Owner
City of Greenville

Contract Type
Smart Cities

Contract Amount
$109,000

General Contractor
Facility Solutions Group, Inc

Electrical Contractor
Essential Lighting Solutions

CITY OF GREENVILLE
Greenville South Carolina

Greenville Deploys Smart Cities Initiative Utilizing Cooperative Purchasing

CHALLENGE
Greenville is a city in and the seat of Greenville County, South Carolina, with an estimated population of 68,219. The population of the surrounding area was 400,492 as of 2010, making it the third-largest urban area in South Carolina as well as the fastest-growing. It is home to BMW Manufacturing, Michelin and The Clemson University International Center for Automotive Research (CU-ICAR). The city has long had a desire to be a "Smart City" and had been looking for an avenue to implement and pilot new technologies and mobility solutions.

SOLUTION
Some poles and light fixtures in the city are owned by the local utility, Duke Energy, while others are city-owned. The light fixtures provided the best location to pilot new technologies, and by upgrading the fixtures to state of the art LED the energy savings would pay for both the lighting and Smart City upgrades in less than 7 years. The city decided to use the AEPA Cooperative Purchasing contract to streamline the solicitation and purchasing process.

RESULT
The pilot provided new lighting on 2.5 miles of roadway. LTE lighting control nodes provide utility-grade metering, tilt/vibration sensing, foot-fall monitoring, BlueTooth Beaconing and more. Integrated video cameras provide adaptive traffic control and traffic monitoring, while the installed Gigabit switch provided bandwidth at intersections. Ultra Wide Band (UWB) positioning provides positioning accuracy to 2cm to allow for autonomous vehicle pilots. A Transit Mobility Hub will be installed on the Clemson campus as part of this project. By utilizing the AEPA national cooperative purchasing contract Greenville was able to reduce their procurement cost while making sure their contracts were bid compliant.