Situational Crime Prevention

EVIDENCE BRIEF

Situational Crime Prevention is concerned with reducing opportunities for crime. There is consistent international evidence that several types of Situational Crime Prevention reduce crime, particularly property crime.

OVERVIEW

- Situational Crime Prevention (SCP) involves any opportunity-reducing measures that are directed at a specific form(s) of crime and involve the management, design, and manipulation of the immediate environment to make crime more difficult, risky, or less rewarding or excusable.
- SCP is used in New Zealand by local authorities, businesses, NZ Police and others.
- Examples of SCP in use in New Zealand include CCTV, property marking, alarm tags on clothing, and environmental design to improve lighting and visibility in public places.
- Several types of SCP approaches have been sufficiently researched to be confident in their effectiveness, including CCTV and street lighting; Crime Prevention through Environmental Design ('CPTED'); target hardening; and access control.
- SCP has been successfully implemented in a wide range of settings including residential, retail, public spaces and public transport settings.
- There is the most evidence of SCP interventions being effective to reduce property crime such as burglary, car theft and shoplifting, and public order offences such as liquor ban breaches, drug use and vandalism.

- SCP rarely uses a single technique, and it is often used as part of a package. This can make it difficult to identify which particular component has led to the reduction in crime.
- The evidence shows that SCP is most likely to be effective if tailored to the particular context rather than through generic solutions such as widespread CCTV.
- Further research is needed to conclude that SCP is generally effective at reducing other kinds of crime such as violent or drug-related crime.

EVIDENCE BRIEF SUMMARY

Evidence rating:	Promising (for property and public order offences)	
Unit cost:	Unknown (not reported in literature)	
Effect size (percentage reduction in offending, assuming 50% untreated recidivism):	4% - 13% (varies depending on intervention)	
Current spend:	\$1.19 million (2015/16)	
Unmet demand:	Unknown (varies depending on intervention)	







WHAT DOES THIS BRIEF COVER?

This brief includes:

- a summary of the theoretical basis and historical development of situational crime prevention and Crime Prevention through Environmental Design
- an examination of international and national evidence of the effectiveness of these interventions overall, but specifically:
 - o CCTV cameras and street lighting
 - Crime Prevention through Environmental Design
 - Access control
 - Target hardening
 - Nuisance abatement
 - Neighbourhood support/watch
- a brief discussion about the factors that lead to the successful implementation of these interventions, as well as the other benefits that these interventions can produce
- the extent of current investment in New Zealand.

Note that other Evidence Briefs are currently under development that may address specific interventions from the above list (i.e. CCTV cameras) in more detail.

WHAT IS SITUATIONAL CRIME PREVENTION?

Situational crime prevention (hereinafter SCP) is a broad category of specific interventions aimed to reduce opportunities for crime through, for example, increasing the perceived effort or risks of a crime. Ron Clarke, who originally developed the concept of SCP, defines the approach as:

"comprising measures (1) directed at highly specific forms of crime (2) that involve the management, design or manipulation of the immediate environment in as systematic and permanent a way as possible (3) so as to reduce the opportunities for crime and increase the risks as perceived by a wide range of offenders" ii

Initially SCP was deliberately not based on a theoretical model of criminal behaviour. However, it has since been given a theoretical basis and incorporated into mainstream criminology through theories such as rational choice, routine activity, and crime pattern theory. Each of these theoretical perspectives emphasise the fact that crimes occur in specific situations and result from a nexus of a motivated offender, suitable target or victim, and the absence of a capable guardian.



Physical convergence in time and space

These theories recognise that the likelihood of a crime occurring is directly related to the physical situation and an offender's motivation. As a result, changing the properties of a situation might change the likelihood of crime even absent any change in the offender.

Most straightforwardly, if no suitable target is available then a crime will not occur. But even if a target remains, even a motivated offender may be less likely to go ahead with the offence if the perceived risks can be altered to outweigh the benefits.

Clarke and Cornish have divided SCP into 25 specific techniques under five headings:

- increase the perceived effort of a crime, such as by placing electronic tags on clothing in stores
- 2. increase the perceived risks of a crime, such as with speed cameras
- 3. reduce the anticipated awards of crime, such as by regularly cleaning off graffiti
- 4. reducing provocations to offend, such as by reducing crowding in pubs
- removing excuses for offending, such as with clear signage showing the boundaries of a private property.^{iv}

Situational crime prevention also focuses on the fact that crime is highly concentrated in space. Most places attract virtually no crime, whereas some places consistently attract a high level of crime. The stability of offending at certain locations over time can give a degree of confidence that interventions will be relevant to future crimes, not just past ones.

Crime Prevention through Environmental Design

In addition to SCP, there is an approach to crime reduction called Crime Prevention through Environmental Design, or CPTED. CPTED is often employed as an architectural or urban planning approach when designing a public

space. It aims to modify the built environment to create safer places that are less crime prone or can make people feel safer, and ultimately encourage community ownership of the geographic space.

There is significant overlap between CPTED and SCP, as many designs incorporating CPTED principles will include SCP interventions (e.g. improving street lighting or natural surveillance of a space). However, CPTED can include non-SCP approaches, such as promoting a positive image and routine maintenance of the built environment to send a positive signal to all users of the space.

This evidence brief only focuses on CPTED interventions that are also SCP interventions. These interventions include, but are not limited to, redesigning walkways, removing objects that hamper natural surveillance of public places (such as bushes), or street closure or barricading.

DOES SCP REDUCE CRIME?

International evidence

Overall, systematic reviews indicate that SCP is effective at reducing the prevalence of some forms of crime, in particular property crimes. ix Guerette (2009) conducted a descriptive review of 206 SCP evaluations and found that three out of four evaluations (n = 154, 75%) concluded that the intervention was effective overall.x

While there is a substantial evidence base showing that SCP reduces crime, it is important to note that the evidence base for SCP is concentrated among certain types of SCP:

- CCTV and street lighting
- Crime Prevention through Environmental Design (CPTED)
- Preventing repeat victimisation through target hardening
- · Access control and street closures
- Public area surveillance
- Nuisance abatement.

Each of these types of SCP has its own evidence base, discussed in the next section.

New Zealand Evidence

The Ministry of Justice and Auckland University of Technology reviewed an Auckland 'target hardening' programme in 2004, which was designed to reduce the likelihood of subsequent re-victimisation for burglary victims. However, due to data limitations, it was not able to conclude on the programme's effectiveness at reducing crime.xi

Apart from this review, there have been no reviews of situational crime prevention approaches in New Zealand that have

concluded on the effectiveness of a particular intervention's impact on crime.

Nevertheless, SCP has been employed as part of the justice sector's broader crime reduction strategy. Local authorities and territorial authorities have implemented SCP or CPTED interventions in the past, with central government agencies providing occasional support and funding.xii Similarly, the Ministry of Justice in 2005 published guidelines on CPTED to assist urban planners and local authorities,xiii as well as a DVD used as a visual aide to the guidelines.xiv

WHEN IS SCP MOST EFFECTIVE?

Types of SCP with a strong evidence base

CCTV and street lighting: CCTV and improved street lighting are the most well studied forms of SCP. A review of 13 studies from 1974-1999 found significant effect (6% reduction in offending) from street lighting, *v while a review of 41 studies from 1978-2007 found a more modest effect (4% reduction) from CCTV.*vi

CCTV has been noted to be particularly effective at reducing vehicle crime, particularly in car parks: research has shown a 50% reduction in the problem after the intervention. However, CCTV has not been shown to be effective at reducing violence and assault in public.xvii

CPTED: A recent narrative review of the existing evidence concluded that CPTED interventions are effective at reducing crime. However, the authors of that review note that "the complexity of CPTED means the evaluation of individual CPTED projects typically suffer from research quality problems that compromise the potential to derive unequivocal findings from them."xviii

Access control: this intervention aims to use lockable gates to restrict entry to particularly crime-prone areas thereby controlling access to potential crime targets.xix A review of six studies from 2002-2011 found that the intervention was effective at reducing burglary (13% reduction).xx

Target hardening: this intervention focuses on those who have been victimised previously and aims to make it harder for them to be victimised in the future. xxi Research consistently demonstrates that prior victimisation is one of the best predictors of future victimisation.xxii

A review of 27 studies from 1980 – 2006 found a modest effect (4% reduction), indicating that rate of burglary decreased by 15.5% in comparison to the control group.^{xxiii}

Nuisance abatement: this intervention involves using building codes, fire codes, zoning, etc. in order to improve the quality of life and resolve issues in private residences within neighborhoods. This can be done through, for example, inspecting drug nuisance properties, coercing landlords to clean up blighted properties, post "no trespassing" signs, and initiate court proceedings against landlords who failed to comply with civil law citations. In four studies of nuisance abatement, including two randomised controlled experiments, each showed evidence of reduced crime. xxiv

Types of SCP with a more limited evidence base

Neighbourhood Support/Watch: There is mixed evidence for the effectiveness of neighbourhood support/watch, with different reviews coming to difference conclusions about its effectiveness.xxx A 2008 review of 18 studies found that neighbourhood support/watch may be effective at reducing burglary (8% reduction). However, only four of the 18 studies included reported statistically significant effect sizes.xxxi

Neighbourhood support/watch programmes have been employed as an SCP measure as they "attempt to increase the risk associated with offending by increasing levels of surveillance and hence the likelihood that offenders will be deterred from offending or be detected as a consequence of intelligence gathered."xxxviii

Other case studies that suggest situational crime prevention can be effective include:

- engine immobilisers reducing the theft of cars^{xxviii}
- the introduction of exact change policies on buses with a tamper-proof moneybox reducing robberies of bus drivers^{xxix}
- alcohol interlocks on cars reducing the incidence of drunk driving^{xxx}
- reducing burglaries in terraced houses by installing gates at the entrance of alleyways that offer access to the back entrance.xxxi

Several other types of SCP have been identified as promising, with at least some evidence that they are effective. These promising approaches are:

- store redesign at commercial retailers
- training for serving staff at bars and taverns
- · target hardening of public facilities
- security guards in public places
- use of place managers to provide surveillance of public spaces.xxxii

In addition to these general findings, there are a large number of case studies of situational crime prevention in practice, reflecting a diverse range of problems and solutions. The United States based Center for Problem-Oriented Policing*xxxiii has a list of over 240 examples on its website:

http://www.popcenter.org/library/scp/

However, in some cases, the methodologies used in these studies make it difficult to decisively attribute the reduction in crime to the situational crime prevention technique.

Specificity to context

A key caveat that should be borne in mind when considering the effectiveness of a particular SCP intervention is that these interventions are directed at a particular type of crime. As such, they are very specific and are not designed to result in a general reduction in crime.

This caveat is recognised by Bowers and Guerette, who recognise that SCP interventions involve a reactive process and tailoring a particular intervention to a particular crime. Inherent in this process is that the implementation of SCP measures will be specifically tailored to the unique circumstances of the problem at hand.xxxiv

As a result, tailor-made place-based interventions tend to be more effective than implementing off-the-shelf approaches (such as widespread CCTV). The need for highly customised SCP interventions should also recognise that victims can experience the same crime in different ways. For example, one person's house may be burgled in a different way to another person; therefore, applying the same intervention is unlikely to be effective for both.

Implementation

The Australian Institute of Criminology conducted a review and assessment of a number of crime prevention interventions, and considered as part of their review the characteristics of a successful intervention. In particular:

 interventions appear to be more effective when introduced in combination with other strategies, e.g. awareness campaigns

- engagement with local residents can increase effectiveness, particularly where natural surveillance is desired
- utilising engaged members of the local community who are prepared to be involved and commit greatly increases the success and effectiveness of community patrols
- CPTED/street lighting strategies which encourage community ownership of the area can act as a catalyst for further changes and increase community pride in the environment.

WHAT OTHER BENEFITS DOES SCP HAVE?

The direct crime reduction benefits of SCP can understate their full impact, as there is some evidence for two secondary types of benefit: anticipatory benefits and diffusion effects.

Anticipatory benefits

There is some evidence of the benefits of crime reduction occurring before the implementation of an SCP intervention. These benefits are known as 'anticipatory benefits'. A review of 52 evaluations of SCP interventions found *prima facie* evidence of anticipatory benefits 42% of the time.xxxvi

Smith et al forward a number of potential causes of the anticipatory effects generally. For example, crime may reduce prior to implementation due to offenders assuming measures (e.g. CCTV cameras) being operation before they are, or because offenders already presume that measures already exist as a result of publicity or hearsay about an intervention. xxxvii

More research is required to accurately assess the impact and extent of anticipatory benefits of SCP.

Diffusion and displacement

The displacement of crime is often forwarded as a criticism of SCP interventions – i.e. that an intervention does not reduce crime, but displaces it in some way. This displacement can be: XXXVIII

- temporal: offenders change the time at which they commit crime
- spatial: offenders switch from targets in one location to targets in another location
- target: offenders change from one type of target to another target type
- tactical: offenders alter the methods used to carry out crime
- offence: offenders switch from one form of crime to another
- offender: new offenders replace old offenders who have been removed or who have desisted from crime.

Crime diffusion is the reverse of displacement, and occurs when reductions of crime (or other improvements) are achieved in areas that are not close to crime-prevention interventions, even though those areas were not actually targeted by the intervention itself. This feature has been referred variously as the "bonus effect", "halo effect", "free-rider effect", and the "multiplier effect".

The prevalence of crime diffusion or displacement in SCP interventions has been assessed using evidence from 102 evaluations. The authors of that review conclude that "crime displacement seems to be the exception rather than the rule, and it is sometimes more likely that diffusion of crime-control benefit will occur."xxxiix

CURRENT INVESTMENT IN NEW ZEALAND

In the 2015/16 financial year, the Ministry of Justice provided \$2.69 million dollars of funding for crime prevention initiatives, of which \$1.19 million (44%) was spent on programmes that were partially or entirely focussed on SCP initiatives.

In addition, expenditure on SCP can occur at the Local Authority level. It is not possible to easily capture this expenditure, but there is limited evidence that some Local Authorities are spending money on SCP initiatives. For example, Auckland Council's 10-year plan provides for a \$5.7 million expenditure "on improving public safety and security for public transport (fencing, gating, CCTV etc)."xl

EVIDENCE RATING AND RECOMMENDATIONS

Each Evidence Brief provides an evidence rating between Harmful and Strong.

Harmful	Robust evidence that intervention increases crime
Poor	Robust evidence that intervention tends to have no effect
Inconclusive	Conflicting evidence that intervention can reduce crime
Fair	Some evidence that intervention can reduce crime
Promising	Robust international <i>or</i> local evidence that intervention tends to reduce crime
Strong	Robust international <i>and</i> local evidence that intervention tends to reduce crime

According to the standard criteria for all Evidence Briefs,^{xli} the appropriate evidence rating for Situational Crime Prevention is Promising.

As per the standard definitions of evidence strength outlined in our methodology, the interpretation of this evidence rating is that:

- there is international or local evidence that interventions tend to reduce crime
- interventions are likely to generate a positive return if implemented well
- interventions would benefit from additional evaluation to confirm that they are delivering a positive return and to support the finetuning of its design.

This rating applies only to property crime and public order offences. Further research would be needed to determine whether SCP is generally effective at reducing violent and drug-related crime.

A successful high quality randomised controlled trial of the proposed SCP intervention on the

reduction of crime in New Zealand would raise the evidence rating to Strong.

First edition completed: June 2016

Primary author: Nick Kokay

FIND OUT MORE

Web

www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/

Email

whatworks@justice.govt.nz

Recommended reading

Bowers, K., & Guerette, R. (2014). Effectiveness of Situational Crime Prevention. In G. Bruinsma, & D. Weisburd (Eds.), *Encyclopaedia of Criminology and Criminal Justice*

Bowers, K., & Johnson, S. (2016). Situational Prevention. In D. Weisburd, & D. Farrington (Eds.), What Works in Crime Prevention and Rehabilitation: Lessons from Systematic Reviews

Citations

```
<sup>i</sup> Clarke 1997, p 4
ii Clarke 1983
iii Clarke 2008, Crawford and Evans 2011, Welsh et al.
iv Cornish and Clarke 2003
v Weisburd et al 2010
vi Morgan et al 2012
vii Crowe 1991, Schneider & Kitchen 2007
viii Bowers & Johnson 2016, p 120
ix Bowers & Guerette 2014, p. 1321
x Guerette 2009
xi Casey, PaulRaj, Jacka, and Segessenmann, 2004
xii "Fund to help local councils with crime prevention",
New Zealand Government press release, 16 Feb
2006
xiii Available at
http://www.mfe.govt.nz/publications/towns-and-
cities/national-guidelines-crime-prevention-through-
environmental-design-new
xiv https://www.beehive.govt.nz/release/dvd-reduce-
crime-through-environmental-design
xv Welsh & Farrington 2008a
xvi Welsh & Farrington 2008b
xvii Bowers & Johnson 2016, p 119
xviii Cozens & Love 2015 p 400
xix Sidebottom et al 2015, p 10; Newman 1972
xx Sidebottom et al 2015, p 26
xxi Bowers & Johnson 2016, p 121
xxii Pease 1998
xxiii Grove et al 2012
xxiv Welsh 2011; Eck & Guerette 2012
xxv Husain 1990, Sherman & Eck 2002, Weisburn &
Eck 2004, Telep & Weinburn 2008
xxvi Bennett et al 2008
xxvii Bowers & Johnson 2016, p 121
xxviii Brown and Billing 1996, Potter and Thomas 2001
xxix Chaiken et al 1974
xxx Willis et al 2004
xxxi Bowers et al 2004
xxxii Eck 2002, Welsh 2011, Welsh et al 2011
xxxiii There is a close relationship between Situational
Crime Prevention and Problem-Oriented Policing and
Place-Based Policing. For more information, see the
relevant evidence briefs.
xxxiv Bowers & Guerette 2014, p. 1319
xxxv Morgan et al 2012
xxxvi Smith, Clarke, & Pease 2002, p 74
xxxvii Smith, Clarke, & Pease 2002, p 78-9
xxxviii Guerette & Bowers 2009, p 1333
xxxix Guerette & Bowers 2009, pp 1356-7
xl Auckland Council Long-term Plan 2015-2025,
```

Volume 2 of 3, p 199

xli Available at <u>www.justice.govt.nz/justice-</u> sector/what-works-to-reduce-crime/

REFERENCES

- Bennett, T., Holloway, K., & Farrington, D. (2008). The effectiveness of neighborhood watch. *Campbell Systematic Reviews*, *4* (18).
- Bowers, K., & Guerette, R. (2014). Effectiveness of Situational Crime Prevention. In G. Bruinsma, & D. Weisburd (Eds.), *Encyclopedia of Criminology and Criminal Justice* (pp. 1318-1329). New York: Springer Reference.
- Bowers, K., & Johnson, S. (2016). Situational Prevention. In D. Weisburd, & D. Farrington (Eds.), What Works in Crime Prevention and Rehabilitation: Lessons from Systematic Reviews (pp. 111-135). New York: Springer Reference.
- Bowers, K., Johnson, S., & Hirschfield, A. (2004). Closing off opportunities for crime: an evaluation of alley-gating. *European Journal on Criminal Policy and Research*, 10.
- Brown, R., & Billing, N. (1996). *Tackling Car Crime: An Evaluation of Sold Secure.* London: Home Office.
- Brown, R., & Billing, N. (2004). *Tackling Car Crime: An Evaluation of Sold Secure.* London: Home Office.
- Chaiken, J. M., Lawless, M. W., & Stevenson, K. A. (1974). *The Impact of Police Activity on Crime: Robberies on the New York Subway System.* New York, NY: Rand Institute.
- Clarke, R. (2008). Situational crime prevention. In R. Wortley, & L. Mazerolle (Eds.), *Environmental Criminology and Crime Analysis* (pp. 178-194). Cullompton: Willan Publishing.
- Clarke, R. (1983). Situational Crime Prevention: Its Theoretical Basis and Practical Scope. *Crime and Justice: An Annual Review of Research*, *4*, 225-256.
- Clarke, R. (1997). *Situational crime prevention:* successful case studies (2nd ed.). Guilderland: Harrow and Heston.
- Cornish, D., & Clarke, R. (2003). Opportunities, Precipitators and Criminal Decisions: A Reply to Wortley's Critique of Situational Crime Prevention. *Crime Prevention Studies*, 16, 41-96. (M. Smith, & D. Cornish, Eds.) Monsey: Criminal Justice Press.
- Cozens, P., & Love, T. (2015). A Review and Current Status of Crime Prevention through Environmental Design (CPTED). *Journal of Planning Literature*, 30 (4), 393-412.

- Crawford, A., & Evans, K. (2012). Crime prevention and community safety. In M. Maguire, R. Morgan, & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (5th ed., pp. 769-805). Oxford: Oxford University Press.
- Crowe, T. (1991). *Crime Prevention Through Environmental Design: Applications of Architectural Space Management Concepts.* Boston: Butterworth-Heinemann.
- Eck, J. (2002). Preventing crime at places. In L. Sherman, D. Farrington, B. Welsh, & D. MacKenzie (Eds.), *Evidence-Based Crime Prevention* (pp. 241-294). London: Routledge.
- Eck, J., & Guerette, R. (2012). Place-based crime prevention: theory, evidence and policy. In B. Welsh, & D. Farrington (Eds.), *Oxford Handbook of Crime Prevention*. Oxford: Oxford University Press.
- Eck, J., & Guerette, R. (2012). Place-Based Crime Prevention: Theory, Evidence, and Policy. In B. Welsh, & D. Farrington (Eds.), *The Oxford Handbook* of Crime Prevention (pp. 354-383). Oxford: Oxford University Press.
- Grove, L. E., Farrell, G., Farrington, D. P., Johnson, & D, S. (2012). *Preventing repeat victimization: A systematic review. Report prepared for the Swedish National Council for Crime Prevention.* Stockholm: The Swedish National Council for Crime Prevention.
- Guerette, R. (2009). The pull, push and expansion of situational crime prevention evalutaion: an appraisal of thirty-seven years of research. In J. Knutsson, & N. Tilley (Eds.), *Evaluating crime reduction initiatives: Crime Prevention Studies* (Vol. 24, pp. 29-58). Monsey: Criminal Justice.
- Guerette, R., & Bowers, K. (2009). Assessing the extent of crime displacement and diffusion of benefits: a review of situational crime prevention evaluations. *Criminology*, 47 (4), 1331-1368.
- H, S. R., & Kitchen, T. (2007). *Crime Prevention and the built environment.* London: Routledge.
- Hinkle, J., Weisburd, D., Famega, C., & Ready, J. (2013). The Problem is Not Just Sample Size: The Consequences of Low Base Rates in Policing Experiments in Smaller Cities. *Evaluation Review*, 37 (3/4), 213-238.
- Husain, S. (1990). *Neighbourhood Watch and Crime: An Assessment of Impact.* London: Police Foundation.
- Johnson, S., Guerette, R., & Bowers, K. (2014). Crime displacement: what we know, what we don't

- know, and what it means for crime reduction. *Journal of Experimental Criminology*, 10, 549-71.
- M, C. J., Lawless, M. W., & Stevenson, K. A. (1974). *The Impact of Police Activity on Subway Crime.* Santa Monica: Rand Corporation.
- Mayhew, P., Clarke, R., & Elliot, D. (1989). Motorcycle theft, helmet legislation and displacement. *The Howard Journal of Criminal Justice*, 28 (1).
- Mazerolle, L., Roehl, J., & Kadleck, C. (1998). Controlling social disorder using civil remedies: results from a randomized field experiment in Oakland, California. In L. Mazerolle, & J. Roehl (Eds.), *Crime Prevention Studies* (Vol. 9). Monsey, NY: Criminal Justice Press.
- Morgan, A., Boxall, H., Lindeman, K., & Anderson, J. (2012). *Effective crime prevention interventions for implementation by local government*. Canberra: Australian Institute of Criminology.
- Newman, O. (1972). *Defensible space. Crime prevention through urban design.* London: MacMillan.
- Pease, K. (1998). Repeat victimisation: Taking stock. Crime prevention and detection series paper 90. London: Home Office.
- Potter, R., & Thomas, R. (2001). *Engine Immobilisers: How Effective are They?* Adelaide: National Motor Vehicle Theft Reduction Council.
- Potter, R., Thomas, & R. (2001). *Engine Immobilisers: How Effective are They?* Adelaide: National Motor Vehicle Theft Reduction Council.
- Sherman, L., & Eck, J. (2002). Policing for crime prevention. In L. Sherman, D. Farrington, B. Welsh, & D. MacKenzie (Eds.), *Evidence-Based Crime Prevention*. New York: Routledge.
- Sidebottom, A., Tompson, L., Thornton, A., Bullock, K., Tilley, N., Bowers, K., et al. (2015). Gating Alleys to Reduce Crime: A Meta-Analysis and Realist Synthesis. *What Works: Crime Reduction Systematic Review Series*, 1.
- Smith, M., Clarke, R., & Pease, K. (2002). Anticipatory benefits in crime prevention. *Crime Prevention Studies*, 13, 71-88.
- Telep, C., & Weisburd, D. (2011). What is Known about the Effectiveness of Police Practices? Open Society Institute.
- Weisburd, D., & Eck, J. (2004). What can police do to reduce crime, disorder and fear? *Annals of the*

- American Academy of Political and Social Sciences , 593 (1).
- Weisburd, D., Lum, C., & Petrosino, A. (2001). Does Research Design Affect Study Outcomes in Criminal Justice? *Annals of the American Academy of Political and Social Sciences*, 578, 50-70.
- Weisburd, D., Telep, C., & Braga, A. (2010). *The Importance of Place in Policing: Empirical Evidence and Policy Recommendations*. Stockholm: Swedish National Council for Crime Prevention.
- Welsh, B. C., & Farrington, D. P. (2008b). Effects of closed circuit television surveillance on crime. *Campbell Systematic Reviews*, *4* (17).
- Welsh, B. C., & Farrington, D. P. (2008a). Effects of improved street lighting on crime. *Campbell Systematic Reviews*, 4 (13).
- Welsh, B. C., Farrington, D., & Taheri, S. (2015). Effectiveness and Social Costs of Public Area Surveillance for Crime Prevention. *Annual Review of Law and Social Science*, 11, 111-30.
- Welsh, B. (2011). Crime Prevention. In M. Tonry (Ed.), *The Oxford Handbook of Crime and Criminal Justice* (pp. 126-155). Oxford: Oxford University Press.
- Welsh, B., & Farrington, D. (2008c). Closed-Circuit Television Surveillance and Crime Prevention A Systematic Review. Stockholm: The Swedish National Council for Crime Prevention.
- Welsh, B., Farrington, D., & O'Dell, S. (2010). Effectiveness of Public Area Surveillance for Crime Prevention: Security Guards, Place Managers and Defensible Space. Stockholm: Swedish National Council for Crime Prevention.
- Welsh, B., Farrington, D., & O'Dell, S. (2011). *Effectiveness of Public Area Survellance for Crime Prevention: Secuity guards, place managers and defensible space.* Stockholm: Swedish National Council for Crime Prevention.
- Willis, C., Lybrand, S., & Bellamy, N. (2004). Alcohol ignition interlock programmes for reducing drink driving recidivism. *The Cochrane Library*, 2004 (3).

SUMMARY OF EFFECT SIZES FROM META-ANALYSES

Meta-analysis	Treatment type/population	Reported average effect size	Number of estimates meta-analysis based on	Percentage point reduction in offending (assuming 50% untreated recidivism)	Number needed to treat (assuming 50% untreated recidivism)
Bennett et al 2008	Neighbourhood watch	OR=1.36* (CI 1.15, 1.61)	18	8%	13
Welsh & Farrington 2008a	Street Lighting	OR = 1.27* (CI: 1.09, 147)	13	6%	17
Welsh & Farrington 2008b	CCTV	OR = 1.19* (CI: 1.08, 1.32)	41	4%	23
Grove et al 2012	Repeat victimization strategies	OR = 1.18* (CI: 1.07, 1.32)	27	4%	24
Sidebottom et al 2015	Alley gating (access control)	OR = 1.73* (CI: 1.21-2.48)	6	13%	7

^{*} Statistically significant at a 95% threshold

OR=Odds ratio

CI=Confidence interval