

# Romulus Community School District Wayne County, Michigan

<b>Project:</b>	Romulus Community School District
<b>Size:</b>	\$ 5,959,422
<b>Type of Project:</b>	Guaranteed Energy Savings Performance Project
<b>Location:</b>	Romulus, MI
<b>No. of Bldgs.:</b>	7
<b>No. of Students:</b>	3,050
<b>Project Description:</b>	Honeywell's role: General Contractor for Energy Performance Contract work, Energy Auditing, Design Engineering, Project Management, Commissioning, Performance Measurement & Verification, Warranty Services, Maintenance Agreements.
<b>List of Improvements:</b>	<ul style="list-style-type: none"><li>• LED Lighting Retrofits</li><li>• Occupancy Sensor Installation</li><li>• Direct Digital Control Installation</li><li>• Energy Management System</li><li>• Condensing Boiler Installation</li><li>• Chiller Replacement (4) Buildings</li><li>• Energy Efficient Motor Installation</li><li>• Variable Speed Drives</li><li>• Building Envelope Retrofits</li><li>• Water Conservation Retrofits</li><li>• Pool Cover Installation</li><li>• Entrance Camera, Intercom, Door Lock System</li></ul>



**Project Implementation**  
April 2015 – November 2016

**Source of Funds**  
Energy Conservation Bond

**Annual Energy Savings**  
\$334,810

**Annual Operational Savings**  
\$149,877

**One Time Gas & Electric Utility Rebate**  
\$273,537

**Total Honeywell Energy Project Amount**  
\$5,959,422

**Client Contact**  
Mrs. Marjie McAnally – Superintendent  
mrmcanally@romulusk12.org  
(734) 532-1600

## BACKGROUND

The Romulus Community School District is located in Wayne County and serves roughly 3,050 students in the District. This energy project was developed to assist the District in repairing and replacing equipment but lacked the necessary funding. The strategy entailed developing an energy project that would pay for itself with savings from the existing budget. The strategy also included utilizing Energy Conservation Bonds as a financing tool that allowed the District to borrow money for the energy project for fifteen (15) years.

## SOLUTIONS

The facility upgrade program was designed to generate savings to pay for both energy retrofits and replace aging infrastructure.

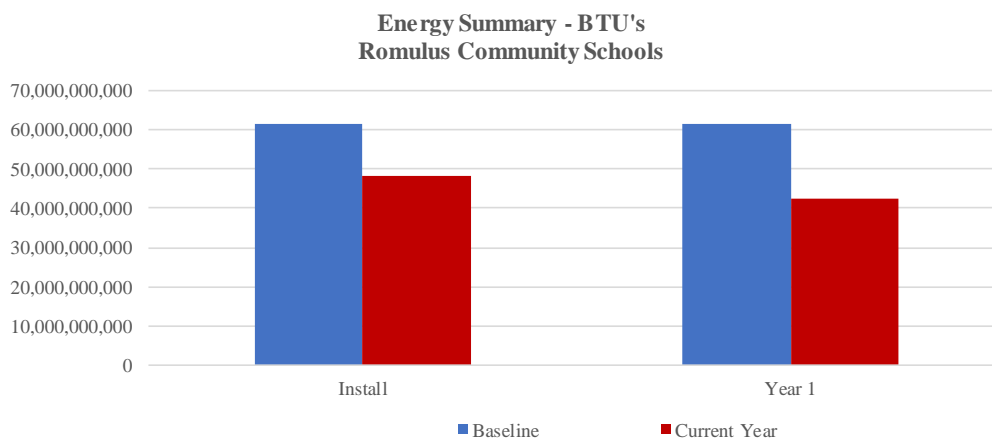
The biggest contributor of savings was the lighting retrofits and replacement. This included a mixture of low wattage T8 lamps, hybrid ballasts and reflector systems. There were also T5 systems installed in gymnasiums and LED systems on the exterior of the buildings. The energy efficiency and utility rebates made this a solid opportunity. Other key contributors were: district wide web-based energy management system, modified control sequences, energy efficient motors, variable speed drives, water conservation retrofits, building envelope – caulking, sealing and foaming, pipe insulation and a pool cover.

There were also capital projects with energy efficiency benefits. A condensing boiler was installed at the High School. Chillers were installed at the High School, Middle School and two (2) Elementary Schools. And Direct Digital Controls were installed throughout the District.

To help the District provide secure entrances for their buildings a camera, intercom and door lock system were installed as part of the project as well.

### OTHER BENEFITS

- Reduced greenhouse gas (GHG) emissions
- Total Energy use avoided = 18,938,468 KBTU which equates to:
  - 1,608 acres of trees planted
  - 786 car’s pollutants removed from the road
- Improved learning environment for students and faculty to assist the district with Student Achievement goals



	BTUs	Dollars
<b>Baseline</b>	61,569,385,722	\$1,095,798
<b>Install</b>	48,268,804,438	\$766,608
<b>Savings %</b>	22%	30%
<b>Year 1</b>	42,630,917,340	\$723,826
<b>Savings %</b>	31%	34%