



# Mesa County Valley School District 51

*Improvements will save more than \$617,000 per year • Grand Junction, Colorado*

Trane is using a comprehensive solutions approach in helping Mesa County Valley School District 51 improve its learning environment, make more efficient use of limited funding, and save significant money for the school district. Although the average age of the district's forty-seven buildings is thirty-eight years, they now have the latest in infrastructure thanks to \$8.63 million in upgrades. The upgrades are expected to save the district more than \$617,000 per year in energy costs, and more than \$390,000 in operating and maintenance costs over the next five years. In addition to the school district upgrades, Trane orchestrated an \$804,000 utility rebate check for the district as a result of the Phase I projects--the largest such rebate ever awarded by Xcel Energy to a client in the State of Colorado.



Mesa County Valley School District 51 covers 2,200 square miles of Mesa County, Colorado, and includes forty-three school campuses and four administration facilities. The school district serves more than 22,000 students. It is the largest employer between Denver and Provo, Utah, with more than 3,200 employees. District schools focus on engaging students in a rigorous and relevant curriculum where all students are successfully learning.



*Mesa County Valley School District 51 accepts an \$804,000 rebate check due to efficiency upgrades.*

Due to the many improvements, Mesa County Valley School District 51 was awarded the Trane Energy Efficiency Leader in Education Award for their sustainable energy and operational efficiency improvements. The award recognizes the district's commitment to optimizing the teaching and learning environment while increasing energy efficiency and environmental responsibility.

## Challenge

Mesa County Valley School District 51 was facing aging systems in the district's numerous schools. The systems were becoming increasingly expensive and difficult to repair as the frequency of failures increased. And, like many school systems, Mesa County Valley School District faced increasing energy and operating costs along with declining budgets.

## Solution

Mesa County Valley School District 51 retained Trane as an Energy Services Company to analyze the district's facilities and recommend updates to aging infrastructure, improve the indoor learning environment, save energy, reduce operating and maintenance costs, reduce the district's environmental impact and protect the investment in existing buildings. In addition to numerous HVAC upgrades, significant work was done to retrofit lighting systems in classrooms and gymnasiums to not only improve illumination, but save energy. Other improvements included converting electric ovens in kitchens to high-efficiency natural gas units, water conservation measures, and installing ice storage and solar heating systems. To better monitor all of the various systems, the existing Trane Tracer Summit™ automation system was converted and recommissioned as a Web-based system to monitor and control literally thousands of control points.

The project is funded from the energy savings and a performance contract supported by the Colorado Governor's Energy Office (GEO) program which uses funds from the American Recovery and Reinvestment Act (ARRA). This program provides rebates to Colorado businesses that invest in renewable energy technologies. A performance contract is an option for funding energy-saving improvements and is a means for schools to manage and optimize energy use, leveraging the savings to support strategic educational objectives.

## Results

Cal Clark, Director of Facilities and Maintenance at Mesa County Valley School District 51, said, "Trane was already familiar with the equipment in our school district. It was an easy decision to retain Trane as the ESCO. This has been a very complex project. Trane has literally touched and assessed thousands of items and components. David Miller, the on-site project manager for Trane, has done a superb job. Trane has also worked very diligently to get us the various rebates from Xcel Energy--\$804,000 to date. We're very happy and highly satisfied. In such tight budgetary times, we're pleased that we can increase efficiency in our schools while achieving one of our most important goals, which is optimizing the teaching and learning environment. It's even better that we can pay for these improvements without new taxes."

Trane is designing even more retrofits and upgrades to produce additional energy and operating cost savings, and generate another \$500,000 in utility rebates for Mesa County Valley School District 51.



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