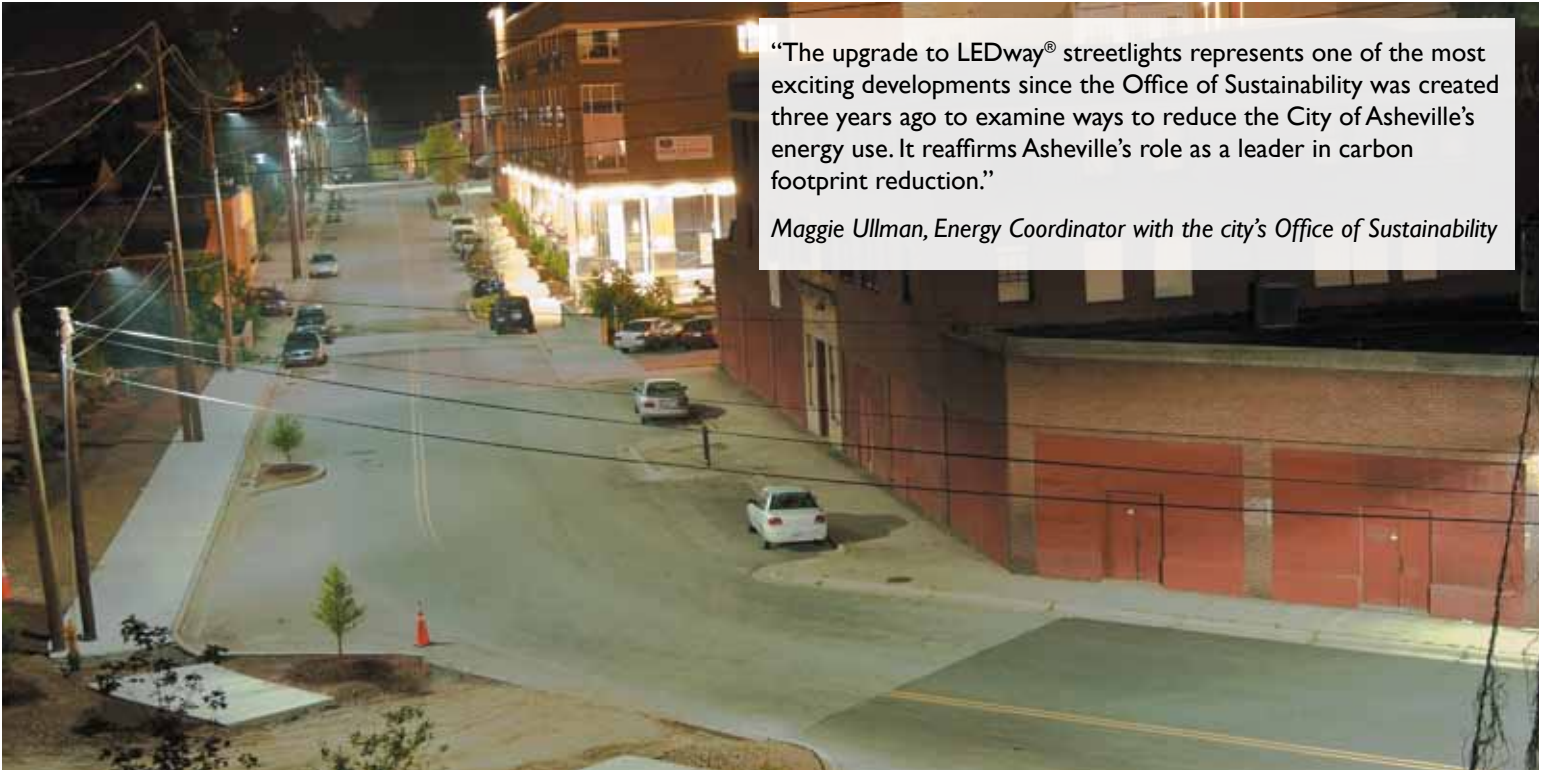




PROJECT OVERVIEW

City of Asheville, North Carolina

LED APPLICATION: Street Lighting



“The upgrade to LEDway® streetlights represents one of the most exciting developments since the Office of Sustainability was created three years ago to examine ways to reduce the City of Asheville’s energy use. It reaffirms Asheville’s role as a leader in carbon footprint reduction.”

Maggie Ullman, Energy Coordinator with the city’s Office of Sustainability

CREE® PRODUCTS WITH BetaLED® TECHNOLOGY



LEDway® Streetlights with 40 LEDs,
Type II medium optics, 525mA, UL Listed
• Color Temperature: 4300K, with NEMA photocell receptacle



LEDway® Streetlights with 60 LEDs,
Type III medium optics, 525mA, UL Listed
• Color Temperature: 4300K



LEDway® Streetlights with 120 LEDs,
Type III medium optics, 525mA, UL Listed
• Color Temperature: 4300K

CREE® products with BetaLED® technology replaced 175- and 400-watt mercury vapor and 250-watt high-pressure sodium (HPS) fixtures.

BENEFITS

- By upgrading all HPS and mercury vapor streetlights to LEDway® luminaires, the City anticipates a savings of approximately \$260,000 per year from the combined energy and maintenance savings.
- Phase one of the LEDway luminaire installation reduces the City’s carbon footprint by an estimated one percent and saves approximately \$45,000 in energy savings per year.
- The LED upgrade project is combined with many other green initiatives lead by the City to reduce both energy use and carbon footprint.
- Progress Energy, which serves the City of Asheville, offers customers a rate schedule for LED streetlights. The special rates offer customers the option of renting or owning LED lighting fixtures and reflect the energy cost savings of LED technology.

PROJECT PARTICIPANTS

End User: City of Asheville, NC
CREE® Rep Agency: City of Asheville, NC



PROJECT OVERVIEW

City of Asheville, North Carolina

Successfully Driving the Adoption of Streetlights in North Carolina



CITY OF ASHEVILLE IS FIRST IN STATE WITH LARGE-SCALE LED STREETLIGHT INSTALLATION

Through a grant from the American Recovery and Reinvestment Act (ARRA), Asheville is first city in North Carolina to install LED streetlights on a large scale. The City of Asheville's push to increase energy efficiency and reduce the city's overall carbon footprint has recently taken a big step with the replacement of traditional streetlights – 175- and 400-watt mercury vapor and 250-watt high-pressure sodium fixtures – with LED luminaires.

Approximately 730 streetlights in Asheville's River District and Kenilworth neighborhoods have been replaced with LEDway® streetlights with BetaLED® Technology saving the city approximately \$45,000 in annual energy costs. An additional 2,913 LEDway® street lights are currently being installed and the City anticipates saving 50 percent in energy use and maintenance avoidance due to the LED upgrade. The total upgrade of 3,643 LEDway® street lights is projected to result in savings of \$260,000 annually. "The upgrade to LED streetlights represents one of the most exciting developments since the Office of Sustainability was created three years ago to examine ways to reduce the City of Asheville's energy use," said Maggie Ullman, energy coordinator with the city's Office of Sustainability. "It reaffirms Asheville's role as a leader in carbon footprint reduction."

This LED installation also adheres to the 2008 lighting ordinance approved by the City Council, which is designed to reduce glare and light pollution.

In 2009, Asheville City Council unanimously approved using Energy Efficiency and Conservation Block Grants, part of the ARRA, to fund efficiency initiatives, including the first phase of the streetlight replacement. The revolving fund will roll energy savings back into the city's green and efficiency initiatives. Progress Energy, which serves the City of Asheville, offers customers a rate schedule for LED streetlights. The special rates, approved by the N.C. Utilities Commission, offer customers the option of renting or owning LED lighting fixtures and reflect the energy cost savings of LED technology.

CITY STATS

Est. Cost Savings/Year	\$45K (Phase 1), \$260K (overall)
Est. Carbon Reduction	1% reduction
Products Replaced	175-, 250-, 400-Watt HPS
Funding	EECBG Funds
First Installation	2011