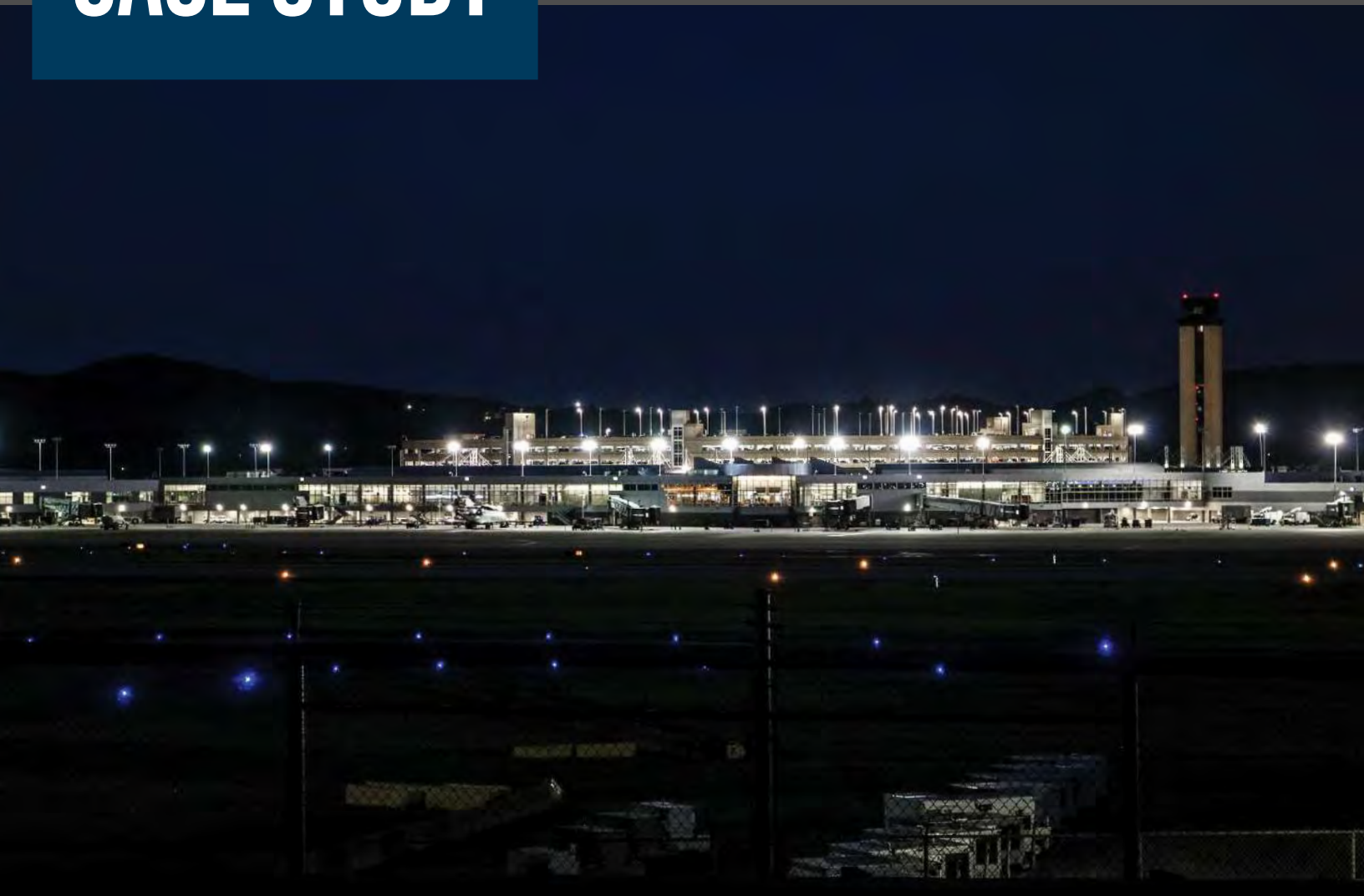


# CASE STUDY



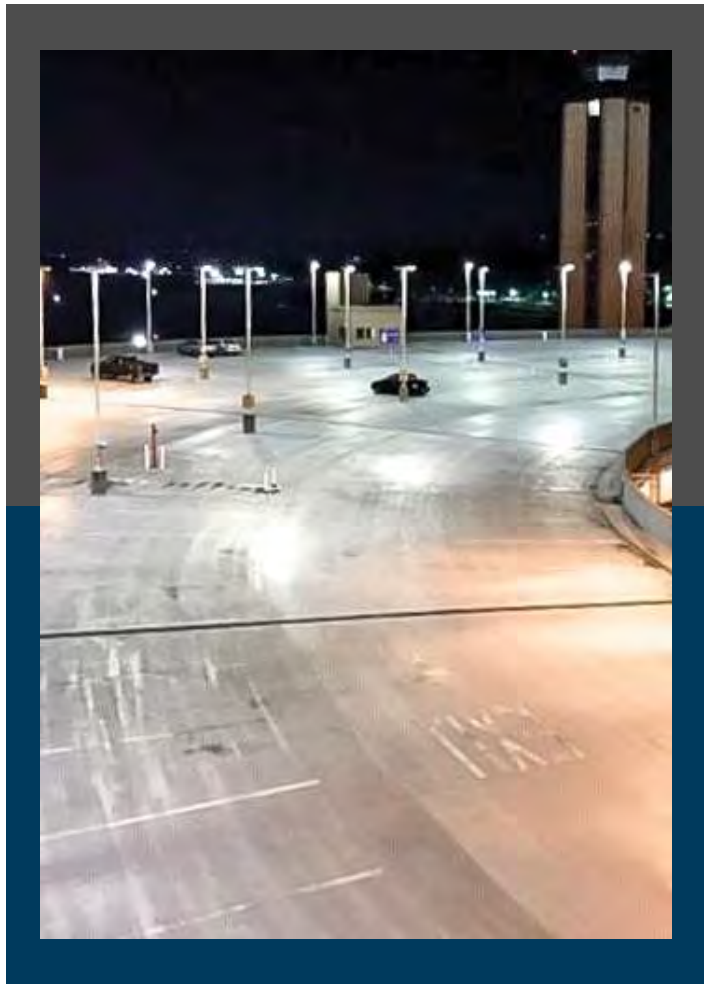
## BIRMINGHAM-SHUTTLESWORTH INTERNATIONAL AIRPORT

**PowerSecure Energy Efficiency Services Project**

Improving airport safety and saving costs with an efficient lighting solution

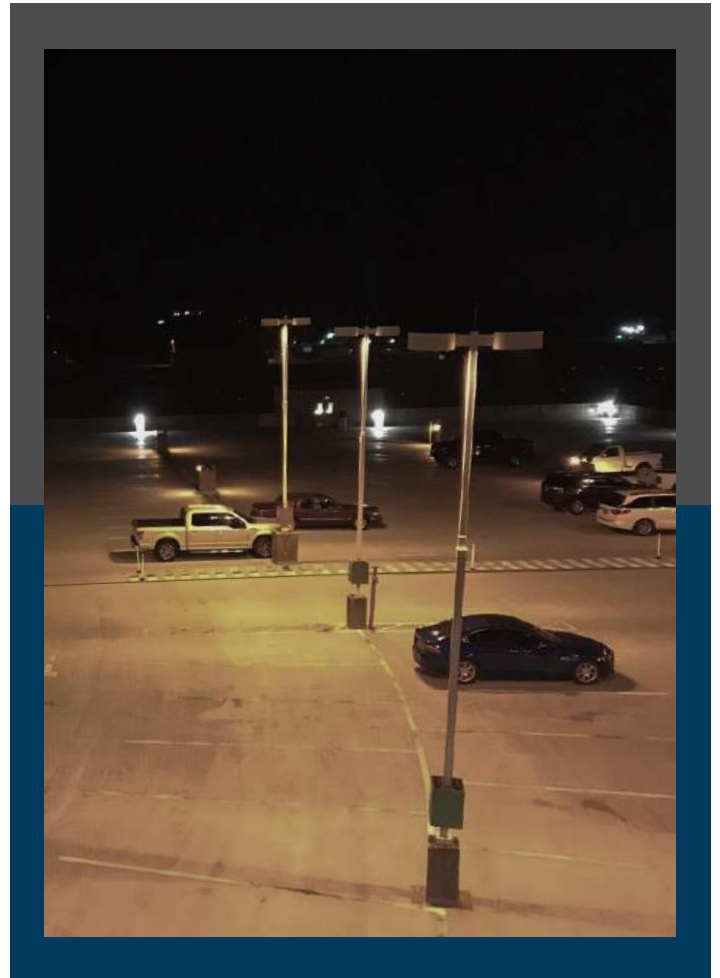
# ABOUT THE CUSTOMER

Established in 1931, The Birmingham-Shuttlesworth International Airport has been welcoming travelers to The Magic City and serving as Central Alabama's gateway to the sky for more than 80 years. Governed by the Birmingham Airport Authority since 1986, the airport has evolved into a catalyst for growth and economic development for the entire Birmingham region. The state's largest airport in terms of passenger traffic, BHM hosts four airlines with service to nearly 400 unique destinations, connecting Birmingham globally, with as little as one stop. Following on the coat tails of the terminal modernization, the Airport Authority approved a much-needed lighting upgrade to the seven-story parking garage.



## THE CHALLENGE

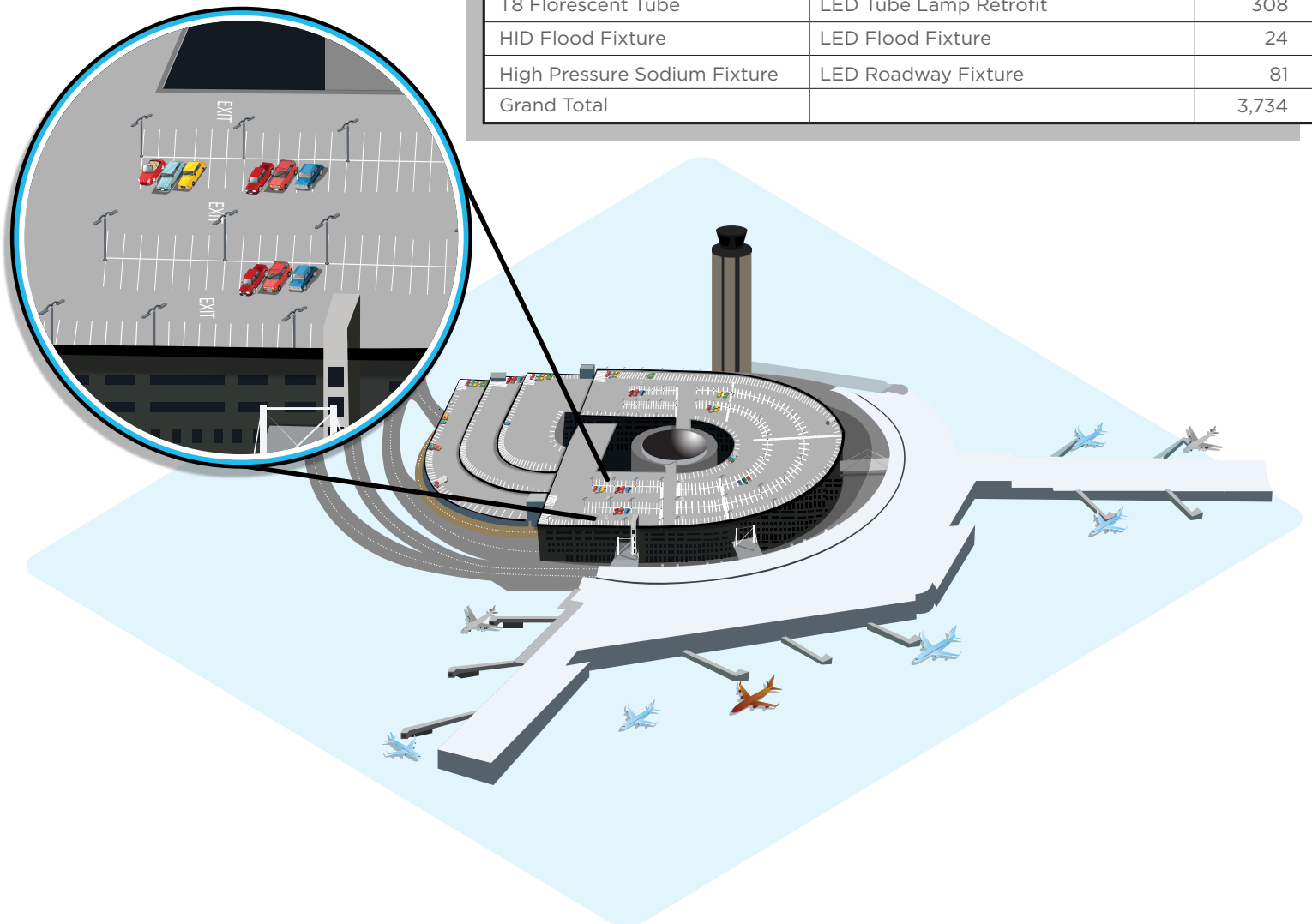
Due to both the high usage of the primary parking garage and the outdated, inefficient lighting, the Birmingham Airport Authority worked diligently to get this project approved for several years. The user experience was declining, and the Airport Authority identified the need to upgrade this parking structure to enhance their customer's experience and safety when parking at the Birmingham-Shuttlesworth International Airport.



# THE SOLUTION

PowerSecure provided a \$1.5M+ LED lighting upgrade for the Birmingham Shuttlesworth International Airport's primary parking garage. This full-service energy efficiency lighting upgrade, improving garage safety, enhancing user experiences and reducing energy costs, entailed switching from aging metal halide, high-pressure sodium, incandescent and fluorescent fixtures to more efficient and long-lasting LED technology. Through Alabama Power's 'On-Bill' financing solution, the Airport Authority was able to secure project financing and pay for these upgrades over time.

Existing Condition	Proposed Measure	Installed
HID Garage Fixture	LED Parking Garage Fixture	2,438
High Pressure Sodium Fixture	LED Area Fixture - Parking Deck	464
HID Wall Pack	LED Wall Pack Fixture	172
HID Walkway Fixture	LED Retrofit Kit	247
T8 Florescent Tube	LED Tube Lamp Retrofit	308
HID Flood Fixture	LED Flood Fixture	24
High Pressure Sodium Fixture	LED Roadway Fixture	81
Grand Total		3,734



# BENEFITS TO THE CUSTOMER

With PowerSecure's industry-leading reliability, PowerSecure's distributed generation solution provided:

- 1** Project Cost \$1,594,344 and total annual energy savings of \$219,413 coupled with annual maintenance savings of over \$32,072 for the customer
- 2** Total peak energy demand reductions of 416.63kW and 2.8M kWh's reduced annually provides significant contributions in carbon and greenhouse gas reductions
- 3** This LED upgrade solution accomplished the most critical of project goals - improving customer safety and enhancing the overall experience during travels that carry both residents and visitors to the Birmingham facility