

Overview

Regency Centers is a national owner, operator, and developer of neighborhood and community shopping centers with over 300 properties throughout the United States. Regency Centers recently upgraded the parking lot lighting at Rona Plaza in Santa Ana, California. Rona Plaza is a grocery-anchored shopping center with 52,000 square-feet of gross lettable area and 250 parking spaces across 77,000 square feet of parking area. Regency Centers retrofitted the existing parking lot and exterior wall mounted fixtures, which were high-intensity discharge (HID) fixtures, with high efficiency LED fixtures coupled with a wireless dimming system. The retrofit resulted in energy savings of nearly 88% compared to pre-existing conditions and was recognized by the Lighting Energy Efficiency in Parking (LEEP) Campaign with the Highest Percentage Energy Savings in a Retrofit at a Single Parking Area award.

Keys to Success

In 2011, Regency Centers made a commitment to reduce its energy consumption and greenhouse gas emissions by 20% by 2021. These 10-year goals are a driving factor for Regency Centers to improve the energy efficiency of the parking lot lighting throughout its portfolio. Shopping centers require significant parking area lighting to ensure sufficient visibility, customer safety, and promote the appearance of the center. However, many times existing lighting is excessively energy intensive, unevenly distributed, and in colors that are undesirable. Consequently, with LED lighting, Regency Centers sees the opportunity to improve the quality of lighting, appearance of the Center, and safety, all while saving energy. The payoff was huge as Regency Centers was able to realize 88% energy savings and a return on investment of 50% at the Rona Plaza site.

“LED technology enables us to reduce lighting operating costs through significant energy and maintenance savings, while providing superior lighting quality at our shopping centers.”

Mark Peternell, Vice President of Sustainability at Regency Centers



Rona Plaza. Image courtesy of Regency Centers

Results	
Energy Savings	113,000 kWh, a savings of 88%
Lighting Power Density (W/sq. ft.)	0.10, a reduction of 74%
Simple Payback	2 years
Installation and Maintenance	Regency Centers retrofitted the existing parking lot and exterior wall mounted fixtures, which were high-intensity discharge (HID) fixtures, with high efficiency LED fixtures coupled with a wireless dimming system.
Overall Performance	LED lighting improved the quality of lighting, appearance of the Center, and safety, all while saving energy.



Regency Centers' ability to take advantage of \$8,800 in rebates, from Southern California Edison, also contributed to the favorable financial results. After the rebates, the project had a simple payback period of 2 years.

Lessons Learned

- ▶ Although Regency Centers reduced energy consumption by 88%, electricity costs were only reduced by 46% during the first 12 months as the marginal cost of energy increased significantly after the retrofit.
- ▶ Regency identified that this was a result of the tariff, and discovered that a request to change the tariff would reduce the marginal cost of energy and improve the project's return on investment.
- ▶ Mr. Peternell advises that other organizations pay close attention to their rate structure as utilities are often under no obligation to automatically switch accounts to the most economical tariff even if the customer is eligible.

Next Steps

Moving forward Regency Centers plans to complete between 15 and 20 LED lighting efficiency projects per year for the foreseeable future, and expects to exceed its 10-year goal of 20% reduction on energy use and greenhouse gas emissions portfolio-wide by 2021.

“It’s always an added benefit to get good press for something that reduces environmental impacts and is financially attractive.”

Mark Peternell, Vice President of Sustainability at Regency Centers

2014 LEAP Award: Highest Percentage Energy Savings in a Retrofit at a Single Parking Area

Location:	Rona Plaza Santa Anna, CA
Parking Area:	77,000 sq. ft. (259 spaces and 66 fixtures)
Solution:	HID to LED with wireless dimming system

Learn More

Through the [Better Buildings Alliance](#), members across different market sectors work with the U.S. Department of Energy's (DOE) exceptional network of research and technical experts to develop and deploy innovative, cost-effective, energy-saving solutions that lead to better technologies, more profitable businesses, and better buildings in which we work, shop, eat, stay, and learn.

Learn more about how to join the Better Building Alliance's Lighting Energy Efficiency in Parking Campaign, at www.leepcampaign.org/. LEAP Participants are collectively saving over 120 million kilowatt-hours and over \$10 million annually across 430 million square feet of lots and garages by upgrading to high efficiency parking lighting.

Find more resources and guidance on lighting in the [Better Buildings Solution Center](#).