

# Van Buren R-1 School District



## CUSTOMER BENEFITS

- Flexibility to expand
- System interoperability
- Reduced energy costs
- Guaranteed savings

## PROJECT AT A GLANCE

Project Type:  
Energy Performance Contract

Location:  
Van Buren, Missouri, USA

Guaranteed Annual Savings:  
\$16,129



Taking a proactive approach to controlling energy consumption and reducing costs, this school district leveraged a performance contract from Schneider Electric to fund improvements to its building and lighting systems.

### The Challenge

Nestled in the foothills of the picturesque Ozark Mountains, the city of Van Buren, Missouri, is home to a population of 845. Originally organized in 1830, the city was named for Martin Van Buren, who later became the eighth U.S. President. Today, the city occupies two square miles in the southeast quadrant of Missouri.

The Van Buren R-1 School District's elementary school and high school meet the needs of 563 students in grades Pre K-12. The student-teacher ratio is 12 to 1.

Faced with rising energy costs, the district looked for ways to minimize its energy consumption. As a result, wasted energy became an issue, especially energy usage related to the HVAC equipment. If someone forgot to turn off the equipment in an area that was no longer occupied, it would continue to run. Additionally, inconsistent light levels and inefficient lights impacted the learning environment, as well as energy costs.

“We had both lighting and energy use issues at our buildings, and we needed a way to address those issues without spending our limited capital projects balance. Schneider Electric provided us a way to do that.”

**Dr. Jeff Lindsey**  
Superintendent

In 2004, the district began its search for a vendor capable of addressing its needs and working around a summer school schedule. Schneider Electric suggested that the Van Buren R-1 School District consider a performance contract that offered guaranteed annual energy savings.

The performance contract proposal appealed to the district. Schneider Electric had successfully executed similar projects for other school districts in the state, building a reputation for its dedication, expertise, and willingness to follow through on a project. Moreover, the district discovered that it could fund the new energy management solution through a lease purchase.

### The Solution

Schneider Electric installed a TAC Vista™ energy management system for the Van Buren R-1 School District. The TAC Vista system's enable/disable capability allows the district to schedule the operation of boilers, furnaces, air-conditioning units and ventilators in the district. Schneider Electric also installed direct digital controllers (DDC) on the boilers.

A front-end PC provides easy access to the TAC Vista system for equipment programming as needed. In addition to scheduling the system's on/off capabilities for daily operations, the district can program the system for holidays, weekends and special events to conserve energy and control costs.

Like school districts everywhere, Van Buren R-1 School District knows that a comfortable indoor environment enhances student learning. So Schneider Electric installed individual room thermostats that allow staff to modify comfort levels within a predetermined range. A lighting retrofit increased light levels while decreasing operating costs. Schneider Electric replaced existing metal halide lights in the gym with more energy-efficient, high-bay fluorescent lighting. Schneider Electric also enhanced classroom light levels by replacing T12 bulbs with more energy-efficient T8 bulbs and electronic ballasts.

### The Bottom Line

One year after Schneider Electric installed the TAC Vista system and new lighting, the district realized energy savings approximately 20 percent higher than the amount guaranteed in the performance contract.

Today, the district uses the TAC Vista system to monitor and quickly pinpoint potential problems in the school district's five main buildings.