CASE STUDY // Commercial Office Parking Garage

Commercial office parking garage sees 14-month payback with retrofit
CBRE commercial office property in Dallas retrofits lighting in 4,500-space parking garage

Overview
A CBRE commercial office property in Dallas, Texas worked with Regency in early 2016 to upgrade the lighting in their parking garage. The fluorescent lighting that CBRE inherited in the parking garage when it acquired the Galleria Office Towers had gone dim and dull. It wasn’t installed well, with overhead beams and signage blocking much of the light being emitted by the fixtures.

Cliff McBryde, the CBRE Chief Engineer at the Galleria Office Towers, saw the possibility of an LED retrofit in the 4,500-spot garage as a low-hanging opportunity for an upgrade to the property. And in addition to brightening the garage, saving energy, and cutting back on maintenance, McBryde was looking to streamline the entrance and exit system at the Galleria.

A Regency lighting specialist in Dallas assessed the garage and presented McBryde with options for accomplishing the early goals he set for the Galleria garage.

Project Summary
- 500 fewer fixtures, increased light output
- 14 month payback
- Wattage per fixture reduced by 50%
- 4,500+ parking spots illuminated
- Brighter, more safely lit parking area

OBJECTIVES:
- Provide safe parking environment for tenants
- Increase light levels in garage
- Automate entrance/exit system
- Lower monthly energy spend
- Eliminate dark spots
McBryde opted to go with a 50,000-hour vapor tight LED fixture from Texas Fluorescents. The new specification was set to save the Galleria significant energy, as each fixture used half the wattage that the previous fluorescents used while emitting more light.

Moreover, Regency was able to boost the light levels in the garage while using 500 fewer fixtures simply by chain-mounting the fixtures and lowering them 18 inches. This ensured that beams, signage, and height indicators would no longer block light being emitted from the fixtures, as they were dropped to the same plane as the height indicator bars, resulting in a wider beam spread and better light distribution.

McBryde also installed a red light-green light system, complete with license plate recognition to grant entrance, which helped with the flow of traffic in the garage. On the different floors of the garage, CBRE had a ways-finding system installed, helping tenants to find open parking spots.

“The tenants love what we have done in the garage,” McBryde said. “It not only makes it safer, but more efficient for drivers.”

With tenants happy with the new brightness and efficiency of the garage, the decrease in wattage and the number of fixtures fixtures left upper management happy, too, as McBryde and CBRE achieved 14-month payback on the project. Regency coordinated all of the installation labor for the more than 2,100 LED vapor tight fixtures and 15 high output LED pole fixtures for the top deck. It also handled recycling of all the fluorescents previously lighting the garage.