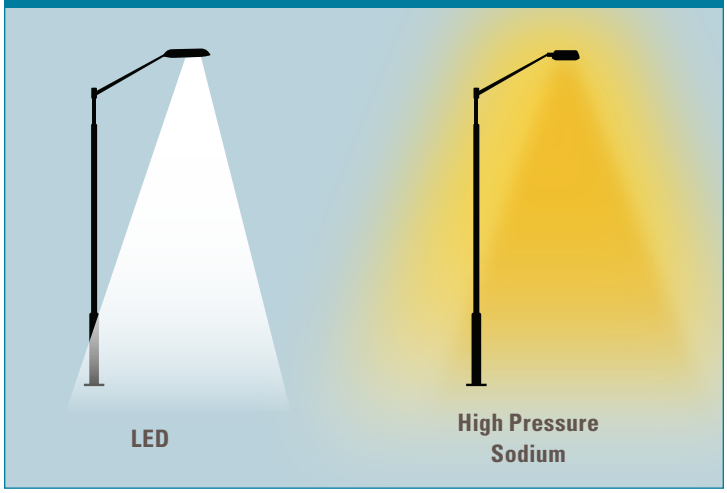
LED Street Lighting

LED streetlights are durable, long-lasting and cost effective and can lead to enhanced public safety while delivering environmental advantages because they use less energy while delivering enhanced visible light. After completing pilot programs and a technical analysis of current products that meet our engineering requirements, we found mainstream LED streetlights to be of utility-grade quality and on par with the reliability standards we must maintain.

Q. Will residents notice a difference compared to the existing lights?

A. Yes. Old residential streetlight technology such as high pressure sodium has less efficient light pattern that causes glare and light trespass. New residential LED street lighting technology has a more efficient lighting pattern that reduces glare and focuses the light directly on the area to be lit (typically corners and mid-block locations).

LEDs have a more efficient lighting pattern that reduce glare and focus the light directly on the area to be lit.

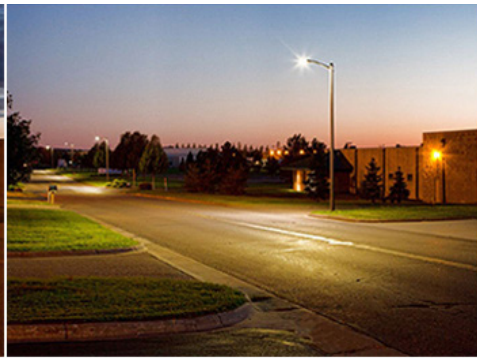


LEDs have better, broad spectrum lighting than traditional high pressure sodium cobra head-style streetlights which spill excessive yellowish-orange light away from the street and into neighboring yards and windows. Because existing poles are not being moved, any unlit areas between poles (corners and mid-block locations) are unchanged. However, due to the uniformity of the light from LEDs, the difference between lit and unlit areas is accentuated.

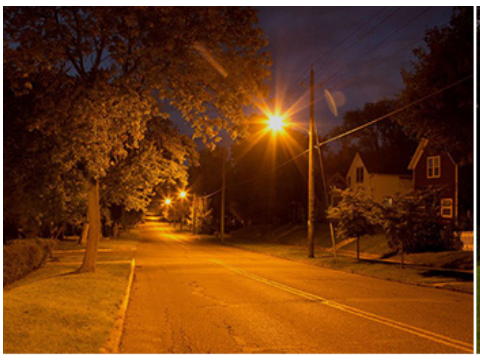
All of our LED lighting is also "Dark Sky" compliant for backlight, uplight and glare. Dark sky is a designation given to outdoor lighting fixtures that meet the International Dark Sky Association's requirements for reducing the waste of ambient light.

Before

After



Before



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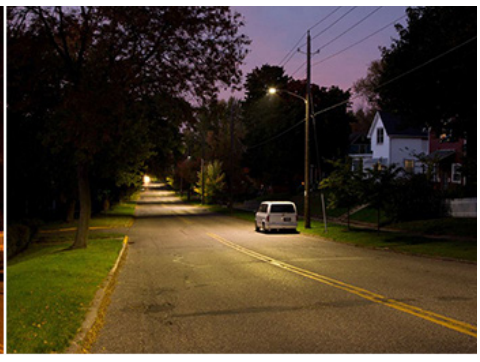

Q. What is the purpose of residential street lighting?

A. Residential street lighting is different than downtown or highway street lighting in that it's meant to provide sufficient guidance for pedestrians and vehicle traffic along residential streets by illuminating corners and mid-block locations. In a downtown area, lighting uniformity plays an important role due to the high volume of pedestrian and vehicle traffic and to enhance the visibility of buildings and storefronts. In highway lighting, particularly near interchanges, exits or roundabouts, lighting uniformity is also important.

Q. Are the new lights as bright as the old lights?

A. Yes. The light output (lumens) of the new LEDs is equivalent to that of the old HPS lights.

Q. How will the program work?

A. Our crews and contractors will install LED replacements for Xcel Energy-owned HPS cobrahead lights on the existing streetlight rate at the 100W, 150W, 250W and 400W equivalent levels. Xcel Energy will pay all costs associated with the retrofits, including removal and salvage of old lights and installation of the new LED fixtures. There are no costs to communities for this replacement. We will also offer LEDs for new construction projects in the same sizes.

Q. How will the new LED rate compare to current rates?

A. Municipal customers could save four to seven percent on their average monthly streetlight bill.

Q. What services does the LED Street Lighting rate include?

A. Our LED Street Lighting rate is a simple modification of the current streetlight rate structure with which customers are familiar.

Q. Will there be an up-front charge?

A. No. We will be able to implement this program with no up-front charge to customers.

Q. When will the work take place?

A. The installation of LED streetlights began in Minnesota September 2016 and will continue for 2 1/2 years.

For further information we also encourage you to visit **xcelenergy.com/LEDStreetLighting**.

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