ACCESS TUNNELS

GREATER LOS ANGELES, CA

LOS ANGELES LIGHTING ILLUMINATES THE PATH FOR UNDERGROUND TUNNELS

Upgrading an aging lighting infrastructure leads to significant energy savings and increased safety benefits, with hands-free controls for miles of underground utility access tunnels.

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OPPORTUNITY

SoCal public agency's tedious and costly lighting maintenance made simple with LA Lighting's LED sensor-controlled fixture.

The LA Basin has hundreds of miles of underground utility access tunnels currently using old fluorescent fixture technology to illuminate the pathways.

With safety concerns due to poor visibility from non-operational fluorescent fixtures, as well as the high maintenance cost of servicing the aging fluorescent system, a more sustainable solution was required.

Enter LA Lighting.

Working with the facility management team responsible for servicing the maintenance tunnels, LA Lighting created a lighting system designed to meet the lighting requirements set by OSHA. The LED system also provided an impressive cost-savings solution and 20% ROI.

SIDE-BY-SIDE COMPARISON	EXISTING FLUORESCENT FIXTURE	WSE201 SERIES
Technology	Fluorescent	LED
System	2-Lamp T8	LED Wrap
Total System Watts (Energy Usage)	59*	36*
Controls	None	Occupancy Sensor
Total Annual kWh	4608*	1515*
Average FC	3	10

**calculations based off of 100% operational usage*

SOLUTION

The right fixture with the right sensor controls makes the difference.

LA Lighting offers a demand response motion sensor pre-installed in the LED Wraparound Fixtures. The motion sensors are designed to operate each fixture at a minimal pre-set wattage level when vacant.

Throughout all the tunnels, the existing fluorescent 4-foot, 2-lamp, 32-Watt fixtures were transitioned to Energy Efficient, LED, Sensor-Controlled, High-Impact, Radial Security Wraparound Luminaire: WSE201-4-4L-MSSD(LOWE)-DRDM-UNV-1/850

The new WSE201 Series LED fixtures will operate at 20% of full power (7.008 Watts) for 24 hours a day, 7 days a week, when the tunnels are vacant. When motion is detected, the fixture illuminates to 100% power (35.04 Watts), for 30 minutes, to ensure the occupant is able to safely pass without visual issues.

The motion sensor option allows the end-user to designate the desired wattage consumption from 10%-50%. This allows the end-user to maximize their overall savings while keeping the necessary light levels required by OSHA.

The versatility of the WSE201 series allows the fixture to be installed in Parking Structures, Corridors, Stairwells, and Tunnels. The fixture has the option for wet location, as well as with tamper proof screws for added security.

4-foot, 2-lamp, 32-Watt Fluorescent (Before)

YEARLY ENERGY SAVINGS
67%

SIMPLE PAYBACK
0.8 Years

34-Watt Wraparound LED Luminaire (After)

BENEFITS

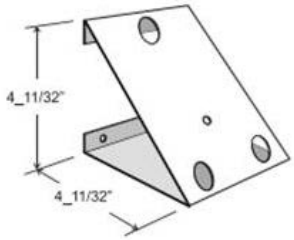
Switching to LA Lighting's LED, Sensor-Controlled, High-Impact, Radial Security Wraparound Luminaire, yielded an impressive Simple Payback of just 10 months with the fixtures' operation at 20% for 23 hours a day. The payback lead to significant energy savings and an overall increase of visibility within the utility access tunnels.

By upgrading the current fluorescent fixtures to the WSE201 series luminaire with a pre-installed motion sensor, the access tunnels will use 3,743 fewer kilowatt hours (kWh) per year, with an annual savings of approximately $5,690 per 100 fixtures. (Calculations are based off 95% of vacancy during a one-year time frame).

In addition, the WSE201 series' service lifespan is rated from 50,000 – 148,000 hours (L70), adding significant savings in reduced maintenance cost.

LA LIGHTING LUMINAIRES

- **WSE201-4-4L-MSSD(LOWE)-DRDM-UNV-1/850**
  Sensor Controlled High Impact Radial Security Wraparound Luminaire
- **45MB**
  45-Degree Mounting Bracket



LISTING

- UL USA and Canada listed
- Suitable for damp locations

WARRANTY

- 5-year limited warranty

Visit **WWW.LALIGHTING.COM/CASE-STUDIES** or contact an LA Lighting representative to learn more.