

Case study

Wyandotte Public Schools

Wyandotte, Michigan



Wyandotte Public Schools is Michigan's first district to be fully ENERGY STAR® certified

The Wyandotte Public Schools district serves more than 4,700 students. The district has a high school, middle school, six elementary schools, an administration building, a skills center, and a regional training center. The 11 facilities span more than 900,000 square feet.

Wyandotte Public Schools has been working hand-in-hand with Johnson Controls for several years to reduce operating costs and improve comfort throughout the district. In 1998 and then again in 2003, the district entered into performance contracting agreements with Johnson Controls, which allows major building improvements to be funded by the energy and operational savings which the new equipment creates. The district teamed with Johnson Controls a third time in 2007 for additional self-funded building equipment upgrades, and again in 2008 to implement a solar energy system at Wilson Middle School that doubles as a learning tool.



“The Performance Contract allowed us to make significant improvements to our school facilities and obtain over \$6.9 million in savings. It’s a win-win: we are creating better learning environments and balancing our budgets.”

DR. PATRICIA COLE, SUPERINTENDENT

Challenges

- Improve the external aesthetics of Roosevelt High School without drawing money from the district’s capital budget.
- Obtain relief from rising energy and operational costs throughout the district’s 11 facilities.
- Demonstrate environmental awareness by having all buildings ENERGY STAR re-certified.
- Tie the community, the school and the home together with an energy efficient project that offers cost savings, and can teach children about renewable energy sources and the social responsibility involved with taking care of the environment.

Johnson Controls solutions

- Replace windows and doors, as well as install a new marquee, at Roosevelt High School.
- Perform long-overdue improvements such as partial roof replacement at Wilson Middle School, and various HVAC enhancements, including steam traps, throughout the district.
- Install a Johnson Controls Metasys® building management system, which led to the required points to achieve ENERGY STAR certification.
- Install a 10-kilowatt photovoltaic solution on Wilson Middle School. Solar panels on the school’s roof harness sunlight, and the photovoltaic process converts the sun’s rays to electricity.

Results

- Restored Roosevelt High School to the centerpiece of the Wyandotte community.
- Guaranteed energy and operational savings of \$6.9 million throughout the 15-year contract term.
- Obtained ENERGY STAR certification for all 11 buildings, making Wyandotte Public Schools the first district in the state of Michigan to achieve this distinction.
- The photovoltaic system provides students with first-hand experience in learning about solar energy, shows them how to monitor the impact of the school’s solar panels, and helps them gather information so Wyandotte’s citizens can learn how they will benefit from alternative energy sources.

