



## Project Highlight

# Wake County Public School System, NC



Holistic Building Upgrades Save  
Wake County Public Schools  
7,209,000 kWh of Energy Annually

### Technology Type:

LED Lighting | Domestic Water Conservation | HVAC Controls | Airside Systems Conversion & Replacement | Retro-Commissioning | Variable Speed Pumping | Boiler Replacement | Cooling Tower VFDs | Demand Control Ventilation

### Facility Size

**2.1m** square feet  
(12 schools)

### Energy Project Size

**\$7.2 Million**

### Annual Guaranteed Savings

**\$691,000**

### Annual Utility Savings

7,209,000kWh - Electricity  
37,000 Therms - Natural Gas | 9,400 Gallons - Fuel Oil  
5,600 Kilogallons - Water & Sewer



### Summary

Wake County Public School System (WCPSS), located in Raleigh, NC, is North Carolina's largest school district and one of the largest in the country. Like every school district, WCPSS faced aging infrastructure, equipment, and HVAC controls, as well as growing deferred maintenance and operating costs. WCPSS partnered with Ameresco for a 15 year performance-based energy services contract to address their needs in twelve on their schools. To reduce energy costs, Ameresco worked with WCPSS to develop a plan that reinvested the energy cost savings into the schools' infrastructure, equipment, HVAC controls, and reduced operations and maintenance costs long term.



## Solution

Ameresco utilized its innovative engineering and expertise to investigate all energy and utility consuming systems, equipment, and infrastructure throughout the twelve WCPSS schools. Ameresco then identified all the energy savings and infrastructure improvement opportunities and worked with WCPSS to select the specific opportunities they wanted to implement within the project. The comprehensive project scope included comprehensive LED lighting replacement, water fixture upgrades, HVAC controls modernization, and retro-commissioning of HVAC systems at all 12 schools.

Individual school-specific improvements included AHUs upgrades, high-efficiency hot water condensing boilers, installation of VFD on cooling tower fans, variable speed improvements on chilled water pumping systems, and demand control ventilation, to name just a few.

“Our partnership with Ameresco will result in updated facilities while providing improved learning environments for our students and teachers. We are pleased to have this opportunity.”

Cathy Moore  
Superintendent, WCPSS



## Benefits

Ameresco's partnership with WCPSS developed and implemented energy savings strategies that will save money and enhance learning environments. These energy conservation and infrastructure improvements across twelve WCPSS schools provided essential facility improvements funded by energy and utility cost savings, which provided the following benefits.

- Annual energy & utility savings of \$691,000
- Reduces energy & utility consumption
- 4,600 metric tons of CO<sub>2</sub> offset annually
- Enhance comfort for buildings occupants
- Enhance the learning environment.

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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