

Outdoor Lighting and Crime Prevention

A reprint of the Illinois Coalition for Responsible Outdoor Lighting website page at <http://www.illinoislighting.org/crime.html>

Fear of crime is a concern which hangs at the back of each of our minds. Crime has much in common with disease; we all have either suffered its unpleasant effects, or know someone close to us who has. We desire to avoid "contracting" it.

"Apply artificial illumination after dark" is one instruction we regularly hear from people telling us how we should protect ourselves from crime. But does following this broad injunction, and operating lights all around us throughout the night, actually reduce the likelihood of our becoming victims of crime? Is darkness itself a "breeding ground" for crime, or are we expressing an innate human fear of the dark in this instance, rather than looking at the true nature of the crimes which we fear? These questions are not that difficult to answer, but they are too seldom asked; adding more light is repeatedly "prescribed", but those prescriptions are often not backed up by real statistics or any depth of analysis.

Having our residences invaded by burglars is a concern for us all. In 2008, over one and a half million residences in the United States were burglarized¹. To keep our homes from being added to the lists of those victimized, we need to look at what factors make one home a target, and what other factors make another home uninviting to the criminal.



Of all those residential burglaries in 2008 where a time of day is known for the crime (usually, as opposed to crimes which were committed during an extended absence of the residents), 65% were committed during the daylight hours¹. If about two-thirds of the burglaries occurred during the half of the day when the sun is up, what does this say about the effect of the presence or absence of light on the likelihood of a burglary occurring? Statistically, the answer is clear: Darkness is not a leading causal factor for residential burglaries; if anything, it somehow reduces the likelihood of their occurrence.

So, why not put up all those extra lights, and run them all night, anyway? There are a number of cogent reasons to not blanket our neighborhoods with indiscriminate lighting, on the off chance that we might randomly illuminate some spot where added security

lighting might have a positive effect. First, there are the multitude of reasons which are documented on other pages of this website: energy waste, ecological disruption, health concerns around over-lighting our nights, the "paving over" of our nighttime skies, etc. But more directly to the crime issue, if we are trying to combat crime by using the wrong prescription, that means we are *ignoring the real problems* -- the real factors which may make us targets. To genuinely be safer, we need to analyze what makes our property a target *during the daytime*, when it is most likely to be attacked, and address those issues. They are very likely the same issues which would make our homes into targets at night, too; blaming the darkness itself for these crimes is at least illogical, and at worst, dangerously misguided.

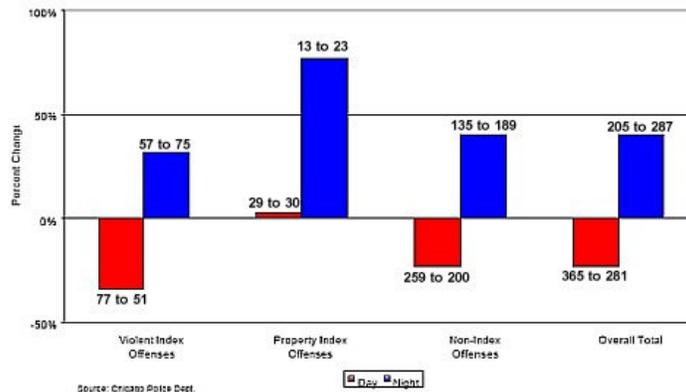


What about in other locations -- does added light at night make us safer? The answers are harder to draw out of the statistics, when we look at all the other environments we are concerned about away from our homes. It seems evident, in general, that lighting which is carefully prescribed to fill a demonstrable need in a specific situation can have positive effects in crime prevention. But that does not make the use of the "medicine" of light any more effective in a general blanket installation than the use of prescription medicines is against the wrong diseases. The evidence of effectiveness in one set of circumstances does not necessarily transfer to all others, as many people assume it does -- penicillin and other anti-bacterials may cure some infections well, but many doctors find themselves repeatedly trying to explain to their patients that those antibiotics will do nothing to combat influenza, or the common cold.

One of the largest, most scientific studies of outdoor crime and lighting at night was the 1998-99 Chicago Alley Study² (also discussed on our [Key Issues > Light, Safety & Crime](#) page). Test and control areas with similar crime rates were chosen in Chicago neighborhoods; in the test area, the alley lighting levels were increased to a level of about three times higher than the norm for the city. Comparing the six months prior to the lighting increase in the test area, to the following six months, the *increases* in nighttime crime associated with the increased lighting were significant. Violent crime (assaults, rapes, murders, etc.) went up by 32%, property index offenses (breaking & entering, auto theft, etc.) were up 77%, non-index offenses (prostitution, drug dealing, etc.) up 40%, for an overall increase of 40%. But even with the significant increase in

nighttime crime (which was accompanied by a 23% decrease in daytime crime for the same period, indicated by the red bars on the graph below), many of the residents of the neighborhood, when interviewed afterward by the researchers, commented that they felt safer at night with the new lighting. In effect, they were asking the doctor to prescribe penicillin for their colds, because they thought it made them feel better, while the functional data proved there were no curative benefits (and in this instance, likely harm, instead).

Figure 10 - Change in Reported Incidents in Experimental Area:
Six Months Pre- and Post-Installation of Alley Lights
Day Versus Night Comparison - All Offenses



In some instances, added lighting has proved to be an encouragement for crime, rather than a deterrent. Also referred to on this website's [Key Issues > Light, Safety & Crime](#) page is how some school districts in different parts of the U.S. have discovered that when the "security" lights installed around some of their schools were turned off because of budgetary problems, the vandalism at the schools decreased, rather than increasing as had been expected³. Not only do criminals of any sort need light to see what they are doing (just like any of us), prominent illumination can make a house, school or business stand out, and give the impression that there must be something there worth stealing or vandalizing.

And it is easily demonstrated that, in any situation, poorly applied lighting reduces both safety and security. Glare inhibits the neighbor or law enforcement officer from seeing the activity on a property; it also is often teamed with areas of deep shadow, where anything could be going on.

Well-applied illumination at night can serve as a medicine in the combat against some forms of crime in some locations. But in a sustainable world, such lighting will need to be applied by carefully administered prescription, recognizing that, just as in medicine, improper application does no good -- and may actually cause harm. Also as in medicine, the drugs -- in this case the lighting fixtures -- need to be analyzed for effectiveness before they are marketed as "cures". The uncontrolled dumping of lighting into our world is reminiscent of the era of patent cure-all "medicines"; our fears are being played on to in order to sell vast amounts of products (and electricity), much of it of little or no value (or actually bringing harm).

¹[FBI 2008 Crime in the United States report, Table 7.](#) ²The Washington State Crime Prevention Association's manual for homeowners entitled "[What to do Before the Burglar Comes](#)" lists a number of factors which make a home a prime target for burglars, and recommends preventative actions; note that nowhere do they "blame the darkness", or advise a blanket of exterior lighting as an effective preventative. ³[Chicago Alley Lighting Project - Final Evaluation Report \(2000\).](#) ⁴A report from [Peninsula School District](#), Gig Harbor, Wa.

For more discussion of these topics, see our [Key Issues > Light, Safety & Crime](#) page, and the [Light, Safety & Crime](#) section of our Resources > Links page.



Quick, spot the lurker by the walking path.

Badly designed lighting makes things better for criminals.

It's time to re-think lighting.

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www.illinoislighting.org