

City of Elgin



CUSTOMER BENEFITS

- Accurate recording of water usage
- Improved revenue collection
- Solutions funded by energy savings and revenue generation

PROJECT AT A GLANCE

Project Type:
Energy Performance Contract

Location:
Elgin, Texas, USA

Guaranteed Annual Savings:
\$99,183

Energy Conservation Measures:

- 2,700 water meters
- Drive-by meter reading system
- Programmable thermostats
- Lighting retrofits
- Air conditioning system in one building
- Energy-efficient streetlights



While looking to comply with a state mandate to reduce energy consumption, the city of Elgin discovered an opportunity to recoup lost revenue stemming from under-recorded water usage.

The Challenge

Located just 19 miles east of the Texas state capital in Austin, the city of Elgin is home to about 7,500 people. Despite its modest size, Elgin's proactive city manager was determined to find an energy solution that would help the city comply with a new state law.

Texas Senate Bill 5 mandated that municipalities "implement all cost-effective, energy-efficiency measures to reduce electric consumption in existing facilities." The law also required them to "adopt a goal to reduce electric consumption by five percent each year for five years, beginning Jan. 1, 2002."

Although the law focused on electric consumption, the city manager wanted to look at all utility sources. While surveying Elgin's energy management systems and energy usage, Schneider Electric discovered that the city was missing out on revenue collection opportunities due to aging residential and commercial water meters.

Water flow degrades a meter's performance over time. Although a water meter's life span is about 15 years, most only have a five- to 10-year warranty and, like many cities, Elgin did not have a consistent meter change-out program in place.

The Solution

Schneider Electric proposed an energy solution that would enable the city to comply with Senate Bill 5 while using the guaranteed energy savings to pay for system renovations. The proposal also included a new revenue generation measure to fund the replacement of aging water meters.

The American Waterworks Association believes a city needs to take immediate action if it is losing more than 15 percent of its billing potential. Schneider Electric's survey revealed that 26 percent of Elgin's water usage went unrecorded due to the aging meters.

The estimated \$52,000 in additional revenue generated by more accurate recording of water usage was sufficient to replace 2,700 water meters and to fund an automatic meter reading system. The new meter reading system links to the city's route management software and billing system.

Schneider Electric also helped the city of Elgin comply with Texas Senate Bill 5 by installing energy-efficient programmable thermostats and retrofitting the lighting fixtures in all municipal buildings. In addition, Schneider Electric replaced an aging air conditioning system at the police station and installed more energy-efficient streetlights.

The Bottom Line

Today the city of Elgin generates revenue for more than 9.5 million gallons of water that were previously unrecorded due to aging meters.

Prior to replacing the old meters, two meter readers spent two full weeks each month taking the readings needed to bill residents. With the new meters and drive-by capabilities, it now takes one meter reader just three hours a month to gather that information.