# Bright outdoor lights are not as safe as they appear.



A U.S. National Institute of Justice study concluded: "We can have very little confidence that improved lighting prevents crime." In fact, poor or too much lighting can actually have the opposite effect.

Real security depends on the wise use of lighting. Visibility should always be the goal. Instead of more and brighter lights, we need smart lighting that directs light down where it is most useful. It is possible to protect the natural nighttime environment without compromising safety.

"[W]hen risks are carefully considered, local authorities can safely reduce street lighting saving both costs and energy ... without necessarily impacting negatively upon road traffic collisions and crime."

— 2015 study published in the *Journal of Epidemiology* and Community Health

#### WHY DARK SKIES?

The need to protect and restore the natural nighttime environment is more urgent than ever. Light pollution, defined as light where it is not wanted or needed, affects our health, the environment, wildlife, and our ability to find awe in the natural night. Research indicates that light pollution is increasing at a global average rate of two percent per year.

#### **ABOUT IDA**

The International Dark-Sky Association, a 501(c)(3) nonprofit organization based in Tucson, Arizona, is dedicated to preserving and protecting the natural nighttime environment.



#### HELP US PROTECT THE NIGHT

Our work is made possible by support from IDA members. Become a member and support our work in protecting the natural nighttime environment. Please join us today!

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## Outdoor Lighting, Crime, and Safety





## **BRIGHTER DOES NOT MEAN SAFER**

Lighting up the nighttime environment does not necessarily improve safety or security. This may seem contradictory, but there is no clear scientific evidence that increased outdoor lighting deters crime and increases safety.

#### AT HOME: POOR LIGHTING CREATES A FALSE SENSE OF SECURITY



Keeping yourself and your property safe from theft and vandalism is a major priority. However, badly designed outdoor lighting can actually make you less safe because bright and poorly aimed lights can hide danger. Bad lighting creates deep shadows where criminals can hide.

Some crimes like vandalism and graffiti actually thrive on night lighting. For example, bright dusk-to-dawn lights allow criminals to see the contents of parked cars.

## AROUND TOWN: LIGHT FOR LIGHT'S SAKE DOES NOT EQUAL SAFETY

Towns, cities, and businesses often install lighting in parks, shopping areas, parking lots, and other public places to improve safety.

Improperly aimed and poorly shielded lights can actually attract criminals and allow them to see what they're doing. Property damage may be exacerbated by too many lights, particularly dawn-to-dusk lighting. A study by the city of Chicago actually found a correlation between increased crime and brightly lit alleyways.

## ON THE ROAD: BAD LIGHTING CREATES UNSAFE DRIVING CONDITIONS

Poorly designed lighting on roadways and highways contributes to tragic accidents. Motorists and pedestrians can be temporarily blinded by glare from unshielded streetlights and electronic signs. The problem is more acute for older individuals.

A 2015 study published in the *Journal of Epidemiology and Community Health* found that streetlights don't prevent accidents or crime, but do cost a lot of money.

### Poor Lighting Reduces Safety and Security

Glare from bright, unshielded lights actually decreases safety. See how glare in the closest photo makes it hard to see the man at the gate? Glare creates deep shadows, making it more difficult to see. The bright light shines into your eyes, constricting your pupils. This diminishes your eyes' ability to adapt to low-light conditions. So, is that bright light really making this area safer?





#### SAFE LIGHTING SOLUTIONS

Effective lighting that helps people be safe – not just feel safe – is a win-win situation for everyone. You can create a safer environment while preserving the natural night. Here are some simple rules to follow:

- Use fully shielded, dark-sky friendly fixtures. That means lights shine down, not up, and don't create glare and contrasts.
- Only use lights when and where needed.
  Install timers and dimmer switches, and turn off lights when not in use. If you must have security lighting, use motion sensors.
- Use the right amount of light. Too much light is wasteful and impairs vision.
- Use long-wavelength lights with a red or yellow tint to minimize negative health effects.
- Good lighting design can mitigate glare.
  Cities and towns can restrict the use of bright signs and flashing lights near roadways.

Visit darksky.org for more information.