

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, Cobb County decided to retrofit all county traffic signals with LED modules. Cobb County funded a contract with a private sector signal contractor to install the LED'S. The retrofitting of 100% of Cobb County - maintained traffic signals with the LED modules was completed in 2007. In conjunction with this effort, Cobb County established a policy that all new installations of traffic signals and school flasher signs will include LED lamps meeting ITE and Cobb County specifications.

100% of County maintained traffic signals are now LED. This represents approx. 526 traffic signals and approx. 120 school flashers. The engineering estimate of annual energy savings from the use of LED signals is approx. 3.6 million kWh per year. Using EPA's estimates, this translates to approx. 2,800 tons of CO2 emissions reduced annually. The initial estimate of annual utility savings was \$271,000.

Cobb County DOT maintains school flasher signs for 93 schools in Cobb County. The 120 flashers converted as part of the earlier effort completed in 2007 represented approximately 26% of the total number of school flashers maintained. The balance of school flashers, approx. 330 units, would not see a utility cost savings from the retrofit and were not converted. However, the County does have a current plan to retrofit the remaining school flashers with LED lamps during preventative maintenance beginning in the Summer 2009. Full conversion is expected to be completed by the end of 2010.

Documentation:

- *Requested: A copy of the policy to install only LED lamps in traffic signals with date of adoption.* There is no written ordinance covering this, it is a department standard. The County specification for the purchase of LED traffic signals is enclosed. The County can document recent purchases upon request.
- *Requested: A copy of the plan to retrofit existing traffic signals with LED lamps within 2 years.* There is no written plan of action, but is a department directive.
- *Note: Site visits and records are available for review by ARC staff upon request.*