Blue Grass Airport upgrades six separate zones to smart LEDs

**Location:** Lexington, KY

---

**Project Details**
Lexington Blue Grass Airport (LEX), nestled in the heart of Kentucky, is growing at a record pace. The annual number of passengers traveling through the airport have increased consistently for the past eight years. Four major airlines operate out of Blue Grass Airport, and they are continuing to add flights and larger aircraft.

**Challenge**
To facilitate its rapid growth, the airport is continuously updating its facilities to provide the most modern, convenient and safety-conscious services possible. The traditional HPS fixtures at Blue Grass Airport needed to be replaced as the airport wanted to provide higher efficiency, optimal light quality and the ability to fully control the lighting.

**Solution**
Blue Grass Airport worked with Phoenix and HDR Engineering to design a solution that combined reliable LED fixtures and Phoenix’s proprietary lighting intelligence technology. They replaced 161 existing 1000W HPS fixtures with 145 Highland Series LED high mast lights - 95 500W fixtures and 50 250W fixtures – all installed by Whalen Electric. Phoenix’s LIT System™ is installed on all 145 fixtures and divided into six separate zones, which can be controlled individually as operations require. Blue Grass Airport is able to use all the key functions including dimming by individual zone and sunset/sunrise settings.

**Results**
- Annual energy savings of over 70% and $60,000+
- Total annual savings of energy and maintenance are over $70,000
- $18,700 energy utility rebate paid directly to the airport
- Elimination of runway glare

**Feedback**
Lexington Blue Grass Airport couldn’t be happier with the results of the lighting project. Craig Farmer, Manager of Design and Construction, commented, “The new LED lighting makes a dramatic difference, not just aesthetically, but also for safety and security. This was a long overdue improvement.”

Farmer went on to describe the cost savings as dramatic. “Our investment in this project will pay for itself in only a few years. This project is producing excellent results for us, and I would highly encourage other airports to consider it.”

The airlines continue to praise Blue Grass Airport for upgrading these fixtures. Farmer adds, “The difference is far more significant than they could have imagined. The lighting is enhanced and the ability to control each light with the LIT System is an added level of technology to increase efficiency even more.”