Energy Efficiency

Measure 10 – Energy Efficiency 5 Points

Install LED lamps in traffic lights.

Discussion:

Cobb County Department of Transportation (CCDOT) currently maintains 526 traffic signals. All 526 signals are LED signals, as are a significant number of pedestrian crossing signs.

In 2004 Cobb County did a pilot program to retrofit all signals at 25 county intersections, replacing a total 573 of incandescent lamps.

Following this pilot program, in 2005, Cobb County retrofitted all remaining traffic signals with LED modules. Funding was shared between the Georgia Department of Transportation (GDOT), who provided the required hardware (LED modules) to Cobb County DOT. Cobb County funded a contract with a private sector signal contractor to install the LED’S.

The calculated annual energy savings from the use of LED signals is estimated to be approximately 3.6 million kWh per year. (This is an engineering estimate - signals are not metered by the local utilities.) Using EPA’s estimates, this translates to reducing approx. 2,800 tons of CO2 emissions annually. The initial estimate of annual utility savings was $271,000.

Documentation:

- **Requested:** A copy of the policy to install only LED lamps in traffic signals with date of adoption.
  
  The County LED traffic signals, turn arrows, and pedestrian crosswalk signage is enclosed. Recent purchase documents can be provided upon request to document the exclusive purchase of LED signals since the conversion in 2005.

- **Requested:** A copy of the plan to retrofit existing traffic signals with LED lamps within 2 years.
  
  This documentation is not applicable. As noted in the discussion above, Cobb County has completed conversion of all traffic signals countywide. Project documents can be provided on request, or site visits are welcomed.

- **Requested:** 526 traffic signals have been retrofitted or were purchased as LED lights at initial installation. This represents 100% of the County’s traffic signals.