

Ann Arbor Public Schools Retro-Commissioning Program: RCx Express and Standard Tracks



Express: Clague Middle School, Forsythe Middle/Wines Elementary Schools, Slauson Middle School, Huron High School, Pioneer High School. **Standard:** Skyline High School.

What is Retro-Commissioning?

The DTE Energy Retro-Commissioning (RCx) Program provides a professional study of your existing building and process systems. Program specialists help you optimize and improve comfort and functionality while decreasing energy and maintenance costs over time.

The program is focused on tuning-up your existing equipment for more efficient performance, rather than upgrading or replacing it.

The retro-commissioning study is complimentary with opportunities for additional incentives and bonuses. Contact us to see if you qualify.

Get Started Today!

For more information on the DTE Retro-Commissioning Program, visit dteenergy.com/rcx, send an email to DTERC@esciences.us or call 248.430.5579.

Project details

Ann Arbor Public Schools (AAPS) participated in the RCx Program for several of their schools. AAPS found success in both the Express and Standard tracks.

The following energy efficiency improvements were identified, implemented, and verified through the RCx Program at the participating schools:

- Adjusted scheduling
- Adjusted setpoints for: static pressure, economizer, and temperature
- Adjusted supply fan and pump variable-frequency drives
- Adjusted temperature reset
- Adjusted airflow and outdoor air ventilation control

Verified Electric Savings

Huron High School	178,084 kWh
Pioneer High School	42,453 kWh
Clague Middle School	41,686 kWh
Slauson Middle School	25,804 kWh
Forsythe Middle / Wines Elementary	48,936 kWh
Skyline High School	145,327 kWh
Total verified savings	482,290 kWh

Description	Cost (-)	Benefit (+)
Annual energy cost savings estimate		\$49,317
Implementation cost estimate	\$27,457	
Customer verification bonus		\$4,312
Customer bank bonus		\$4,823
Study cost funded by DTE		\$25,322
Implementation funding by DTE		\$15,000
Total benefit		\$98,774

Retro-Commissioning Program Case Study: Ann Arbor Public Schools



Joshua M. Mattison, CFD, CAPM, Ann Arbor Public Schools

Joshua M. Mattison, CFD, CAPM, is the Director of Physical Plant and a licensed mechanical contractor at the Ann Arbor Public School District (AAPS). Joshua and his team were aware of the challenges with their facilities having older equipment; their systems were working harder, using more energy, and keeping their costs high. They wanted to take action to ensure the district's core value of energy efficiency was upheld. With this substantial task ahead of him, Joshua brought in a team of Retro-Commissioning specialists through the DTE Retro-Commissioning Program (RCx).

There are 33 schools within the AAPS, providing an innovative approach to teaching and learning for future generations, including fostering a better environment for students and faculty. According to Joshua, one of the top priorities for the AAPS is to be energy-conscious by reducing their building emissions and energy costs: "One

of our biggest goals in the district is being green. We want to put out the least emissions and save energy where we can."

With the district's priorities in mind, Joshua, his team, and the RCx team got to work. The RCx specialists identified multiple opportunities to improve operations and schedules within the AAPS' existing building systems and presented estimated savings. Joshua and his team identified which measures they wanted to implement, and the RCx team supported them along the way. "The team really knew what they were doing," said Joshua, "They worked well with us and our contractors. Our out-of-pocket cost was minimal compared to the incentives that we got back and the savings we're going to see over many years."

Joshua was impressed with the work of the RCx team and is looking forward to making a further impact with energy and cost savings: "I would absolutely recommend this program to anybody out there. I think the benefits outweigh the costs enormously, not only in the upfront incentives but in the long-term savings you're going to have in both cost and emissions and energy you're using."

The DTE Retro-Commissioning Program is an important part of our energy efficiency initiatives through DTE CleanVision, our goal of net zero carbon emissions by 2050. Learn more about CleanVision at dtecleanenergy.com and the RCx Program at dteenergy.com/rcx.



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