us to upgrade facilities while being fiscally accountable to the taxpayers, and direct more monies to the classroom."

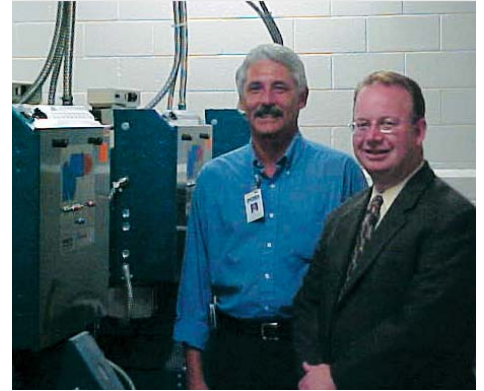
J. KEVIN KELLEY
BOARD PRESIDENT
PARMA CITY SCHOOL DISTRICT

"We see performance contracting with Johnson Controls as a very effective way of operating. It allows us to upgrade facilities while being fiscally accountable to the taxpayers, and direct more monies to the classroom," states Kelley. "The return on investment is already there. At current savings levels, we will reach payback in 9 to 10 years as opposed to 15," states Ganyard.

A key component of the district-wide upgrades, was the gradual migration of all facilities to Johnson Controls web-based Metasys building management system. "Now complete, the system allows me to monitor and control any connected piece of equipment at any facility in the district from my office computer or even my laptop," exclaims Ganyard. "I can remotely override preset schedules to accommodate off-hour events, and identify any out of the ordinary equipment activity that may be initiated by school personnel."

Johnson Controls worked with Ganyard to prioritize all energy using devices and program the Metasys system to react to equipment alarms in a specific manner. For example, alarms on devices with a critical rating will result in a page to Ganyard, alerting him of the problem. "The Metasys system has provided energy and operational savings we could not have achieved otherwise. And, the level of support on the product both in training and in the field has been exceptional," says Ganyard.

Through asset protection and technology expansion, Johnson Controls is not only helping the district reduce its costs but also improve its learning environment. Savings from avoided equipment replacement and decreased energy and operational costs can be directed at new academic programs. Similarly, increased monitoring and control mean a more comfortable classroom environment for students and faculty.



Ric Ganyard, Director of Facilities and J. Kevin Kelley, President of Parma City School Board

"The Metasys system has provided energy and operational savings we could not have achieved otherwise. And, the level of support on the product both in training and in the field has been exceptional."

RIC GANYARD
DIRECTOR OF FACILITIES
PARMA CITY SCHOOL DISTRICT

