

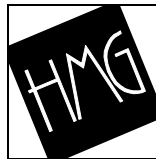
# Outdoor Lighting and Security: Literature Review

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## Executive Summary

This literature review is intended to inform Pacific Gas and Electric Company (PG&E) about the existing research literature relating to any relationship between night-time outdoor lighting and security. This report reviews ten original research papers and three previous literature reviews. It sets out to answer the following questions:

1. Does the presence of nighttime lighting around commercial and residential buildings, parking lots and walkways influence crime or the fear of crime?
2. Does the quantity or quality of nighttime lighting influence crime or the fear of crime?
3. Is there a causal relationship between nighttime lighting and crime or the fear of crime?

None of the papers reviewed presents sufficient evidence to demonstrate a causal link between night-time lighting and crime. The available results show a mixed picture of positive and negative effects of lighting on crime, most of which are not statistically significant. This suggests either that there is no link between lighting and crime, or that any link is too subtle or complex to have been evident in the data, given the limited size of the studies undertaken.

Several studies showed a significant relationship between lighting and the *fear* of crime, i.e. that people feel safer in lit areas. The amount of light required to reduce the fear of crime appears to be in the range of 10 horizontal lux (1 footcandle), with little increase in perceived safety above that level.