

#### **OVERVIEW**

First Energy Stadium is a destination annually for hundreds of thousands of NFL football fans and concert goers each year in Cleveland, Ohio. Constructed in 1999, the stadium is over 1.6 million square feet.



### INTERIOR

The Cleveland Browns commissioned LEDLightingIQ to retrofit their under-bowl, parking lot and multiple locations throughout the interior of the stadium with a flexible, high performing, ultra efficient LED lighting solution that consised of two different lighting types – a bright white light for sporting events and a full theatrical color range for special events.

### **EXTERIOR LIGHTING:**

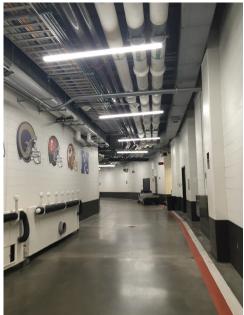
The exterior installation was a unique challenge in that the stadium is a multipurpose facility that is used for sporting events, concerts and a wide range of special events that require a large outdoor venue. The challenge was to have two different color temperatures that could work together when high brightness is needed for a sporting event like football, but could then be used for a concert that required a theatrical color that could be dimmed. The original design consisted of multiple fixtures that used a huge amount of power and had not performed to specifications due to the impact of climate conditions on the shore of Lake Erie.

### SOLUTION

LEDLightingIQ came up with a plan to retrofit the fixtures using a custom, flexible, waterproof, cool white LED (5000K) strip that is designed for sporting events or when a high white brightness is required. We combined that with a custom, flexible, waterproof RGB (red, green,blue) LED strip for social and entertainment events that require a different light level and ambiance.

### OUTCOME

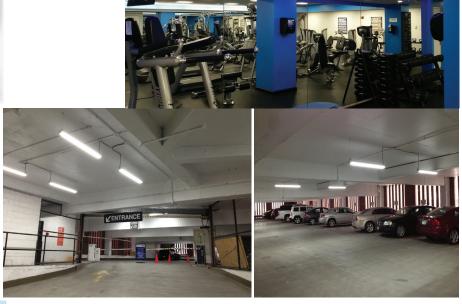
We were able to successfully give the Cleveland Browns and the fans of the area the best of both worlds! They got a 20% increase in brightness and a full color dimmable system that meets all their needs, can be controlled from a tablet and provides significant energy savings. The main interior corridors have a smart sensor system that now operates at 20% brightness levels when not occupied or in use and then increases to 100% automatically and remains for five minutes following direct use before reverting back to 20%, saving millions of KWH per year.







Am Trust Financial Services, Inc. (ATF) is a NASDAQ publically-traded company founded in 1998 to provide property and casualty insurance to businesses throughout North America. ATF engaged LEDLightingIQ to retrofit their parking garage and company fitness center in Cleveland's landmark Superior Building.



# PROJECT

Property General Manager John Tepfenhart (216-241-8365) is heading up the efforts to transform the property and set a new standard for corporations that own and control millions of square feet of premium office space in the United States. The installation was a one-for- one replacement of the existing 175 watt, metal halide fixtures. However, the fixtures were in very bad condition and were not good candidates for retrofitting with LED lamps.

#### SOLUTION

We were able to recycle or repurpose 85% of these fixtures and replace them with 40 watt "Tri-Proof" (waterproof, dust proof, vandal / damage proof) LED linear fixtures. The 10-story parking garage project resulted in a 76% reduction in electrical consumption for the property. The conversion and retrofit of the fitness center not only gave the center a new lively look to enhance the user experience, but also reduced the consumption nearly 82%.

## OUTCOME

The net results of the project were a tremendous cost savings, a brighter and safer parking structure for employees, customers and other users, as well as a cost effective, mini renovation of the fitness facility. The key is that both projects essentially paid for themselves with energy savings.

