

LIGHTING FOR SAFETY AND SECURITY

Safety and Security issues are different problems that require different lighting solutions.

"Safety" issues require providing the best visibility, with adequate lighting for safe pedestrian passage during times of anticipated pedestrian traffic. "Non-glare" lighting, at recommended light levels will provide the best visibility. Coverage of walkways, parking lots, and entrances and exits need different levels of light. (There are guidelines available that outline light level recommendations from the Illuminating Engineering Society of North America, in their "Recommended Practices" booklets, e.g. RP 33: Lighting for Exterior Environments.) At other times, motion sensor lighting is a good option and often "pays for itself", if a separate system is added.

"Security" issues are best addressed with measures other than lighting. Floodlighting a deserted area, especially an area that is locked or not under surveillance, is a waste of money. In fact, lighting can facilitate criminal activity by drawing attention to a property and permitting easy access. As well, criminals can "hide" best, if obscured by glare projecting into the eyes of neighbors or passersby. More effective and less expensive measures include: using adequate locks, an effective alarm system, giving the illusion of occupation with independently timed interior lights (a research project on what motivates burglars by Bennett and Wright, 1984, concluded after interviews with 300 experienced burglars, that their main concern was whether or not the premises were occupied), and forming a neighborhood "watch"; especially considering that most crime takes place during daylight hours.

We need to distinguish between our "sense" of security, and real security. The task is to be secure, not to just feel secure. (See the International Dark Sky Association Information Sheet: #24 "Security Lighting: Let's Have Real Security: Not Bad Lighting").

Vandalism, loitering, graffiti, and burglary can be the by products of lit areas. In Washington State, the School District in Clark County, among others, reduced vandalism to almost zero with a policy to darken the property after 10:30 pm. In San Antonio, the bill for vandalism for their school district was cut from \$160,000 per year, to \$41,000, when they turned the lights off at night. Bill Bakers, retired Associate Superintendent for the East Side Union High School District in San Jose, who pioneered an energy savings program that has saved over a million dollars a year, reports: "We are not aware of any school districts where blacking-out coincided with an increase in vandalism, burglary, or arson . . . And, in case of burglars, any light . . . is cause for suspicion on the part of the neighbors and the police." Graffiti vandals use light to their advantage.

An extensive report has been prepared by Barry Clark, entitled: "Outdoor Lighting and Crime, Part I: Little or No Benefit". He examined all the studies done on the connection between lighting and crime, with the conclusion that "until the lighting and crime issue is better understood, no more security lighting or other lighting for crime-prevention should be installed, and the funding should be redirected to the rectification of existing over-bright and glare outdoor lighting". In Part II, he presents evidence that growth in crime is linked to the growth in outdoor ambient artificial light.

We can all benefit from "re-evaluating" our current outdoor lighting practices, especially when we consider not only the cost/benefit effectiveness, but also the negative effects of light pollution on the natural environment, including the pollution created when electricity is generated by fossil fuels. Apply the Prevention Principal: "First, Do No Harm" --- Susan Harder, Dark Sky Society