

# BetaLED™ Project Brief Overview

Progress Energy Carolina Streetlight Project, Raleigh, NC



## PROJECT SUMMARY

<b>End User:</b>	Progress Energy Carolina
<b>Application:</b>	Street lighting
<b>Product:</b>	Nine Type III, 60 LED LEDway™ luminaires retrofitted onto 30 ft. poles setback three feet from the roadway. LEDway replaces 250-watt high-pressure sodium (HPS) Cobrahead Type III lamps.
<b>Benefits:</b>	<p>LEDway fixtures are 50 percent more efficient and have a life rating of more than 100,000 hours or 23 years compared to traditional HPS lamps which last about two or three years.</p> <p>LEDway provides dramatically improved uniformity eliminating dark spots between fixtures creating a safer environment for vehicle and pedestrian traffic.</p> <p>Patent-pending NanoOptic™ refractors within each LEDway fixture layer light efficiently to deliver more lumens into target areas improving visibility.</p>

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## A Bright Idea – Energy Savings with Improved Performance



The City of Raleigh and Progress Energy are working together to reduce the amount of energy consumed by the city's streetlights. As part of Raleigh's LED City initiative, the Project Energy pilot program was created to test the performance and energy-efficiency of LEDway luminaries in a realistic environment.

Nine LEDway™ streetlights were retrofitted on the street in front of Progress Energy's corporate headquarters where they will be monitored for up to nine months.

Data collected from the program will determine any additional LEDway streetlights that will be retrofitted throughout the city in 2009.

"This is an example of the kind of innovation that will be needed to help us achieve greater energy efficiency," said Lloyd Yates, president and CEO of Progress Energy Carolinas. "Efficiency and conservation are an important part of our balanced solution."

LEDway streetlights have a life rating four times greater than the 250-Watt HPS lamps they replace and save up to 50 percent in energy costs. Since LEDway fixtures require virtually no maintenance, the City will gain additional savings from not having to relamp or replace fixtures.

Other benefits include a whiter light and superior uniformity and control that improve visibility to both vehicle and pedestrian traffic.

"Our early findings indicate that with the brightness of these lights, you don't have as much shadowing or the degradation of lighting between fixtures," said Yates. "The lights are bright enough to light the whole distance between fixtures, which is different than traditional streetlights."

"As we look forward, the city has more than 32,000 streetlights which we hope can switch to clearer light like LEDway, that's brighter and more directional, uses less energy and is easier to maintain," said Raleigh's Mayor Charles Meeker.

The City of Raleigh has already embraced LED technology for parking garage and pathway applications. Installing LED for street and roadway applications is the next natural step and one of the City's biggest opportunities to save citizens money.