



# Cape Light Compact LED Traffic Signal Retrofit



**TEN Member Towns**

**Over 900 Traffic Signals**

**Annual Cost Savings of \$37,000**

Over the next few months, the Cape Light Compact energy efficiency program for Cape Cod and Martha's Vineyard, will begin to help ten member towns - Barnstable, Bourne, Brewster, Dennis, Falmouth, Harwich, Orleans, Sandwich, Truro, and Yarmouth replace their energy-inefficient incandescent traffic signals with LED (Light-Emitting Diode) signals. LEDs generally use 80-90% less energy and last 10 times longer than incandescents. Additionally, incandescents last about a year before needing replacement while LEDs last between seven and ten years. Along with the reduced maintenance and replacement costs and annual energy savings, the LED Traffic Signals provide a brighter and purer color that remains consistent, even in direct sunlight. With the retrofit project, the towns will not only save money and electricity, but will also provide a safer environment. The entire cost of replacing the traffic signals will be paid by the Cape Light Compact

## RESULTS

Starting in late 2003, over 900 traffic signals will be replaced in Cape Cod member towns with the more efficient LEDs through a contract with Republic Electric East. Each installation will displace an average of 330kWh per year. The annual energy savings are approximately 300,000 kWh annually, equivalent to \$37,000. With the rebates from Cape Light Compact, the measures and retrofit costs totaling over \$114,000 will be fully paid for by the Compact for the member towns. The total cost savings over the lifetime of the fixture is estimated to be approximately \$260,000.

## ABOUT CAPE LIGHT COMPACT

Cape Light Compact is an intergovernmental agency of 21 Cape and Vineyard towns and Barnstable and Dukes Counties. The Compact offers energy service options for all consumers - large and small - and brings together the buying power of 193,000 electricity customers. The Compact began administering the energy efficiency program for Cape Cod and Martha's Vineyard in July 2001. For more information, call 508-375-6648 or go to [www.capelightcompact.com](http://www.capelightcompact.com).



# Cape Light Compact LED Traffic Signal Retrofit Frequently Asked Questions

## 1. **What is the estimated life of the LED in hours?**

LED units generally last seven to ten years and are rated at 100,000 hours. They are warranted for five years.

## 2. **What is the retail price?**

LED units range in price from \$49.50 for an 8" red unit to \$305 for the yellow. A typical pedestrian signal is \$234 today. Over the past two years the price on these units has dropped dramatically. The 8" red was formerly as high as \$150. It is expected that this trend will continue and prices will be considerable lower by the time communities begin being responsible for their purchase.

## 3. **Where can replacement LEDs be purchased?**

Replacement units can be purchased from any number of vendors or from the manufacturer. There are more than 25 manufacturers of LEDs today. The Cape Light Compact LED Traffic Signal Retrofit Project RFP was awarded to Republic Electric who will warranty the installation and materials for 90 days and be available for at least the first five years for municipalities to go back to for replacements.

The suppliers are two of the best brands: Gelcore (formerly Ecolux) and Leotek. Both can be locally acquired and are interchangeable. Any company that supplies traffic signal components will also supply the LED units.

## 4. **Will the contractor awarded the work be responsible for everything?**

Yes, the contractor, Republic Electric, will have full responsibility. The Cape Light Compact's technical consultant will manage the project to ensure proper coordination. All work will be done at night except as authorized by each community. The contractor will also warranty his work for 90 days after it is complete and provide backup to the manufacturer's five-year warranty on the unit. If a unit fails during the five-year warranty period, the contractor will exchange it for a new unit at no cost. The Town will be responsible for installation of the replacement unit after the 90-day initial warranty.

5. **Will all 21 towns of the Cape and Vineyard participate?** The project currently incorporates ten towns of Barnstable County. The other five towns on Cape Cod have either already taken advantage of the traffic signal retrofit rebates, where possible, previous to this project, or do not operate their traffic signals. We are currently working with the six towns of Martha's Vineyard to determine future interest in the project.

