

Performance Contracting Project: Air Conditioning Retrofit

With an average age of 46 years, school buildings in the Northeastern U.S. often lack air conditioning, which makes retrofitting air conditioning a common infrastructure improvement that is pursued under the Guaranteed Energy Savings Performance Contract process.

Background

Wyoming Area School District had a goal of installing air conditioning at their Montgomery Intermediate Facility, however budget demands made it challenging to move forward.

The District partnered with CM3 for a guaranteed energy savings performance contract which leveraged energy and operations savings to help fund the project cost.

Services Provided

LED Lighting Upgrade Building Automation System Drives Chiller Unit Ventilators Electric Upgrades Insulation Act 29 Rebates

Project Overview

Cost: \$1,645,764 Financing: Bond Savings: \$155,000/YR Contract Terms: 15 Years Contact: Frank Pugliese, Director of Facilities (retired) Contact Number: 570-655-2836

Performance Contract Benefits

- » A guaranteed level of performance from the chosen partner
- » Single-point accountability for the entire project
- » No referendum required
- » No change orders
- » An accelerated timeline for facility improvements
- » Minimal disruption to building schedules
- » Greater oversight regarding scope of renovations
- » Better control over final cost of the project
- » Enhanced management of renovation timeline
- » Greater flexibility on product selection

The Importance of Air Conditioning

Air conditioners keep classrooms at a comfortable temperature, which helps improve student focus and productivity. In fact, studies show that for school districts without air conditioning, a 1°F increase in average school year temperature is associated with a 1 percent decline in learning.*

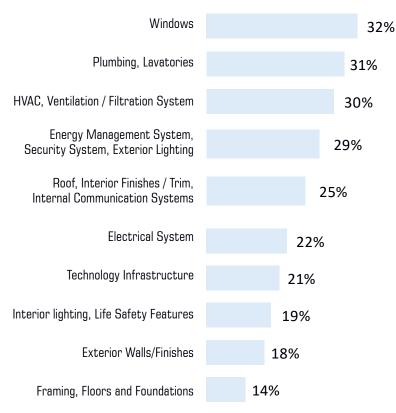
Air conditioning also improves indoor air quality in two significant ways:

- 1. Filters out environmental toxins.
- 2. Draws water vapor from the air, which reduces overall humidity levels thereby reducing mold and mildew risk.

The Need for Air Conditioning Retrofits -

The U.S. Department of Education, National Center for Education Statistics found that 1/3 of schools indicate their HVAC system is in poor or fair condition with 41% of school districts saying they schools need HVAC upgrades.

Percentage of public school building systems in poor or fair condition



* SOURCE: National Bureau of Economic Research, Working Paper 24639

The prevalence of asthma and allergies among students and staff along with rising temperatures means air conditioning is not a luxury but rather an essential component of a healthy school plan.

What we know about school infrastructure, by the numbers



95% of the nation's 476,000 school buses use diesel fuel, which can lead to serious respiratory conditions



53% of school districs in 2019 said they need to replace multiple building systems



41% of districts said more than half of their schools need HVAC upgrades



31% of school systems have portable facilities, and 45% of those portables are in poor or fair condition



16% of districts have not assessed their building needs in 10+ years



SECURITY

AIR

ENERGY