# Cache County School District

Audit team goes the extra mile to uncover new opportunities for K-12 district



Performance Contract funds facility improvements – administrators and teachers 'thrilled'

In northern Utah's Cache County School District, administrators recently found themselves with a challenge all too familiar to the nation's K-12 districts: a desire to conserve energy and reduce costs that is hindered by a lack of resources that could bring about significant change.

"We were waiting, for example, for LED lighting technology to develop to the point where it would actually be feasible to move forward with it. Unfortunately, when that finally happened, we didn't have the

manpower to try to pull together a project," said District Business Administrator Dale Hansen. "The good news is, at about that same time, Johnson Controls contacted us and offered to see how they might be able to help us."

## Audit team goes the 'extra mile'

Although the transition to LED lighting was clearly the district's priority, the Johnson Controls team offered to expand its audit of the district's facilities beyond energy savings measures and explore additional

### Location:

Cache County School District, Cache County, UT

# **Enrollment:**

18,265 across 24 schools.

- High schools 4
- · Alt high schools 1
- Middle schools 3
- Elementary schools 17

#### By the Numbers:

Project cost: \$15,298,070 Guaranteed savings: \$16,389,404 over 20 years

More than \$778,255 received in grants and rebates



"It was a great experience for us to see how many ways it was possible to improve efficiency and provide a better learning environment for what was, essentially, a cost-neutral position."

- Dale Hansen, Cache County School District Business Administrator

opportunities to create more comfortable, safe, and effective learning environments.

As District Energy Manager Bruce James put it, Johnson Controls "went the extra mile."

"ESCOs (Energy Service Companies) are contacting us all the time. But they are just going after low-hanging fruit that makes it easy for them to get in, get out, and make a buck. And maybe they'll save us some money, along the way. By contrast, Johnson Controls looked at *everything*."

"Their team was leading the charge on the discovery of seeing where they really could be of benefit to us," added Hansen. "We would never have even gone down that road because we knew it was beyond our ability. And so it was a great experience for us to see how many possibilities there were to improve efficiency and provide a lot better learning environment, essentially, at a cost-neutral position."

# The self-funding option: Performance Contracting

Following the audit, the Johnson Controls team identified a list of facility improvement measures for consideration. The district chose to move forward with more than a half dozen initiatives, most of which are

funded through energy and operational savings guaranteed by Johnson Controls as part of the project's performance contract. If the savings don't materialize, Johnson Controls pays the difference.

The project includes:

- LED lighting (district-wide)
- Lighting controls (district-wide)
- New and upgraded Metasys® building automation systems
- Building envelope improvements (district-wide)
- Upgraded Fire and CO alarm systems
- Air conditioning of two high school auditoriums
- Plug load control and electrical power factor correction
- Swimming pool operational improvements
- New 485.5kW photovoltaic solar systems

Nowhere will the efforts have greater visibility and impact than at the district's Sky View High School, a 56-year-old facility that currently stands in stark contrast to the two new high schools that have recently been built.

"When this project is complete, the classrooms at Sky View are going to be as

nice as any classroom, including the new high schools in the district," said James. "I can't tell you how thrilled those teachers and administrators are. And under the performance contract, we're going to be able to refurbish all 40 rooms this summer so they're ready for school next year. Without the funding mechanism, we'd have to do maybe one or two each year and we'd never get caught up."

### **Guaranteed results**

The \$15 million project is guaranteed to generate \$16 million in energy and operational savings over 20 years. And although the project is not yet completed, the district is already benefitting.

"After just the first few months, our power factor has improved immensely," said James. "Our usage was pretty much the same, but our efficiency of using it had improved at the top. Plus, these LED lights will automatically shut off when rooms are not in use, so that's an added bonus."

"I know that's going to help my stress level," added Hansen. "It drives me crazy to look out over an empty classroom and see the lights on."

In tandem with the project implementation, the Johnson Controls team continues to find ways to add value to the partnership by applying for grants and utility rebates on behalf of the Cache County School District.

"It may not be major, but it takes a lot of time to run these things down," said Hansen. "These small things make a big difference to us. And it demonstrates that Johnson Controls is looking out for our best interests, not just for their own bottom line."



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