



## FACT SHEET

# Bellevue/LED Street Lighting Project

### Overview

#### Bellevue/LED Streetlighting Project

#### Cost savings:

\$12,000 per year

#### Greenhouse gas savings:

36 metric tonnes of CO<sub>2</sub> per year

#### Partnerships/Grants:

WA Department of Commerce energy efficiency grant, Puget Sound Energy rebate

**Project Summary:** A 2017 Washington State Department of Commerce energy efficiency grant coupled with a Puget Sound Energy (PSE) rebate recently helped Bellevue reduce the cost of converting 153 high-pressure sodium (HPS) municipal streetlights to LED.

Other non-energy benefits to LED lamps include fewer maintenance trips for Bellevue staff (with three times the service life), reduced light trespass, better controllability, and truer color rendering.

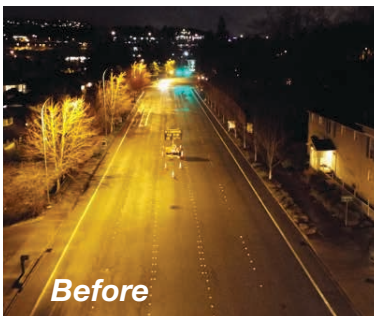
**Results:** Even for this relatively small number of lights, annual energy consumption was reduced 58%, saving approximately \$12,000 per year with a four-year simple payback after receiving \$44,000 in grants and utility incentives. The greenhouse gas savings from this LED conversion project are approximately 36 metric tonnes of CO<sub>2</sub>e annually.

**Detailed Description:** Streetlighting makes up about 35% of Bellevue’s total energy spend. Bellevue owns about 3,500 streetlights that are metered and pays for 5,300 “flat rate” PSE-owned lamps via a monthly charge. PSE rates allow for differentiation in the billed monthly cost between LED and HPS, should customers elect to pay for the additional capital cost of an upgrade to LED.

Bellevue has now converted about 14% of city-owned streetlights and 80% of our PSE-owned lights to LED (a major project completed in 2016), saving about 1.6 million kWh compared to the base year of 2013, and plans to convert the majority of remaining HPS lights within three to five years.

These projects support the Joint County – City Climate Commitments by preventing the release of 2,500 metric tonnes of carbon pollution from municipal and citywide streetlighting infrastructure over the past five years, an investment which will continue to pay off into the future.

Bellevue’s LED streetlight conversion on Richards Road



Before



After



Through focused, coordinated action, we will maximize the impact of our individual and shared efforts.