



Energy Optimization Program

# Durham Public Schools



As one of the **top 10 largest school districts** in the state of North Carolina, Durham Public Schools (DPS) **serves more than 32,000 students** and is **comprised of 56 buildings** throughout their district. SitelogIQ (SIQ) first partnered with DPS to kick off the District's Energy Optimization Program in July 2021. At the onset of the partnership SitelogIQ gathered energy data from DPS to perform benchmarking assessments and identified opportunity to **lower energy usage by 35%**. The first priority to achieving energy savings was to get very familiar with how DPS uses and manages their buildings. This was achieved through a combination of conversations with staff, data analytics, and site audits.



DURHAM  
PUBLIC SCHOOLS

**Achieved 14% Eenergy Reduction**  
**7% year-over-year & >\$900,000 net cost savings**

Calculated from July 2021 through April 2023

**56**  
school  
buildings

**32,000**  
students

**5,967,351**  
square feet

## Solutions

Within the first 90 days SitelogIQ identified opportunities to improve energy efficiency throughout the District with a focus on behavioral changes and operational adjustments such as lighting and HVAC schedules and temperature setpoints.

Within the first 6 months SitelogIQ identified significantly high natural gas usage associated with an outdated boiler and recommended that DPS turn off the boiler during summer break to lower natural gas usage and expedite the boiler replacement, which results in savings of **\$50,000 year-over-year**.

In the first year, SitelogIQ found several buildings experiencing large water leaks and reported the leaks immediately for repair, **saving \$30,000 a month or \$360,000 annually**.

In the first year, DPS achieved **\$550,000 in energy savings by reducing energy usage by 7%**.

So far in the 2nd year, up to April 2023, SitelogIQ has helped DPS **save an additional \$770,000 by reducing energy an additional 7%** from the prior year.

SitelogIQ submitted a **\$85,000 utility rebate** on behalf of the District to help cover the costs of one new construction and four renovation projects.

Partnered with DPS' staff, students, and the local community to create Engagement Programs aimed at educating occupants and stakeholders about energy efficiency, building maintenance, and best practices.

SitelogIQ has provided support to other areas in DPS including project management, capital planning, and sustainability goals and planning.

SitelogIQ completed a solar feasibility study for the District to provide clarity around prioritization, cost projections, and cost savings.

## What's Next?

SitelogIQ and DPS are expanding the energy program by adding an Energy Engineer to support savings opportunities and continue to support in other areas where expertise and knowledge can be utilized. DPS has ambitious energy and sustainability goals and SitelogIQ is able to guide DPS through common and unique challenges they encounter along the way.

