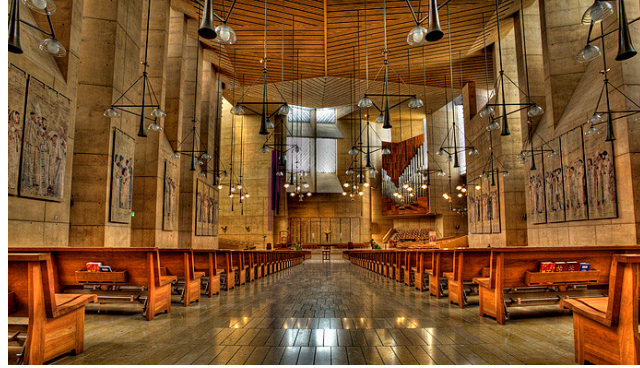


Case Study - Cathedral of Our Lady of the Angels



Opened in 2002, the Cathedral of Our Lady of Angels serves as the mother church to four million Catholics in the Archdiocese of Los Angeles. The cathedral is widely known for enshrining the relics of Saint Vibiana and tilma piece of Our Lady of Guadalupe. With the parking garage tubes operating at 24 daily hours, their previous fluorescent T8 tubes burned out quickly, which resulted in constant maintenance burden.

To address this concern, Carson Technology recommended installing frosted LED T8 tubes at 3500K for the first and second levels and frosted LED T8 tubes at 4000K for the third level. Used in open fixtures, frosted LED tubes are ideal replacements for fluorescent tubes. The warm-white tubes will be aided by sunlight on the first and second level, while the brighter cool-white tubes will light up the third level.

Estimated Project Savings

32W Fluorescent



Annual Electricity Cost = \$70.08

175% ROI

Annual Savings of \$26.28

7 month payback

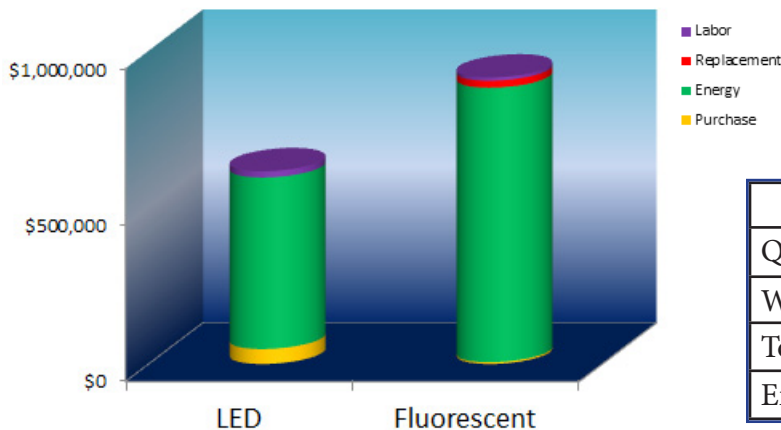
Calculations are based on 8,760 annual hours of operation and \$0.25 average cost per kWh

20W LED



Annual Electricity Cost = \$43.80

Lifetime Costs



Before



After

	Fluorescent	LED
Quantity	2,500	2,500
Watts	32	20
Total Watts	80,000	50,000
Energy Savings	-	37.5%