



Energy Costs Looking Brighter at Chico Mall

Chico Mall hosts 90 retailers and over 3 million visitors a year. Over the last 17 years, its stores had adapted to modern tastes but its lighting, HVAC, and controls were still stuck firmly in 20th Century technology.



Asset Facts

Date Built	1999
Square Feet	528,397
Asset Type	Regional Shopping Mall

Project Facts

Annual Energy Savings	505,167 kWh
Annual Savings	\$78,421
Gross Investment	\$503,558
Rebates	\$41,218
Rebates as % of Total Project Cost	7.9%
Net Investment	\$462,340
Net Payback	5.9 years

ROI 17%

Challenge

The mall's lighting and HVAC systems lacked modernization and control. Lighting consisted primarily of metal halide and high-pressure sodium technologies that consumed significant energy and required extensive maintenance. The HVAC systems were controlled only by local thermostats and could not operate at part-load during periods of lower demand or ambient temperatures.

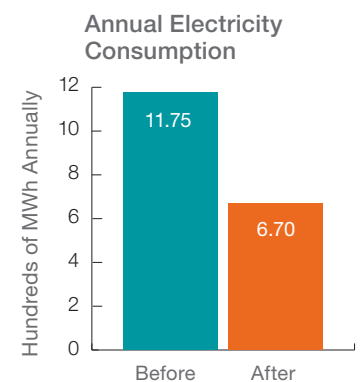
Our Solution

Mindful of how busy the mall was, all work was performed after hours to limit the impact on patrons. GreenGen:

- Installed high-efficiency LED lighting and controls throughout.
- Installed LED site and building lighting on the exterior to improve the aesthetics of the parking lot, converting from a dim yellow/orange color temperature to a brighter white color temperature, thus increasing the perceived safety of the lot.
- Installed advanced controls on the roof top units (RTUs) to provide supply fan part-loading controls, advanced economizing, and demand controls ventilation.
- Replaced a failing RTU with a newer high efficiency unit.

Energy Savings – 41%

- Total annual building energy savings were 41%
- Peak lighting demand was reduced by 32%
- RTU controls reduced unit consumption by 19%
- Lighting consumption reduced by 59%



How can we help you? Please contact Green Generation Solutions at info@greengenerationsolutions.com or 301.202.2930