School Building Authority at the Rhode Island Department of Education

LEA Condition & Energy Data Review

Introduction & Process Overview

As part of the Facility Assessment and Prioritization project for the School Building Authority at the Rhode Island Department of Education (RIDE), teams of architects and engineers visited your schools to compile lists of condition needs and assessed the building systems for potential energy conservation measures. Now that the building surveys are complete and the data is compiled, we need you to review the data as part of a collaborative process that seeks to empower LEAs.

In order to fully understand the physical and educational needs at our local schools, RIDE has engaged LEAs to embark on a collaborative two-part evaluation of all public school facilities in Rhode Island. Teams of architects, engineers and other facility consultants completed building condition, educational program and energy surveys.

LEA Condition Data

A building condition assessment evaluates the general health of physical facilities by identifying and prioritizing deficient conditions that require correction for long-term use of the buildings. Observations are typically organized into civil, architectural, structural, mechanical, electrical, plumbing and roofing disciplines. Additionally, life cycle analysis was performed which looks at the ages of systems coupled with maintenance history and performance to forecast replacement needs as systems reach the end of useful life.

Energy Data

The energy assessment was completed similar to that of an ASHRAE Level 1 Energy Audit. The audit was performed in line with the facility condition assessment. Assessors provided information on the condition, age, size and years of remaining service for equipment and systems. Utilizing information collected during the building condition survey, typical energy conservation measures and Net Zero Energy Measures, per school, were developed along with a reasonable order of magnitude estimation of installation costs. The annual savings for each of the energy conservation measures was calculated using industry standards, engineering rules of thumb, and best practices. The payback period was calculated by dividing installation costs by the budget level estimate of annual savings. Utility cost data from UCOA was used to help facilitate this study.

The combination of these evaluations will provide RIDE with comprehensive technical information needed to understand the total level of facilities' need statewide in terms of condition, educational space needs and energy use. This information will be essential in developing a prioritization master plan for the State.

We welcome your participation and collaboration

Now that the building surveys and energy assessment are complete and the draft data is compiled, we hope you will review the data as we embark in a collaborative process.

JACOBS