

# SMART CONNECTED STREET LIGHTING



## BEGIN THE SMART CITY JOURNEY WITH A SURE FIRST STEP

Efficiency, sustainability, infrastructure modernization and the ever-present need for cost controls: These are among the complex and growing challenges that today's city managers face. And they're finding answers in an unexpected place – smart street lighting solutions.

As the starting point of a smart city infrastructure, smart street lighting offers surprising ease, functionality and cost savings.

- ➔ Simply converting to LED lamps delivers big energy savings.
- ➔ Adding intelligent controllers to LED lamps enables automated scheduling and dimming capabilities to drive even more energy savings.
- ➔ Embedded mesh wireless technology can be used as a multi-services infrastructure to connect other sensors and smart devices.
- ➔ Smart connected LED street lighting cost savings can be used to help fund other strategic smart city initiatives.

## THE CDW SOLUTION: SMART CONNECTED STREET LIGHTING POWERED BY CISCO AND CIMCON

CDW is partnering with Cisco and CIMCON Lighting to provide an easy solution with a compelling ROI to begin the journey to the smart connected city. We accomplish this with CIMCON intelligent lighting controls enabled by Cisco network architectures.

The Smart Connected Street Lighting solution is part of Cisco's Smart+Connected lighting architecture and Cisco Kinetic for Cities platform for smart cities and communities.



### SMART STREET LIGHTING: IMMEDIATE VALUE



Outdoor lighting represents **approximately 40%** of a city's electric energy spending.<sup>1</sup>



Retrofitting with LED fixtures can deliver **an average energy savings of 69%**.<sup>2</sup>



Los Angeles **reduced energy usage by 64%** and saved \$9 million in annual energy costs.<sup>3</sup>

Sources:

<sup>1</sup>U.S. Energy Information Agency, "FAQ: How much Energy Is Consumed in U.S. Residential and Commercial Buildings?" May 2017.

<sup>2</sup>U.S. General Services Administration, "LED Fixtures with Integrated Controls," August 2015.

<sup>3</sup>U.S. Department of Energy, "Energy Savings Forecast of Solid-State Lighting in General Illumination Applications," September 2016



### KEY FEATURES OF SMART STREET LIGHTING

- Adaptive dimming controls
- Power metering
- Self-organizing mesh network
- External sensor integration
- GPS location data
- Photocell sensor
- Alerts, reports and dashboards
- API integration for third-party apps

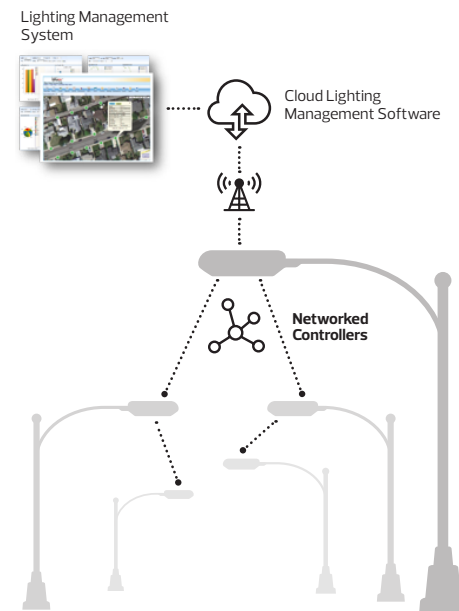
## CASTING LIGHT ON THE SMART CITY

### Immediate advantages and rapid ROI

LED street lights and smart controls can accelerate energy and maintenance savings. Lighting controller self-diagnostics can alert workers to respond to lighting asset failures or where proactive repairs are needed. And software API integration can help public safety departments target and control lighting remotely in an emergency.

### A foundation for other smart city services

Most smart city services require a citywide wireless infrastructure to connect sensors and systems. CIMCON smart lighting controllers' fault-tolerant mesh network is self-organizing, without operator intervention – a network that can also enable other smart city services such as smart parking, environmental sensors, traffic management and gunshot detection systems. All smart city services can be monitored and controlled from a powerful centralized platform: Cisco Kinetic for Cities.



### REDUCE COSTS

- Energy savings from LED street light conversion, smart scheduling and dimming
- Reduced smart city infrastructure costs through a shared wireless infrastructure

### INCREASE PUBLIC SAFETY

- Enhanced visibility for drivers and pedestrians
- Increased, targeted light intensity to aid first responders
- Improved lighting for public spaces and events

### ACCELERATE INNOVATION

- Energy savings can fund other smart city initiatives
- An ideal platform for deploying sensors and other smart services

## THE SMART CONNECTED STREET LIGHTING PILOT FROM CDW

Where to begin? CDW recommends starting with a low-cost investment in a pilot deployment across a neighborhood or a few city blocks, incorporating the following components:



**CIMCON's smart lighting controller**, installed on standard LED luminaires, containing sensors and mesh wireless functionality



**Cisco Connected Grid Router** for secure backhaul network connectivity, enabling command and control of smart lighting components



**CIMCON's lighting management system** for web-based energy, fault and asset management, which can integrate with Cisco Kinetic for Cities



Want more information?

Start your digital transformation here:

**CONTACT YOUR CDW ACCOUNT MANAGER AT 800.800.4239 OR ONE OF OUR BUSINESS ARCHITECTS AT [DIGITALTRANSFORMATION@CDW.COM](mailto:DIGITALTRANSFORMATION@CDW.COM)**

