Harshaw Trane saves Kentucky school district over $5 million and helps eight schools earn the ENERGY STAR certification

Project Scope
Working with Harshaw Trane, Hardin County Schools took another step towards fulfilling their vision of “Helping Children Succeed” by developing a district-wide initiative to create an optimal learning environment for students. Through a performance contract with Harshaw Trane, all 21 schools improved their energy efficiency through building upgrades and other projects. As a result of these efforts, the county saved money on utility bills and demonstrated their commitment to a cleaner and more sustainable facility in which education can thrive.

Project Summary
Harshaw Trane implemented a number of energy efficiency initiatives as part of the performance contract with Hardin County Schools, including: installation of hybrid geothermal systems, Tracer Summit® building automation systems, and building controls on existing HVAC systems in addition to the replacement of water source heat pumps and roof top units. Lighting retrofits were conducted at 14 facilities.

- **Energy Savings**
  2,994,355 kWh; 5,665 kW; and 54,353 therms in annual energy savings
- **Investment**
  Hardin County Schools purchased a $5.3 million 20-year bond to finance projects, and is repaying the bond through energy savings realized by the improvements.
- **Financial Return**
  12 year simple payback
- **Other Benefits**
  The school district plans on using a portion of the cost savings achieved to purchase text books, hire additional teachers, and explore wireless capabilities to enable students to access personal devices for educational purposes.

Monitoring & Verifying Energy Savings
Harshaw Trane’s partnership with Hardin County Schools included energy data collection. Tracer Summit building automation systems were installed district-wide, providing the county with web access to live energy data from thousands of data points at multiple facilities, as well as enabling real-time decision-making and verification of savings achieved. Monthly benchmarking with Portfolio Manager also allowed the Hardin County Schools to measure whether systems were performing effectively on a month-to-month basis.

Distinguishing Value
Harshaw Trane’s energy tracking and monitoring system as well as the use of Portfolio Manager led to improved energy efficiency in several schools. As a result of benchmarking and implementing strategic energy projects, eight of Hardin County’s 21 schools earned the ENERGY STAR for superior energy performance.