

Welcome

SSL Technology Development Workshop

November 16, 2016

James R. Brodrick, Ph.D.

Lighting Program Manager U.S. Department of Energy

Recent Headlines

The Washington Post

Some cities are taking another look at LED lighting after AMA warning



LED meets the cosmos - space station gets circadian boost



Smart Cities: LEDs take cities and utilities into the future



Tunable white light for health care spaces



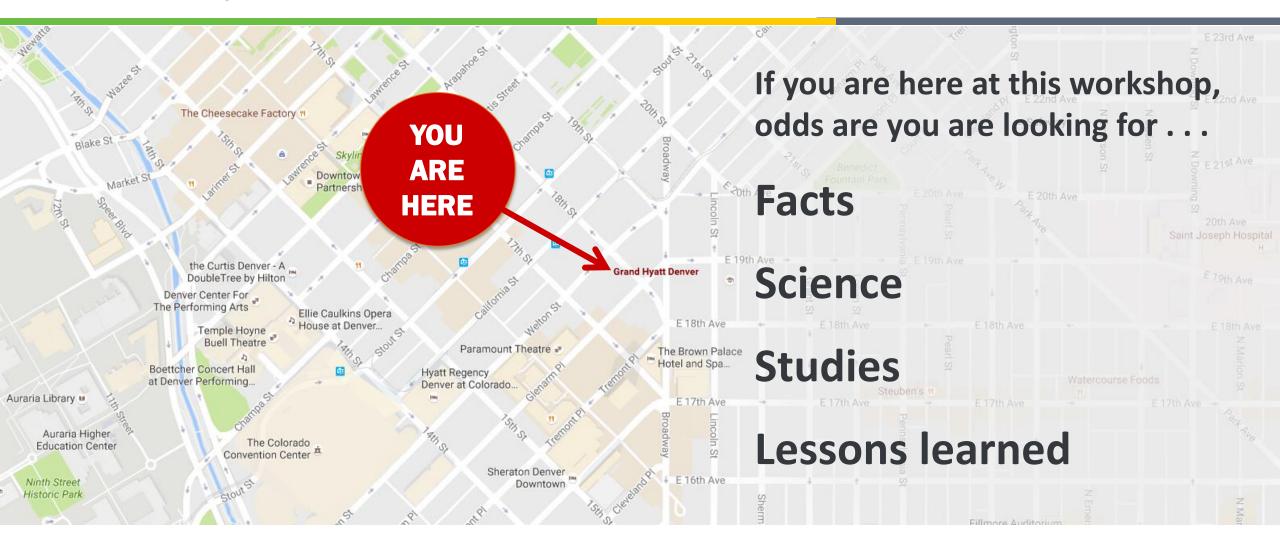
Early LED Street Lighting Causing Light Pollution, Glare



Think Outside the Troffer



Science, Not Sound Bites





25 Experts | 2 Days | 1 Meeting of the Minds

LED Technology Potential



The Rise of TLEDs







Connected Lighting







Tunable Lighting











25 Experts | 2 Days | 1 Meeting of the Minds







Glare

OLEDs







Sky Glow









& Controls













More Opportunities for Discussion





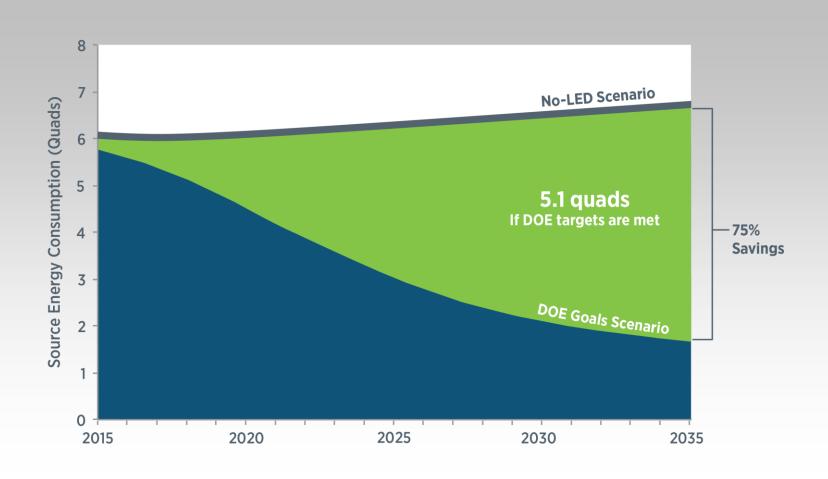




The Big Picture

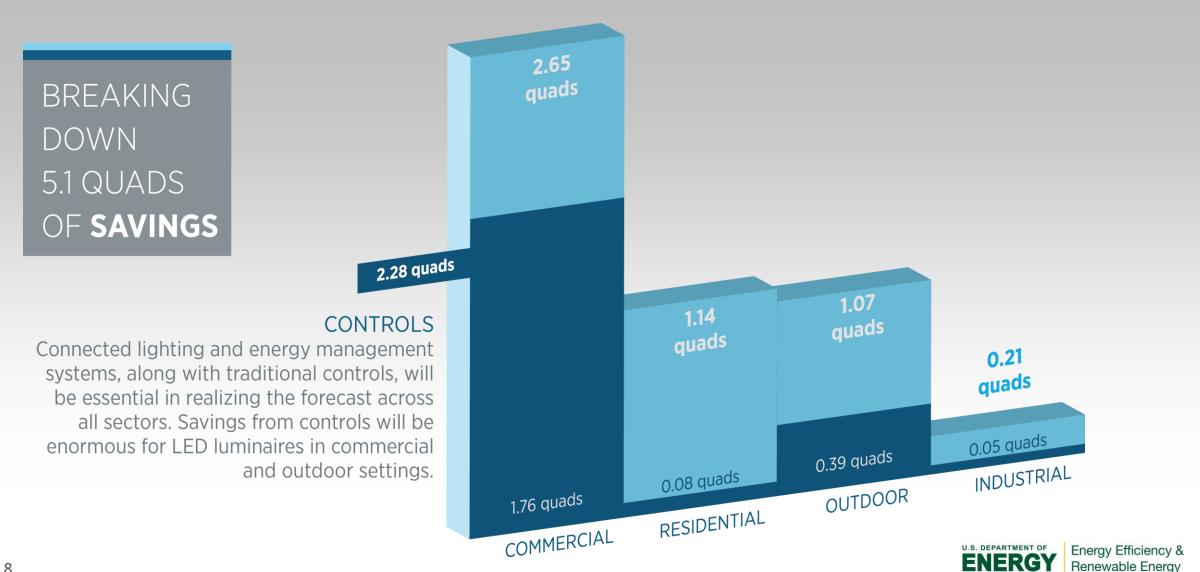
TURNING **DOWN**LIGHTING ENERGY USE

U.S. energy savings attributable to LED lighting will reach 5.1 quads by 2035. Energy use for lighting in 2035 will be **75% lower** than it would have been if LEDs had not entered the market.





Breaking It Down



Facts are stubborn things

and whatever may be our wishes, our inclinations or the dictates of our passion,

they cannot alter the state of facts and evidence.

~ John Adams

