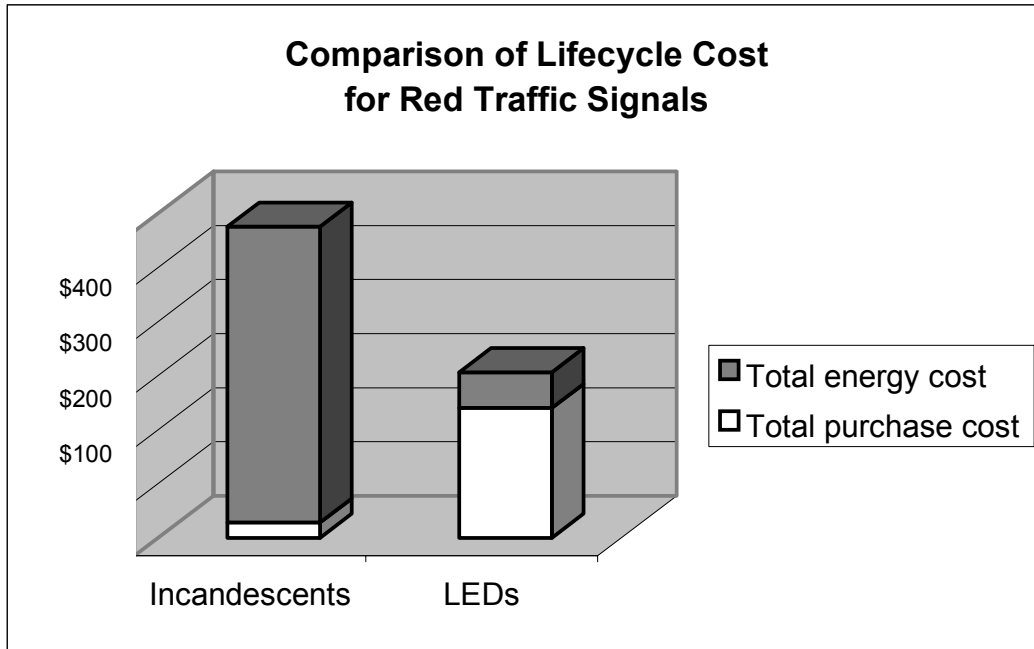


LED traffic signals provide dramatic energy savings



Red LED traffic signals are far more cost-effective than signals using incandescent lamps. A red LED traffic signal costs about \$75, compared to \$3 for an incandescent signal. The LED signal, however, consumes approximately 88 percent less energy than a comparable incandescent signal in the same application. Over an estimated seven-year life, LED traffic signals cost 70 percent less (\$290) than signals that use incandescent lamps (based on 10 cents/kWh). These economics are becoming even more attractive as LED traffic signal prices decline.

Cost comparison

	Incandescent signal	Red LED signal
Annual energy use (kWh)	559	67
Energy use for 7 years (kWh)	3,912	472
Energy cost (10 cents/kWh)	\$391.20	\$47.20
Lamp cost	\$3	\$75
Lamp cost over 7 years	\$21	\$75
Total cost over 7 years	\$412.20	\$122.20

Source: CEE calculations based on data from *A Market Transformation Opportunity for LED Traffic Signals* (Suozzo 1998) and 2002 manufacturer-submitted price information

Note: The above comparison does not include maintenance costs. Incandescent signals require annual relamping at a cost of about \$150/installation. Thus, over seven years, the incandescent signal would generate approximately \$1,050 in maintenance costs. Over the same time period, the LED signal would generally require no maintenance.