



FPL®



## Changing the Way Florida Looks at Night

### FPL LT-1 LED Lighting Tariff

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FPL LED Lighting Solutions

# FOUNDED IN FLORIDA

### **The Founding Company – Florida Power & Light Company (FPL)**

- Began in the final days of 1925
- Joined the New York Stock Exchange in 1950
- Largest electric utility in Florida
- A leading Florida employer (approximately 8,900 employees)

### **The Next Era Begins**

- In 2010, FPL's parent company (FPL Group) was renamed NextEra Energy, a forward-looking enterprise that sees the future and gets there first
- Headquartered in Juno Beach, Florida
- Ranked the top “green utility” in the United States in 2015 and 2016

# PIONEERS OF POWER

## **FPL**

- Serves nearly 5 million accounts or more than 10 million people across nearly half of the state of Florida
- Residential and business rates among the lowest in the state and the nation
- One of the cleanest power plant fleets among all utilities nationwide

## **NextEra**

- Operations in 30 states and Canada
- Largest generator of renewable energy in the world
- Capacity 45.9 GW

# LEADERS IN LIGHT

## FPL

- Providing street light services for more than 60 years
- Currently providing street light services for more than 500K owned and maintained street lights
- Services/replaces approximately 150K lights per year
  - Automobile accidents
  - Hurricanes
  - Routine maintenance
- Through smart grid technology, FPL owned street lights are now equipped with “Smart Nodes” that can auto-generate trouble tickets

# NEW LT-1 TARIFF

**Approved by the PSC on April 28, 2017, this tariff provides for the installation of FPL owned LED lights at no upfront cost to customers\*.**

- The Tariff allows us to offer a variety of LED street and area light solutions in a variety of different scenarios:
  - Convert HPS lights currently under SL-1
  - Convert customer owned and maintained lights to LED
  - Install new LED street and area lights
- Monthly fixture, maintenance, and energy charges are determined based on the fixture chosen by the customer
- Customers may pay additional monthly charges for dedicated light poles, underground construction and conversions

*\* In cases where directional boring or other uncommon construction concerns exist, an upfront fee may be required*

## Proliferation of LED

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LEDs are in our cars, our offices, our homes and even our pockets



### JUST SOME OF THE US CITIES CONVERTING

- Los Angeles, CA
- Las Vegas, NV
- Boston, MA
- New York City, NY
- West Palm Beach
- Detroit, MI
- San Francisco, CA
- Cleveland, OH
- St. Louis, MO
- Portland, OR
- Orlando, FL
- Asheville, NC
- Raleigh, NC
- Oahu, HI
- Pittsburg, PA
- Pueblo, CO
- Austin, TX
- San Antonio, TX
- Seattle, WA
- Salt Lake City, UT
- Phoenix, AZ
- Anchorage, AK
- Topeka, KS
- Des Moines, IA
- Chattanooga, TN
- Canton, OH
- Mobile, AL
- Tampa, FL
- Chicago, IL
- Providence, RI

# DEMAND IS HIGH FOR LED STREET LIGHTS UNDER LT-1

More than 40 cities have already signed up to do citywide conversions





# LED ADVANTAGES

## BENEFITS OF LED

### LEDs offer:

- Superior color rendition and differentiation
  - High color rendering index (CRI)
  - More natural colors than HPS
- High efficiency
  - Energy savings up to 50%+
- Greater variety of choices



Comparison of LED fixtures (left) versus High Pressure Sodium (HPS) fixtures (right)

Image from <http://www.myLEDlighting guide.com>

# LED ADVANTAGES

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## WHY CHOOSE LED OVER HPS?



Compare color rendering from HPS lights vs. LED on the building

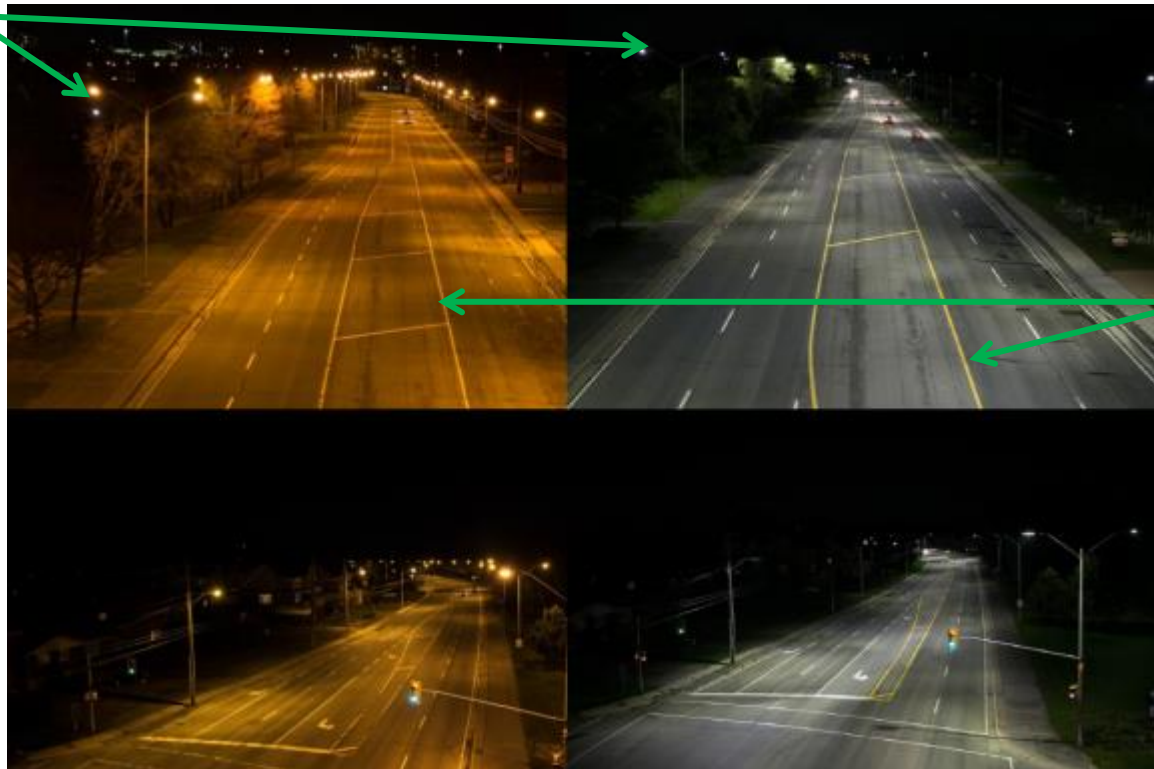
Compare light pollution contribution from HPS lights vs. LED

# LED ADVANTAGES

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## WHY CHOOSE LED OVER HPS?

Compare **uplight** component from HPS lights vs. LED



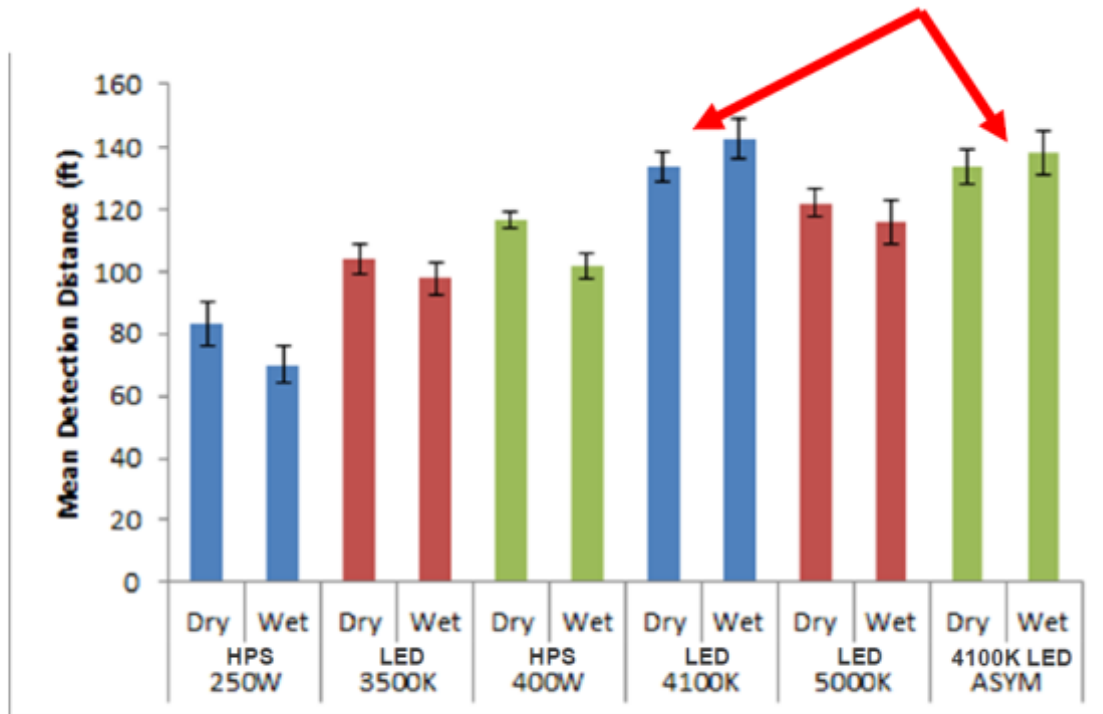
Compare **color rendering** from HPS lights vs. LED on the stripe colors

# LED ADVANTAGES

## Object Detection Distance Example

- 250W and 400W HPS Baseline
- 3500K, 4200K, and 5000K LED

Is 4000K the "Sweet Spot"?



Credit: Virginia Tech Transportation Institute

## LED ADVANTAGES

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# CITY OF LOS ANGELES



## New Fixtures

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RSW Series



Contempo



American  
Revolution



ATB Series



ATB2 Series