

Case study

Jackson County

Jackson County, Missouri



Unique partnership improves environment, facilities and energy awareness

The Jackson County Courthouse is a beautiful historic building in downtown Kansas City, Missouri. Built by Harry S. Truman during his tenure as Presiding Judge of Jackson County, the art deco building was constructed in 1932-33 and occupied in 1934. The courthouse is just one of four buildings affected by the County's partnership with Johnson Controls, Inc. The partnership not only supports Jackson County's commitment to preserving its environment through reduced energy use, it will save the county and its taxpayers approximately \$7.6 million over the next 15 years.

In its vision: "Jackson County will...be recognized for its delivery of seamless, citizen-centered services, be safe and vibrant and will celebrate community diversity, be the catalyst to resolve regional issues that improve the quality of life of all residents." In pursuit of this vision, Jackson County needed to address issues with aging infrastructure, high energy bills, training and education issues with staff, and an overall lack of funds.

A unique combination of performance and service contracts implemented with Johnson Controls allowed the county to make necessary facility upgrades while complying with the environmental standards set forth in its vision. Tactics include increased energy and operations efficiency, improved indoor air quality, and significant recycling efforts in everyday operations and by as much as 50 percent in the construction phase. Also unique to the Johnson Controls approach, and of particular importance to Jackson County Executive Katheryn Shields, was an energy awareness training program for all county employees.

"When this approach was first proposed to the County Legislature, my hope was that we would be able to not only complete some needed improvements to our county buildings, but also conserve energy to ensure that we are spending tax dollars as efficiently as possible," said Shields. "I am pleased that Johnson Controls is helping us preserve the environment for all Jackson County residents to enjoy."



A comprehensive project

The Jackson County Courthouse, County Jail, Community Justice Center, and Criminal Justice Center underwent extensive renovations through the performance contract with Johnson Controls. The comprehensive project will not only save energy usage and costs, it is guaranteed to save the county more than \$429,000 annually, which is enough to pay the up-front costs for the initial improvements over the life of the 15-year contract. The cost-neutral approach eliminated the need to alter budgets or raise additional funds.

Johnson Controls designed and installed energy-efficient building improvements including steam energy and lighting retrofits, plumbing upgrades, indoor air quality sensors, and the installation of a Metasys® building management system. In keeping with Jackson County's environmental standards, Johnson Controls committed to recycling at least one-half of the old equipment and materials removed from the buildings, as well as construction waste. Signage was provided to tout these efforts and encourage county employee support.

Under a planned service agreement, a building environment specialist, employed by Johnson Controls, is stationed at the courthouse for the duration of the contract. The goal of the specialist is to ensure the county realizes the energy and cost avoidances guaranteed by the performance contract by keeping all systems operating at peak performance. The specialist works to identify additional energy and cost

avoidance opportunities, train county personnel, and support the engineering staff in maintaining the facility management system. In addition, the specialist will help implement and train facility staff on a new computerized maintenance management system to increase the flow of work orders and better track the county's equipment assets.

Taking a lead in environmental standards

Jackson County is dedicated to improving the indoor environment for its workers and minimizing the impact of its buildings on the community environment. Johnson Controls is serving as an integral part of the implementation of LEED® (Leadership in Energy and Environmental Design) components for qualified buildings. A key component of LEED certification is monitoring indoor air quality.

Johnson Controls reviews current county programs to ensure continuity between LEED certification and county environmental standards. The Johnson Controls on-site staff works to advance the county toward LEED certification and will report the status thereof to County Administration annually. With the assistance of Johnson Controls, Jackson County is working to attain ENERGY STAR® status from the Environmental Protection Agency (EPA) for qualified buildings. These efforts will further decrease the amount of harmful emissions, which have already been decreased by nearly 2.5 million pounds since the contract began.

"Our partnership with Johnson Controls provides us the technologically advanced equipment to operate our buildings more efficiently, and a training program to educate our staff on the need for energy awareness and efficiency."

KATHERYN SHIELDS
JACKSON COUNTY EXECUTIVE

Education is key to success

County Executive Shields wished to make employees aware of the impact they have on energy use and the environment at work and at home; and also to familiarize them with the work being done by Johnson Controls, and how it affects their comfort, county budgets, the environment, and overall energy use of Jackson County. As part of the contract, Johnson Controls sponsored the Jackson County Energy & Environmental Showcase, a day of energy and environmental education, to approximately 1,200 county employees.

The showcase is just one of four training classes that make up the Jackson County & Johnson Controls Communications & Education Program. The second class, directed at all employees, will provide an update on the benefits of the program to date. The remaining classes, aimed at supervisors,

department heads, and facility managers, will discuss supply side reporting and load profiles, followed by a discussion of the ENERGY STAR Program hosted by the EPA.

“We hope the training will encourage behavioral change of the employees at work and at home. This will facilitate the success of the performance contract and positively impact our community,” said Shields. During the showcase event, Shields received a national EPA “Waste Wise” award, which recognizes those partners who achieved and reported the most impressive waste reduction results in 2001.



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JACKSON COUNTY VISION

