

# Traffic Signals

## PURPOSE

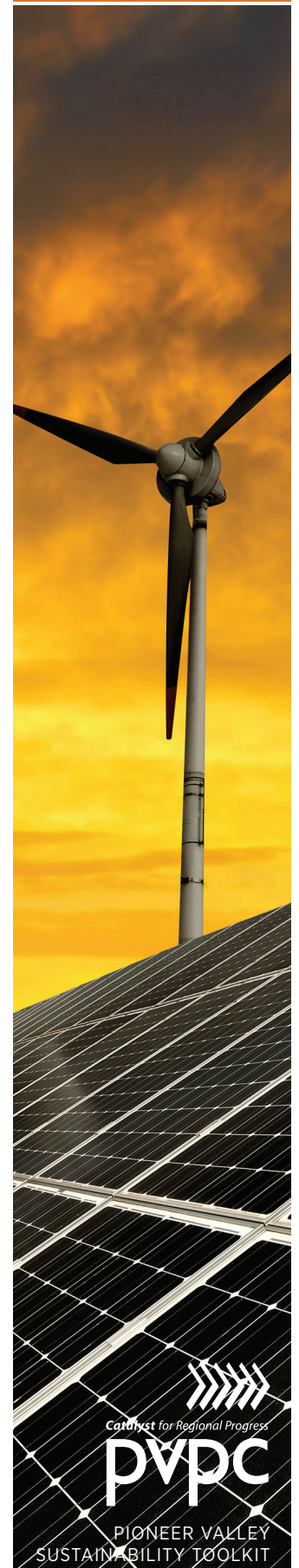
To reduce energy use and municipal utility bills by replacing inefficient traffic signals with very efficient Light Emitting Diode (LED) lighting.

## HOW IT WORKS

New LED traffic signals consume 80 to 90 percent less energy and last up to six to eight times longer than traditional incandescent signals. Initial purchase cost for LEDs are much higher than incandescent, fluorescent, compact fluorescent, or other electric light sources. However, monetary savings come in the form of lower utility bill and saved labor for replacement and maintenance of traditional incandescent signals. How to pay for this? Options include grants (see below) and incremental purchases as light replacements are needed.

## EXAMPLES OF WHERE STRATEGY HAS BEEN ADOPTED

Easthampton, MA decided to replace over 400 street lights with LED high-efficiency street lights in 2011 to conserve energy as well as save money on annual maintenance and operating costs. The City estimated that the LED streetlights would save the city an estimated \$23,700 in energy bills and \$13,000 in maintenance costs each year. Easthampton was the first municipality in western Massachusetts to use the Green Communities Grant to create a large-scale installation of LED street lighting. The Mayor of Easthampton noted that the LED bulbs not only are more energy efficient but they also cause less light pollution and will last 10 to 15 years longer. The total cost of this project was \$223,000 of which all but \$300 was covered by grant funding from the Massachusetts Green Communities Program (\$170,000) and from the Western Massachusetts Electric Company (\$52,700).





Weymouth, MA is among the many communities statewide that recently changed its traffic signals to LED lighting. The town's Economic Development Planner estimates that the switch to LED will reduce energy use by 85 percent and maintenance by 50 percent. Weymouth also received grant funding through the Green Communities Program.

## LINKS TO MORE INFORMATION

CITY OF EASTHAMPTON, MA, DEPARTMENT OF PUBLIC WORKS  
<http://www.easthampton.org/>

MASSACHUSETTS GREEN COMMUNITIES PROGRAM:  
<http://www.mass.gov/?pageID=e0eeasubtopic&L=3&LO=Home&L1=Energy%2C+Utilities+%26+Clean+Technologies&L2=Green+Communities&sid=E0eea>

## FOR MORE INFORMATION, PLEASE CONTACT

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