Case Study

## City of St Clair Shores

St Clair Shores, Michigan



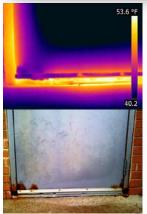
# St Clair Shores leverages savings to fund needed capital improvements

St Clair Shores is located along the shores of Lake St. Clair and boasts a population of approximately 60k. The City of St Clair Shores faces that same challenges that most units of local government in Michigan face, relatively flat revenues and mounting deferred maintenance. The city had roofs in need of replacement as well as many HVAC units and building automation controls that were nearing the end of their useful life. With the leadership of the City Manager and City Council, city 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.

The City solicited proposals from Energy Service Companies or ESCO's and selected Johnson Controls to be their partner to develop a comprehensive efficiency project and to provide assurances that the savings would be present to make the TELP payments. Construction of the \$5.7M project was completed in the fall of 2018. The City of St Clair Shores was the first Municipality in MI to take advantage the recently passed Tax Exempt Lease Purchase (TELP) legislation allowing local units of government the ability to fund energy efficiency projects through this non-debt funding instrument.









Project generates over \$9.1 million over life of project in energy and operational savings!

### **Challenges**

- Rising energy costs
- Risk of Equipment Failure
- Aging Infrastructure (including roofs, HVAC, controls, lighting, IT, etc.)
- · Aging Civic Arena and pressures on ice revenues
- · Lack of capital funds for necessary upgrades

#### **Johnson Controls solutions**

- Improvements to Civic Arena include new HVAC, Controls, Dimmable LED, roof repairs, new cooling tower and IT
- Interior and Exterior LED lighting upgrades
- · Replaced boilers and air handling equipment
- Roof replacement and repair
- Installed a new energy management system
- Replaced structured cabling, network switches and installed new VOIP phone system
- Installing variable speed drives on pumps and fan motors
- Building Envelope Weatherproofing
- Water conservation

#### **Results**

- Self Funded Solutions \$5.7 in Improvements without a budget increase
- Annual Energy & Operational Savings (\$418,064 annually)
  - \$108,720 annually
  - \$309,344 in operations savings
  - 17% reduction in energy usage annually
  - \$108,720 in annual energy savings
  - 634,630 kwh, 254 KW, 42,642 Therms of natural gas
- Guaranteed Outcomes Cost, technical & fiscal performance
- Operational Integrity Replaced aging equipment prior to failure
- Greenhouse gas emissions Reduced 642 tons of CO2

#### **Contact Information:**

