CHAPTER 14

IMPROVED STREET LIGHTING*

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INTRODUCTION

Improved street lighting serves many purposes, one of them being the prevention of crime. While street lighting improvements may not often be implemented with the expressed aim of preventing crime – pedestrian safety and traffic safety may be viewed as more important aims – and the notion of lighting streets to deter lurking criminals may be too simplistic, its relevance to the prevention of crime has not gone unnoticed in urban centers, residential areas, and other places frequented by criminals and potential victims.

Explanations of the way street lighting improvements could prevent crime can be grouped into two main perspectives:

- Situational crime prevention that focuses on reducing opportunity and increasing perceived risk through modification of the physical environment (Clarke, 1995), such as Crime Prevention Through Environmental Design (Jeffery, 1977).
- A group of perspectives that stress the importance of strengthening informal social control and community cohesion through more effective street use (Angel, 1968; Jacobs, 1961) and investment in neighborhood conditions (Taub et al., 1984; Taylor and Gottfredson, 1986).

The situational approach to crime prevention suggests that crime can be prevented by environmental measures, which directly affect offenders’ perceptions of increased risks and decreased rewards. This approach is also supported by theories, which emphasize natural, informal surveillance as a key to crime prevention. For example, Jacobs (1961) drew attention to the role of good visibility combined with natural surveillance as a deterrent to crime. She emphasized the association between levels of crime and public street use, suggesting that less crime would be committed in areas with an abundance of potential witnesses.

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Other theoretical perspectives have emphasized the importance of investment to improve neighborhood conditions as a means of strengthening community confidence, cohesion, and social control (Kelling and Coles, 1996; Skogan, 1990; Wilson and Kelling, 1982). As a highly visible sign of positive investment, improved street lighting might reduce crime if it physically improved the environment and signaled to residents that efforts were being made to invest in and improve their neighborhood. In turn, this might lead them to have a more positive image of the area and to have increased community pride, optimism, and cohesion. It should be noted that this theoretical perspective predicts a reduction in both daytime and nighttime crime. Consequently, attempts to measure the effects of improved lighting should not concentrate purely on nighttime crime.

The relationship among visibility, social surveillance, and criminal opportunities is a consistently strong theme to emerge from the literature. A core assumption of both opportunity and informal social control models of prevention is that criminal opportunities and risks are influenced by environmental conditions in interaction with resident and offender characteristics. Street lighting is a tangible alteration of the built environment, but it does not constitute a physical barrier to crime. However, it can act as a catalyst to stimulate crime reduction through a change in the perceptions, attitudes, and behavior of residents and potential offenders.

It is also feasible that improved street lighting could, in certain circumstances, increase opportunities for crime. It may bring greater numbers of potential victims and potential offenders into the same physical space. Increased visibility of potential victims may allow better judgments of their vulnerability and attractiveness (e.g., in terms of valuables). Increased social activity outside the home may increase the number of unoccupied homes available for burglary. Increased illumination may make it easier to commit crimes and to escape.

The effects of improved street lighting are likely to vary in different conditions. In particular, they are likely to be greater if the existing lighting is poor and if the improvement in lighting is considerable. They may vary according to characteristics of the area or the residents, the design of the area, the design of the lighting, and the places that are illuminated. For example, improved lighting may increase community confidence only in relatively stable homogeneous communities, not in areas with a heterogeneous population mix and high residential mobility. The effects of improved lighting may also interact with other environmental improvements, such as closed circuit television (CCTV) cameras or security patrols.

This chapter reports on the findings of a systematic review – incorporating meta-analytic techniques – of the highest quality available research evidence on the effects of improved street lighting on crime.

**BACKGROUND**

Contemporary interest in the effect of improved street lighting on crime began in the U.S. during the dramatic rise in crime in the 1960s. Many towns and cities embarked upon major street lighting programs as a means of reducing crime, and