

CCTV surveillance for crime prevention

A 40-year systematic review with meta-analysis

Eric L. Piza , Brandon C. Welsh, David P. Farrington, Amanda L. Thomas

First published: 24 March 2019

<https://doi.org/10.1111/1745-9133.12419>

Citations: 15

This project was made possible by funding from the Swedish National Council for Crime Prevention to Cambridge University. We thank Editor William Bales, Senior Editor Meghan Hollis-Peel, and the anonymous reviewers for their insightful comments.

Abstract

Research Summary

We report on the findings of an updated systematic review and meta-analysis of the effects of closed-circuit television (CCTV) surveillance cameras on crime. The findings show that CCTV is associated with a significant and modest decrease in crime. The largest and most consistent effects of CCTV were observed in car parks. The results of the analysis also demonstrated evidence of significant crime reductions within other settings, particularly residential areas. CCTV schemes incorporating active monitoring generated larger effect sizes than did passive systems. Schemes deploying multiple interventions alongside CCTV generated larger effect sizes than did schemes deploying single or no other interventions alongside CCTV.

Policy Implications

The results of this systematic review—based on 40 years of evaluation research—lend support for the continued use of CCTV to prevent crime as well as reveal a greater understanding of some of the key mechanisms of effective use. Of particular salience is the continued need for CCTV to be narrowly targeted on vehicle crimes and property crime and not be deployed as a “stand-alone” crime prevention measure. As CCTV surveillance continues to expand its reach in both public and private space and evolve with new technology, policy will benefit from high-quality evaluations of outcomes and implementation.

Citing Literature



Number of times cited according to CrossRef: 15

Alexandre Marois, Daniel Lafond, François Vachon, Eric R. Harvey, Bruno Martin, Sébastien Tremblay, Mobile Real-Time Eye-Tracking for Gaze-Aware Security Surveillance Support Systems, *Intelligent Human Systems Integration* 2020, 10.1007/978-3-030-39512-4_32, (201-207), (2020).

[Crossref](#)

Giovanni Circo, Edmund McGarrell, Estimating the impact of an integrated CCTV program on crime, *Journal of Experimental Criminology*, 10.1007/s11292-019-09404-y, (2020).

[Crossref](#)

Gustavo Carvalho Moreira, Vania Aparecida Ceccato, Gendered mobility and violence in the São Paulo metro, Brazil, *Urban Studies*, 10.1177/0042098019885552, (004209801988555), (2020).

[Crossref](#)

Dennis Mares, Emily Blackburn, Acoustic gunshot detection systems: a quasi-experimental evaluation in St. Louis, MO, *Journal of Experimental Criminology*, 10.1007/s11292-019-09405-x, (2020).

[Crossref](#)

Chen Chen, Ray Surette, Mubarak Shah, Automated monitoring for security camera networks: promise from computer vision labs, *Security Journal*, 10.1057/s41284-020-00230-w, (2020).

[Crossref](#)

Rodrigo Tapia-McClung, Exploring the Use of a Spatio-Temporal City Dashboard to Study Criminal Incidence: A Case Study for the Mexican State of Aguascalientes, *Sustainability*, 10.3390/su12062199, **12**, 6, (2199), (2020).

[Crossref](#)

Prince Waqas Khan, Yung-Cheol Byun, Namje Park, A Data Verification System for CCTV Surveillance Cameras Using Blockchain Technology in Smart Cities, *Electronics*, 10.3390/electronics9030484, **9**, 3, (484), (2020).

[Crossref](#)

Anna Gurinskaya, Predicting citizens' support for surveillance cameras. Does police legitimacy matter?, *International Journal of Comparative and Applied Criminal Justice*, 10.1080/01924036.2020.1744027, (1-21), (2020).

[Crossref](#)

Autumn C. James, Courtney M. Gallaher, Andrew J. Krmenec, Individual Experience and Associated Perceptions: How Crime Victimization Influences the Construction of Safety, *Papers in Applied Geography*, 10.1080/23754931.2020.1744473, (1-13), (2020).

[Crossref](#)

Lily Robin, Bryce E. Peterson, Daniel S. Lawrence, How do close-circuit television cameras impact crimes and clearances? An evaluation of the Milwaukee police department's public surveillance system, *Police Practice and Research*, 10.1080/15614263.2020.1772783, (1-20), (2020).

[Crossref](#)

Wesley G. Skogan, The future of CCTV, *Criminology & Public Policy*, 10.1111/1745-9133.12422, **18**, 1, (161-166), (2019).

[Wiley Online Library](#)

Meghan E. Hollis, Security or surveillance?, *Criminology & Public Policy*, 10.1111/1745-9133.12427, **18**, 1, (131-134), (2019).

[Wiley Online Library](#)

Anthony Morgan, Christopher Dowling, Physical Security: Video Surveillance, Equipment, and Training, *Encyclopedia of Security and Emergency Management*, 10.1007/978-3-319-69891-5, (1-10), (2019).

[Crossref](#)

Kevin Fox Gotham, Daniel B. Kennedy, Analyzing crime foreseeability: premises security litigation and the case of convenience stores and gas stations, *Security Journal*, 10.1057/s41284-019-00218-1, (2019).

[Crossref](#)

Brandon C. Welsh, Eric L. Piza, Amanda L. Thomas, David P. Farrington, Private Security and Closed-Circuit Television (CCTV) Surveillance: A Systematic Review of Function and Performance, *Journal of Contemporary Criminal Justice*, 10.1177/1043986219890192, (104398621989019), (2019).

[Crossref](#)

Supporting Information



Filename	Description
capp12419-sup-0001-SuppMat.docx 88.6 KB	Appendix A. CCTV Evaluations Not Meeting Inclusion Criteria Appendix B. Summary of CCTV Evaluations

Please note: The publisher is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries (other than missing content) should be directed to the corresponding author for the article.

About Wiley Online Library

Privacy Policy

Terms of Use

Cookies

Accessibility

Help & Support

Contact Us

Opportunities

Subscription Agents

Advertisers & Corporate Partners

Connect with Wiley

The Wiley Network

Wiley Press Room

Copyright © 1999-2020 John Wiley & Sons, Inc. All rights reserved