

Need/Challenge

While Warren County Public Schools (WCPS) has developed a mission in regards to the energy consumption and sustainability of their buildings, it is often difficult to find a good starting point or generate a plan on how best to address this challenge of implementing building upgrades district wide. WCPS is the 3rd largest school district in the state of Kentucky, with 31 schools and 16,293 students. A challenge that WCPS faces is that while they are one of the fastest growing districts in the state, they are being funded statewide based on attendance records from 2019. The problem has become that WCPS adds students year over year, but the state funding formula doesn't follow along with the increasing student body.

Additionally, while WCPS is one of the largest districts in the state, they rank very low in terms of revenue per student. The following table shows data from the energy justice mapping tool, comparing WCPS to other districts in the state.

KY District	Schools	Students	Revenue per Student
Boone Co	25	20,750	\$11,454.86
Fayette Co	72	41,987	\$13,149.82
Hardin Co	27	14,787	\$10,007.45
Jefferson Co	168	97,936	\$13,171.54
Warren Co	31	16,293	\$9,584.05

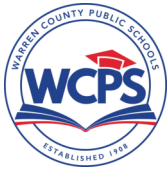
The Energy CLASS Prize offers WCPS a great opportunity to implement comprehensive energy improvements by addressing critical infrastructure needs at the proposed facilities, while also closing the funding gap that the district is facing.

Proposed Facilities to Address

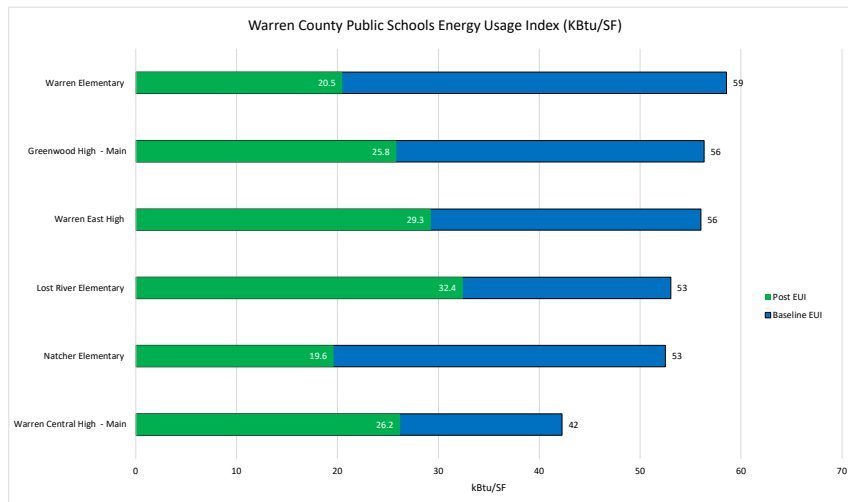
Oakland Elementary School, North Warren Elementary School and Lighthouse Academy

Impact

The Energy Class Prize would have a significant impact on WCPS and its facilities. The prize would help WCPS fund building infrastructure and energy efficiency upgrades that are not currently feasible. While the proposed facilities are due for upgrades in the overall district facility plan, the Energy Class Prize would accelerate the timeline for these buildings and put them at the forefront of WCPS' facilities and allow them to "restart" their building timeline clock. The following graph shows the energy usage impact of previous upgrades WCPS has implemented. The Energy Usage Index (EUI) takes into account the electric and natural gas/fuel annual consumption, with the blue line



showing the baseline EUI pre project, and the green line is the measured energy consumption post HVAC, lighting and controls upgrades.



In addition to an energy usage reduction impact, there is also a health and learning environment impact. New HVAC systems mean cleaner air being introduced into the classrooms, ensuring that the proper amount of outside air is used based on the capacity of the classroom. WCPS also has a history of using energy efficiency upgrades to further educate students on the importance of energy efficiency and carbon footprint reduction. WCPS has installed energy dashboards at various schools that shows the students what systems are currently operating in their schools, and how the energy usage reduction impacts the environment and community.

Team/Proposed Energy Champion(s)

Our team is comprised of Chris McIntyre, the WCPS CFO/Treasurer and Construction Supervisor, as well as Mike Wilson, WCPS Facilities Director, and Bobby Livingston, project manager at CMTA submitting on behalf of WCPS. Chris McIntyre will serve as the proposed energy champion if WCPS were to be selected.