

DOUGLAS COUNTY GOVERNMENT



Given the dramatic temperature highs and lows of Midwestern weather, working in an office environment in Douglas County, Kansas, without proper controls proved downright miserable for employees. The main government facility featured a control system that simply turned off the air handlers for 15 minutes out of every hour, making it impossible to manage temperature inconsistencies. To retrofit a better solution that would help decrease energy usage, minimize operations time and increase comfort level for occupants, the maintenance director reached out to Control Service Company for help. More than a decade later, the partnership between the Douglas County Government and CSC continues to flourish.

INITIATION

With a goal of decreasing the county's energy consumption by 30%, CSC went to work integrating Automated Logic into parts of the Douglas County Judicial and Law Enforcement Center. The project team digitized variable air volume boxes stored in the duct work while making it possible to evaluate air handlers, chillers and office space temperatures with ease. Because the maintenance team established that the building would go into night setback after 5 p.m., they quickly recognized that the exterior office temperature consistencies were more difficult to maintain because of energy loss through the windows. With a simple programming adjustment, these offices were put on a different temperature control schedule to ensure occupant comfort at all times of day.

IMPLEMENTATION

One year after the system was implemented, the county decreased its peak demand

dramatically and saved \$55,000 in energy costs, putting the project on track to provide a complete return on investment in just 3.2 years. The maintenance director then decided to build on this success by suggesting to county commissioners that digital controls be installed in the Douglas County Courthouse. Once the project was approved, CSC began removing all pneumatic controls and replacing them with more efficient digital controls. The boiler was replaced by one that is 99.6% efficient and variable frequency drives were installed on air handlers enabling a "soft start" in the process of maintaining the proper amount of air flow. Additionally, both the Douglas County Jail and Douglas County Youth Services facilities have been fitted with Automated Logic. The energy savings from all these projects is currently being reinvested by the county's Sustainability Department to educate individuals about how to be more energy conscious and to fund future energy-saving projects.

"The Automated Logic product is phenomenal and very user-friendly. Plus, CSC's customer service is excellent. From personalized on-site training to 24/7 phone support, I know that if I have a problem or can't figure something out, CSC can help me identify the issue almost immediately and fix it in minutes. It's really nice to be able to respond to temperature control inquiries from anywhere and make adjustments without having to travel from building to building."

— Bill Bell,
Maintenance Director