



**Project Details**

*Contract Type:*

LED street lights and wireless controls

*Customer Type:*

Local Government

*Technology Type:*

Energy Efficiency

*Facility Size:*

1,097 fixtures

*Annual Energy Savings:*

61% reduced electric consumption  
\$67,000 in energy costs



The project team converted 1,097 high pressure sodium (HPS) street lights to energy efficient LED luminaires.

**Project Summary**

The city of West Richland wanted to upgrade its 1,097 fixture city-owned high pressure sodium (HPS) street lighting system to LED and incorporate a control system to significantly reduce energy and maintenance costs while improving the quality of illumination and decreasing greenhouse gas emissions.



The majority of fixtures are used to replace 100-watt and 200-watt HPS fixtures on residential streets, at midblock and intersections.

**Customer Benefits**

Ameresco completed a budget neutral LED street lighting and control project for the City of West Richland, WA. The LED street lights and wireless control system are expected to reduce annual electric consumption by more than 61 percent, saving the City approximately \$67,000 in energy costs per year. The lighting system installed meets city requirements for greenhouse gas emissions and the utility's technical requirements for metering.

The lighting control system will help to maximize savings through enhanced monitoring and control functions, and will enable the City to move from a flat utility rate to a consumption-based tariff, reducing the City's average cost per kWh by more than 26 percent. The City previously paid a flat rate per fixture to cover all power and maintenance provided by electric utility, Benton Rural Electric Authority (REA). Now the City pays Benton REA only for the power used; the city is responsible for maintaining the LED luminaires.

Funding is partially provided through local grants. The Washington State Department of Commerce (DOC) granted the City of West Richland \$281,937. Benton REA provided a \$195,000 grant in support of the City's lighting project. The balance is financed for 12 years through the WA State Treasurer Local Option Capital Asset Lending program, and paid for through savings.

**Environmental Benefits**

Through its partnership with Ameresco, the City is expected to save the equivalent of 527,481 lbs of CO<sub>2</sub> per year.

**Accolades**

*"It makes good economic and business sense for the City to install new LED street lights and a wireless control system that reduce energy use by more than 60 percent while improving illumination, safety and addressing dark sky considerations," said **Brent Gerry, Mayor, City of West Richland.** "In addition to dramatic energy and maintenance savings, the control system will also enable us to move to a lower cost metered rate schedule that provides further cost reductions."*

*"Benton REA saw this project as an opportunity to partner with the City of West Richland to provide improved public lighting while also conserving energy," said **Clint Gerkenmeyer, Benton REA General Manager.** "The added safety of the new lighting and the energy savings to the City will benefit all residents. As a cooperative, Benton REA is committed to improving the communities we serve and bringing additional value to our member-owners."*

## About West Richland, WA

West Richland is a fast-growing community in southeastern Washington with a population of nearly 14,000 residents. The vibrant community features an unrivaled quality of life, breathtaking panoramic views, excellent neighborhoods and a relaxed lifestyle. The region boasts some of the best recreational opportunities around, including water-skiing, boating, bicycling, fishing and wine tasting, and there are over 300 days of sunshine each year. The city's integrated park system, river shore and wide-open living spaces add to city's appeal. West Richland is nestled between urban "Tri-Cities" metropolitan area and agricultural areas including the Red Mountain American Viticultural Area, a premier and world-renowned wine grape-growing region.

Learn more at  
<http://www.westrichland.org/>

## About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal, all with practical financial solutions. Ameresco has constructed billions in projects throughout North America and the United Kingdom.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit [www.ameresco.com](http://www.ameresco.com).



The control system allows the City to implement dimming strategies that will reduce energy consumption.

## Services Provided

The City of West Richland partnered with Ameresco to upgrade 1,097 city-owned HPS street lighting to high performance LED luminaires. The LED luminaires replaced 100-watt, 200-watt and 400-watt HPS fixtures on residential streets, at midblock and intersections.

In addition to replacing light fixtures, Ameresco installed a wireless lighting control system which enables West Richland to remotely monitor, control and measure luminaire performance. The lighting control system will enable the City to implement dimming strategies projected to reduce energy use by an additional 10-20 percent.

West Richland will benefit from reduced energy and maintenance costs while improving the quality of illumination and decreasing greenhouse gas emissions.



The new LED street lights are expected to reduce the system's annual electricity consumption by 61 percent, saving the City approximately \$67,000 per year.