

Bolivar R-1 Schools

Bolivar, Missouri

Bolivar R-1 School District has earned the distinction as a Blue Ribbon School. It is located in the heart of the Ozarks and serves more than 2,700 students. It's mission is to ensure every student acquires the knowledge and skills necessary to become a responsible citizen in today's rapidly changing world.



CHALLENGE

- A majority of the district's equipment was past its expected lifespan and needed to be replaced.
- Limited funding made it difficult to upgrade the existing aged equipment.
- Indoor air quality was poor in sections of the buildings and below acceptable standards.
- Existing geothermal system was unable to remove excess heat, causing it to operate inefficiently.



SOLUTION

- Bolivar hired Trane to complete \$4.7 million worth of building infrastructure upgrades.
- Building upgrades included geothermal well field improvements, new high efficient HVAC systems, ventilation systems, and district-wide building automation systems.
- Installed an energy management control system to monitor equipment remotely.
- Project was funded through participation in a statewide program which allows upgrades to be paid from bond funds.



RESULTS

- Utility and operational savings are expected to be approximately \$69,000 annually.
- HVAC upgrades have reduced energy expenses by nearly 20%.
- Classroom conditions have improved. New HVAC systems improved indoor air quality three-fold.
- Remote monitoring of equipment allows the District to identify issues before they become a problem.