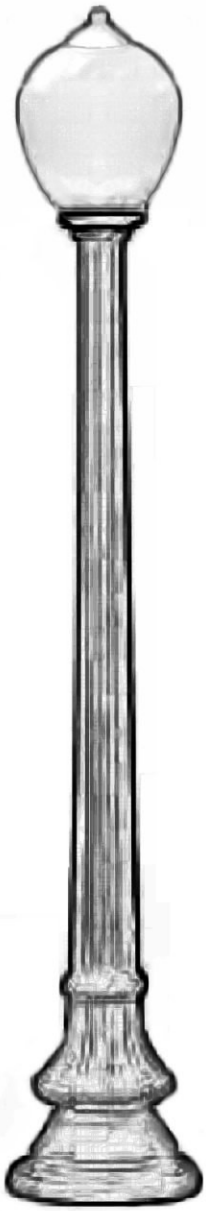
Environmentally Responsible Streetlighting for the 21st Century



# STREETLIGHTS ARE NOT DAYTIME DECORATIONS.

**A streetlight is an electric appliance which operates every minute of every night.**

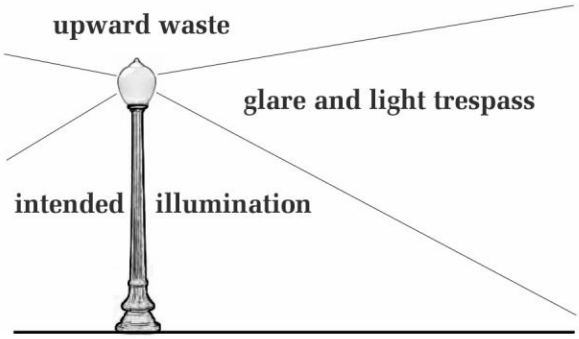
**In Illinois, that is over 4,200 hours per year, for each and every light on every block of your town.**

**A well-engineered light fixture can illuminate an area as well as or better than a poorly designed one, while consuming 30% less electricity, 30% fewer dollars of utility expense. Or 50% less. Or even 70% less.**

**Do you leave your doors and windows open all winter, to use twice as much energy as needed to heat your home or office? When you fuel your vehicles, do you then pour an equal amount of fuel out on the ground? Is it any more responsible to install or operate streetlights which consume twice as much energy as necessary, minute after minute, night after night, year after year?**

**What is the secret? Some new light bulb?** over

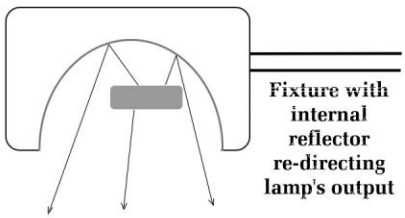
**Streetlight fixture efficiency isn't a matter of LEDs or CFLs or other lamp changes; it is a matter of putting the light where it is needed. We install lights along our roadways to illuminate the streets, parking zones, parkways and sidewalks. Every photon of light which the lamps in our streetlights create represents electrical energy consumed; every photon which goes somewhere other than where it is needed represents wasted wattage.**




**The space around a streetlight can be divided into three zones. The ground around the fixture, and the volume of space above it, are the area of intended illumination. Light which the fixture throws in the zone above that doesn't add illumination to the area; instead, it shines into the eyes of people approaching the area as glare, and off into the surrounding area (bedroom windows, natural areas, etc.) as trespass.**

**The light which shines up into the sky is completely wasted energy; it does nothing other than disturb nature, and prevent our citizens from seeing stars in the nighttime sky.**

**A well-engineered fixture takes the light which is coming from its lamp in the wrong direction, and re-focuses it in the right one. By gathering up all of the lamp's light output, this design wastes very little light, and delivers so much more of the output where it is needed that it can illuminate the "intended area" as well or better using a notably lower wattage lamp.**




**Streetlights with this sort of efficient design are made in many different styles. Their use can not only save energy, but also improve the safety and esthetics of the nighttime environment; well-lit scenes are much more attractive than glare-filled ones. Evidence is increasing that stray light at night is doing serious harm not only to natural ecosystems, but that it also poses serious threats to human health; we should be making every effort to reduce light trespass.**

**Illumination standards of the Illinois Department of Transportation and the lighting industry can easily be met while using efficient fixtures which shine light only where it is needed.**

**Our citizens are being asked to make serious efforts to be more conservation-minded about saving energy; is it wrong for them to wonder why they should purchase more efficient appliances, and cut back on their energy use, when their towns flagrantly waste energy with large-scale installations of inefficient lighting? Streetlight fixtures commonly have lifetimes of 25-50 years; shouldn't someone be concerned about the expense of operating them over that whole period?**

## We must stop selecting these appliances as if they are only daytime decorations.

**For more information on energy efficient and environmentally responsible lighting practices, please visit us on the Web:**

**Illinois Coalition for Responsible Outdoor Lighting**
**www.illinoislighting.org**
**or drop us a line at: info@illinoislighting.org**