

Case Study

Branch County

Coldwater, Michigan



Branch County leverages savings to fund needed capital improvements

With Coldwater as the county seat, Branch County has a population of 46,664 and is located on Michigan's southern most border where I-69 enters Indiana. Branch County faces that same challenges that most units of local government face, relatively flat revenues and mounting deferred maintenance. The top priority from a deferred maintenance standpoint was an outdated and unreliable boiler system at the county courthouse/administration building. Rather than roll the dice through another winter with the existing boiler system, county officials embraced the idea of using Performance Based-Contracting to not only design and deliver the project, but to fund the project through a more comprehensive set of energy reduction solutions.

Branch County solicited proposals from Energy Service Companies or ESCO's and selected Johnson Controls to be their partner to develop the right project for the County's needs and to provide assurances that the savings would be present to make the LTGO bond payments. Construction was completed in 2016. After one year of successful operation, 2016-2017, the new equipment has not only achieved the guaranteed energy savings from Johnson Controls, but actually exceeded the \$102k in guaranteed annual savings.



Challenges

- Rising energy costs
- Risk of Equipment Failure - boilers and chillers
- 139,360 sq. ft. of aging Infrastructure
- Lack of county-wide building automation system
- Lack of capital funds for upgrades



Johnson Controls solutions

- Interior and Exterior LED lighting upgrades
- Replaced boilers and chiller in county courthouse
- Air handler refurbishments
- Replaced VAV boxes
- Installed a new energy management system
- Water conservation improvements, including meter rightsizing
- Installing variable speed drives on pumps and fan motors
- Building Envelope - Weatherproofing

Project generates over \$1.7 million over life of project in energy and operational savings!

Results

- Self Funded Solutions - *\$1,360,260 in Improvements without a budget increase*
- Energy & Operational Savings – *\$102,315 annually*
 - *\$15,093 in operations savings*
 - *\$87,222 in annual energy savings (933,350 kwh, 978 KW, 1,874 Therms of natural gas)*
 - *34% reduction in energy*
- Guaranteed Outcomes – *Cost, technical & fiscal performance*
- Operational Integrity - *Replaced aging equipment prior to failure*
- Turnkey Approach - *Single point of accountability*
- Greenhouse gas emissions - *Reduced 1,414.8 tons of CO2*

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