

## **Title: Designing Out Crime in Western Australia: A Systems Approach to Policy Development.**

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### ***Abstract***

Designing Out Crime is a system and a process for reducing both opportunities for crime and the fear of crime. These ideas, also known as crime prevention through environmental design (CPTED), form part of the Western Australian (WA) Government's Community Safety and Crime Prevention Strategy. Designing Out Crime is promoted by all other Australian States, as well as by the United Nations and the governments of North America, the UK, Europe, South Africa, Singapore, New Zealand and Chile among others.

Internationally, although most countries provide some policy guidance on designing out crime, it is largely piecemeal, uncoordinated, fragmented and dispersed across many policy areas, initiatives and departmental agendas. WA's Designing Out Crime Strategy (OCP, 2007) attempts to consolidate the multi-disciplinary and multi-agency dimensions and objectives of these ideas and adopted a systems approach to analysing and tackling this problem. The Designing Out Crime Strategy seeks to embed the ideas into relevant aspects of government policy, particularly the planning process. Essentially, it attempts to encourage policy-makers and practitioners to proactively 'think crime', in designing all 'products' – ranging from the design of cities, neighbourhoods and streets, to buildings and the spaces within them and ultimately to the 'products' which are placed within such spaces and bought and consumed by the community.

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## **Introduction**

In Australia, the financial costs of crime to the community have been estimated to be approximately \$32 billion per annum (Mayhew, 2003) and studies consistently reveal that sections of the community are fearful for their personal safety and the safety of their possessions when using or visiting the city (Johnson, 2005). Western Australia's (WA) population of around two million people is spread over one million square miles with about one and half million people living in the capital, Perth. The Government's planning vision for the future, Network City, estimates that 375,000 new homes will be required by 2031 and 60% will be built in existing urban areas (WAPC, 2004). This has obvious potential criminogenic implications for WA.

Crime prevention is no longer considered the sole responsibility of the police and it is recognized that government agencies, businesses and the community have a responsibility to actively seek to reduce crime and the fear of crime.

According to Elsworth (2002) although research and practice indicates that crime prevention is the most effective means of reducing crime, reactionary approaches to crime reduction, such as the Criminal Justice System (CJS), continue to dominate public policy. The CJS concentrates on punishing offenders after the commission of an offence and on rehabilitating them. It also encapsulates the idea that the threat of punishment can deter crime. However, the CJS appears largely ineffective as a system for rehabilitation and prison populations continue to expand (Home Office, 2000). This paper presents the background and brief overview of Designing Out Crime, also known as crime prevention through environmental design (CPTED). It also discusses the process and practicalities of embedding the ideas into mainstream public policy in WA. The Designing Out Crime policy development (OCP, 2007) adopted a systems approach to formulate a strategy with the objective of encouraging the use of designing out crime techniques and strategies in an interconnected way for the purpose of manipulating the opportunities for crime *before* they occur.

## **Crime Prevention**

According to America's National Crime Prevention Institute (NCIP) crime prevention "is the anticipation, recognition, and appraisal of a crime risk, and the initiation of some action to remove or reduce it". (NCIP, 1989). Crime prevention can be described in terms of three stages or levels – tertiary, primary and secondary.

Tertiary crime prevention focuses on the operation of the CJS and deals with offending after it has happened and is therefore reactionary. The primary focus is on intervention in the lives of known offenders in an attempt to prevent them re-offending. Examples include incarceration, community youth conferencing schemes, and individual deterrence through community-based sanctions and treatment interventions.

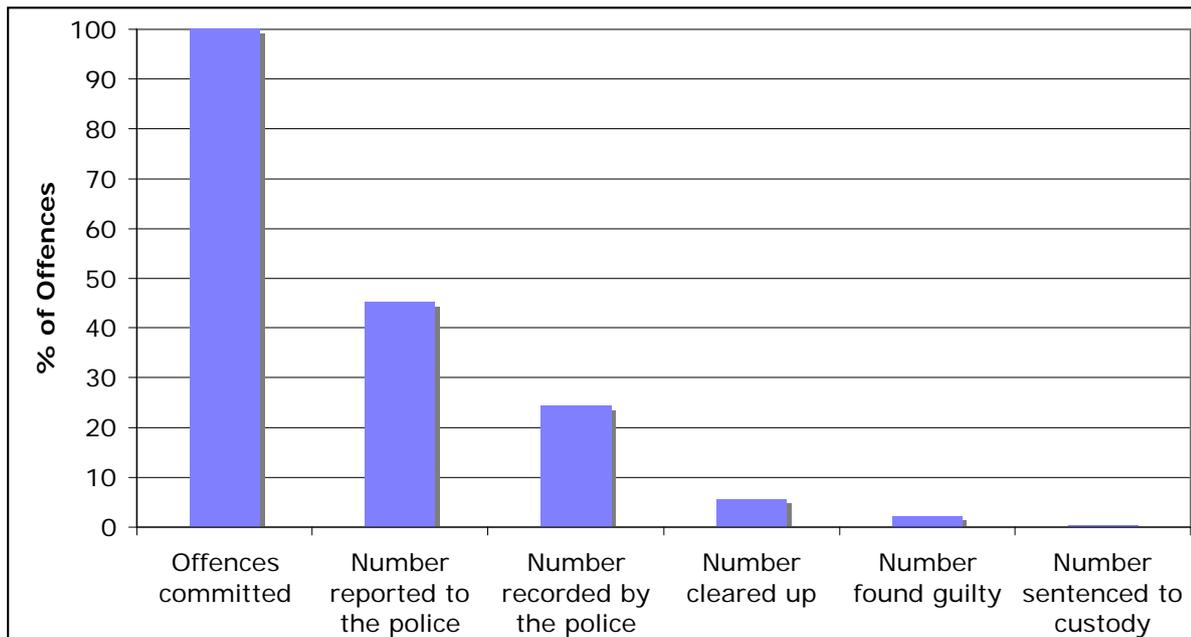
Primary crime prevention is more proactive and is directed at stopping the problem before it happens. This involves strengthening community and social structures by focusing on social factors that influence an individual's likelihood of committing a crime, such as poverty and unemployment, poor health and low educational performance. Examples of prevention include school-based programs (for example, truancy initiatives) as well as community-based programs (for example, local resident action groups which promote shared community ownership and guardianship). Primary crime prevention also focuses on situational measures for reducing opportunities for crime using the effective design, management and use of urban space and the products society uses.

Secondary crime prevention seeks to change people, typically those at high risk of embarking on a criminal career. The focus can be on rapid and effective early

interventions (for example, youth programs) and high-risk neighbourhoods (for example, neighbourhood dispute centres).

The CJS sets sanctions and punishments for offences, makes clear boundaries of acceptable and unacceptable behaviour and delivers retribution and justice, incarcerating the most dangerous criminals. However, although it is necessary, it may not be sufficient at controlling crime. As Table 1 clearly illustrates, around 1% of offences result in a prison sentence. Furthermore, a large proportion of offenders are not rehabilitated and subsequently re-offend. Indeed, the recidivism rate for the UK was estimated to be 58 per cent (Home Office, 2000).

**Table 1. Attrition in the UK Criminal Justice System**



Source: Home Office (1999) and Mirrlees-Black *et al.*, (1998).

In acknowledging the limits of the CJS, it is therefore necessary to pursue additional crime prevention approaches in order to reduce opportunities for crime and prevent offences from occurring in the first place. A systems approach to crime prevention would integrate tertiary, primary and secondary crime prevention approaches, in addition to considering many other factors and processes, and such as complex task has not thus far been attempted. However, the work of Jeffery (1971) among others, have attempted to think about crime using systems thinking, which transcends traditional disciplinary boundaries and could provides the basis for developing frameworks in which this might occur.

This paper focuses specifically on the problem of integrating the three key components of designing out crime (the design and management of urban space and product design) into a systematic strategy. As a distinct approach to reducing opportunities for crime, it is argued that integrating these dimensions to designing out crime can be enhanced using systems thinking.

**Designing Out Crime**

Designing Out Crime is a primary crime prevention process which asserts that “the proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime, and an improvement in the quality of life” (Crowe, 2000, p. 46). Designing Out Crime is a multi-disciplinary approach, located within the field of environmental criminology and draws on disciplines such as criminology, planning, public

health and environmental psychology (for a review see Cozens *et al.*, 2005; Cozens, 2008).

Many of the origins of Designing Out Crime derive from Jane Jacobs' *The Death and Life of Great American Cities* (1961) and Oscar Newman's *Defensible Space, People and Design in the Violent City* (Newman, 1973) where 'defensible space' is defined as: "...a surrogate term for the range of mechanisms; real and symbolic barriers, strongly-defined areas of influence, and improved opportunities for surveillance that combine to bring an environment under the control of its residents" (Newman, 1973, p2). The design of the built environment can reduce opportunities for crime by promoting passive and active surveillance and enhancing a sense of ownership. This is achieved by promoting intervisibility between buildings using street layout and building orientation. It also focuses on defining spaces using barriers (real and symbolic) and can include improvements to building security, fencing, surface treatments, foliage management and lighting levels.

The management of the built environment is also important to designing out crime. Neglected and poorly-managed spaces can transmit the message that citizens do not care about their environment and that offending is more acceptable. Vacant and derelict properties are associated with crime (Wilson and Kelling, 1982; Ross and Mirowsky, 1999) and poorly-managed and stigmatised areas are often more likely to be targeted by offenders and less likely to be defended by residents. The 'Broken Windows' theory (Wilson and Kelling, 1982) purports that failure to repair a single broken window in a building can lead to more vandalism and an escalation of crime problems due to a perceived lack of social control. Maintaining a positive image of the environment to support the community's capacity for self-policing is crucial. The maintenance of public space via the rapid repair of vandalism and removal of graffiti are examples of this component of designing out crime.

Products also have the capacity to become both targets and tools for crime. "Thinking crime" can help reduce opportunities for crime associated with certain products and many can be made less attractive to thieves by reducing their desirability as stolen goods. Vulnerable goods are 'CRAVED' in that they are 'Concealable', 'Removable', 'Available', 'Valuable', 'Enjoyable' and 'Disposable' (Clarke, 1999). Designing for the 'abuse' or 'mis-use' of products as well their potential use is another dimension to designing out crime (Lester, 2001; Cozens and Hills, 2003). Indeed, many studies have demonstrated how crime waves can be created by the arrival of new products and services, such as credit cards, mobile phones and automatic telling machines (Felson, 2002).

Research consistently underpins the assertion that the design (Poyner, 1993; Clarke, 1997; Eck, 2002; Cozens *et al.*, 2005) and management (Wilson and Kelling, 1982; Ross and Mirowsky, 1999; Cozens *et al.*, 2005) of the built environment and the design of products (Ekblom, 1997; Pease, 2001; Ekblom, 2005) can reduce opportunities for crime. For a review of this evidence see for example, Cozens (2005) and Cozens *et al.*, (2005).

However, few governments have attempted to integrate these three key dimensions of designing out crime into a comprehensive, systematic approach. For example, in the UK, designing out crime initiatives are supported by a range of planning policy guidance notes and Acts of Parliament including; Section 17 of the Crime and Disorder Act (1998). This asserts that "it shall be the duty of each authority to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all it reasonably can to prevent crime and disorder in its area" (Crime and Disorder Act, 1998, p3). However, how this outcome might be achieved is not explicitly stated within any comprehensive strategy in a systematic way. The Clean Neighbourhoods and Environment Act (1995) extends this duty beyond crime and disorder to include low-level anti-social behaviour and environmental crime (such as litter, graffiti, fly-posting, nuisance

vehicles and fly-tipping). Further support is derived from elements within the Environmental Protection Act (1990); the Police Reform Act (2002) and the Anti-Social Behaviour Act (2003).

Operationally, all UK police forces have now appointed a designated architectural liaison officer (ALO) or crime prevention design advisor (CPDA) to advise on designing out crime issues at the development proposal stage. Since the early 1990s, ALOs and CPDAs have been involved in the accreditation of Secured By Design (SBD) awards to developments that meet designing out crime principles which have successfully demonstrated reductions in crime (Armitage, 2000; Brown, 1999; Pascoe, 1999; Cozens *et al.*, 2007).

*Safer Places - The Planning System and Crime Prevention* (Office of the Deputy Prime Minister, 2004) represents a practical guide for planners, architects and developers and promotes a greater consideration for crime prevention. It focuses on seven key attributes of safe, sustainable environments, as shown in Table 1.

**Table 1. Seven Key Attributes of Safe, Sustainable Environments**

<b>Key Attributes</b>
1. Access and Movement: places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security
2. Structure: places that are structured so that different uses do not promote conflict
3. Surveillance: places where all publicly accessible spaces are overlooked
4. Ownership: places that promote a sense of ownership, respect, territorial responsibility and community
5. Physical Protection: places that incorporate necessary, well-designed security features
6. Activity: places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times
7. Management and Maintenance: places that are designed with management and maintenance in mind, to discourage crime in the present and the future

Source: Office of the Deputy Prime Minister (2004, p13).

The UK government's Design and Technology Alliance between government, prominent designers and the police promotes the idea that designing out crime is about the sustainable and innovative design of products, spaces and places to reduce opportunities for crime and enhance community safety and the quality of life. It forms part of a renewed commitment to designing out crime set out in the UK government's new crime prevention

strategy: Cutting Crime: A New Partnership 2008-2011 (Home Office, 2007). However, there is currently no systematic strategy to integrate the three key dimensions of designing out crime into an interconnected program.

The government in WA has developed a more obviously systematic themed approach to designing out crime and launched its Designing Out Crime Strategy in 2007 (see OCP, 2007; Cozens *et al.*, 2008).

### Systems Thinking

A brief definition of a system is *set of components interconnected for a defined purpose*. O'Connor and McDermott (1997) distinguish a system (interconnecting parts functioning as a whole) from a heap (a collection of parts) and the key elements are set out in Table 2, below. Clearly, developing an integrated designing out crime strategy using a systems approach has many potential benefits. The Strategy seeks to interconnect the three key dimensions to Designing Out Crime to enable improved implementation, monitoring and evaluation and to systematically reduce opportunities for crime.

**Table 2. A System or a Heap?**

<b>A system</b>	<b>A heap</b>
Interconnecting parts functioning as a whole	A collection of parts
Changed if you take away pieces or add more pieces. If you cut the system in half you do not get two smaller systems, but a damaged system that will not properly function.	Essential properties are unchanged whether you add or take away pieces when you halve a heap, you get two smaller heaps.
The arrangement of the pieces is crucial.	The arrangement of the pieces is irrelevant.
The parts are connected and work together.	The parts are not connected and can function separately.
Its behaviour depends on the total structure. Change the structure and the behaviour changes.	Its behaviour (if any) depends on its size or on the number of pieces in the heap.

(O'Connor and McDermott, 1997, p. 3)

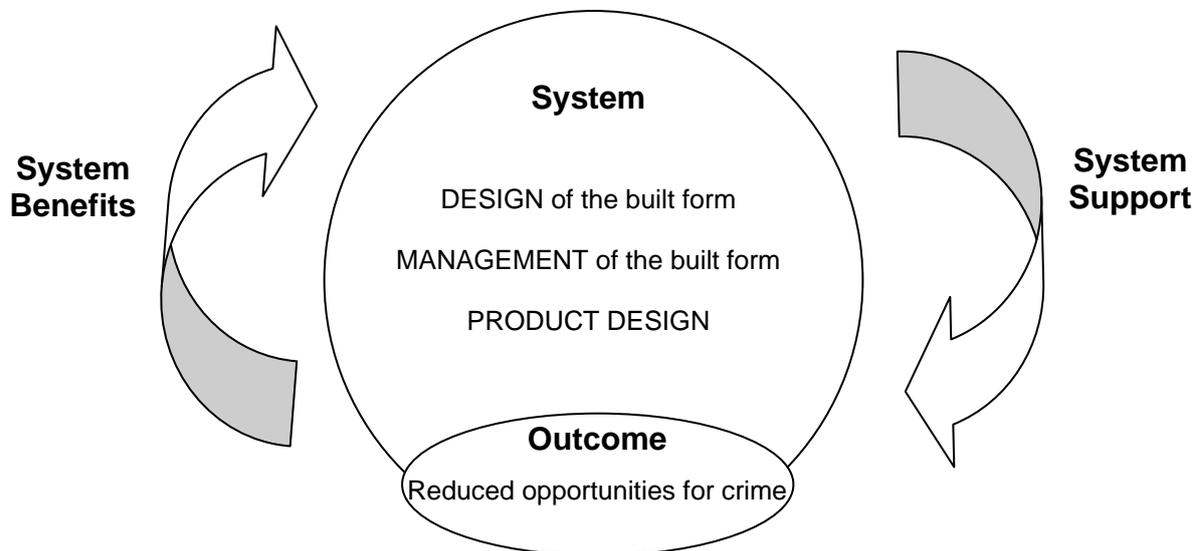
Although the three dimensions to designing out crime are often individually supported by governments, it is often in a disjointed and uncoordinated approach – which considers design, management and product design as a collection of unconnected parts, rather than as interconnecting parts functioning as a meaningful whole. The Designing Out Crime Strategy seeks to connect these dimensions to foster the design of products and the design and management of urban spaces to proactively reduce opportunities for crime *before* they occur. Embedding crime prevention requires a systems perspective (Ellsworth, 2002) which is different from the traditional methods of focusing on the individual components of what is being analysed.

Adopting a systems perspective to embed designing out crime requires the analysis of the whole planning system in WA and other public policies and processes that have an interest and relevance for designing out crime. As the systems process develops, it should

further contribute positively to the sustainability of outcomes by highlighting the support/benefit ratio (see Figure 1).

Indeed, Ellsworth, (2002, p14) notes “within a systems approach, sustainable outcomes are those that both contribute to and derive support from the system”.

**Figure 1. A Systems Approach**



Source: Adopted from Ellsworth, (2002, p.14).

Systems thinking operates by expanding its perspective to incorporate larger and larger numbers of interactions as the issue is being analysed. It is particularly successful in projects involving complex issues and those that depend on the action of others (Aronson, 1996). WA’s Designing Out Crime Steering Group is responsible for guiding the implementation of the Strategy and how it manages and coordinates stakeholder relationships and input will inevitably impact on the success, effectiveness and sustainability of the strategy.

### **The WA Designing Out Crime Strategy**

The WA State Community Safety and Crime Prevention Strategy, *Preventing Crime* (OCP, 2004) outlines five goals to make its communities safer. These include supporting families, children and young people; strengthening communities and revitalising neighbourhoods; targeting priority offences; reducing repeat offending; and designing out crime and using technology.

To achieve the goals of ‘strengthening communities and revitalising neighbourhoods’ and ‘designing out crime and using technology’ the OCP recruited key staff members to develop the State’s Designing Out Crime Strategy. The OCP adopted a systems perspective and an evidence-based approach, which involved a major review of the published findings from recent place-based crime prevention research (Cozens *et al.*, 2005). This foundation underpinned the development of the strategy.

A key objective of the Designing Out Crime Strategy is to ensure that reducing opportunities for crime within the built environment and against people’s possessions becomes a common practice. The Designing Out Crime Strategy was endorsed by government in October 2007 and has five key goals:

1. To embed Designing Out Crime principles within all relevant State and local planning

policies.

2. To manage the built and landscaped environment to reduce crime.
3. To increase understanding of Designing Out Crime.
4. To apply Designing Out Crime principles in a multi-agency approach.
5. To use product design and appropriate technologies to reduce crime.

The Strategy sets out an extensive list of actions to achieve each of these goals (see OCP, 2007; Cozens *et al.*, 2008). These range from the review of relevant State planning policies, strategies and instruments, providing training and assistance to local government in developing local Designing Out Crime policies for town planning schemes, ensuring that public spaces consider design issues that contribute to crime and are adequately illuminated and well-managed, a Graffiti Vandalism Reduction Strategy, developing incentives and exploring options to ensure property owners effectively manage and maintain their properties and reduce the number of vacant and derelict buildings, developing risk assessment tools, improving the utility and accessibility of recorded crime data for use at the local level for spatial and geographical analysis, establishing inter-departmental partnerships with key stakeholders and developing Designing Out Crime initiatives for emerging problems. Actions also include developing policy to minimise opportunities for crime in the design of products and developing CCTV standards and guidelines for the installation, implementation and operation of CCTV.

This systematic approach has thus far resulted in the development of Designing Out Crime Planning Guidelines (WAPC, 2006a) and the supporting Designing Out Crime Planning Bulletin No. 79 (WAPC, 2006b) in partnership with the Western Australian Planning Commission (WAPC). The existing designing out crime dimensions to a range of planning policies (including the State Planning Strategy and the State Sustainability Strategy) will also be strengthened and all relevant Statements of Planning Policy (SPPs) prepared and adopted by the WAPC “will provide more explicit explanation and reference to Designing Out Crime principles” (OCP, 2007, p32). Furthermore, “WAPC policy on Regional Strategies, Regional and Sub-regional Structure Plans, Strategic Policies and Operational Policies will also reflect the Government’s commitment to Designing Out Crime” (OCP, 2007, p32). Various research projects have also been funded to investigate specific elements of designing out crime in WA (e.g. see Love and Cozens, 2008). Such commitment can assist in providing guidance to those responsible for planning for the estimated 375,000 new homes (and additional services) and potentially encourage the development of safer and more sustainable communities in which the quality of life is enhanced.

Indeed, sustainable communities are safe communities and the fear of crime can significantly undermine sustainability (Du Plessis, 1999). The links between sustainable development and designing out crime have been recently highlighted (eg. Cozens, 2002; Dewberry, 2003; Office of the Deputy Prime Minister, 2004; Cozens, 2007a) and it also has the potential advantage of enhancing public health (Cozens, 2007b).

## **Conclusions**

The adoption of a systems approach to designing out crime policy has provided those responsible for progressing designing out crime in WA with some key levers and processes in the public policy debate with which to embed such ideas into the State’s planning system and public policy frameworks. This approach increases the potential longevity of designing out crime thinking amidst the ebb and flows of the political cycle and also provides a systematic strategic direction, objectives and goals in an interconnected

way. The Designing Out Crime Strategy is a plan for action, which is arguably more systematic than any current Australian or international policy statement. Indeed, Paul Ekblom, a former advisor to the UK's Home Office, has praised the Strategy as being "very professional and impressive with clear rational principles...[and] we [the UK] are far behind on the ideas of embedding set out in these publications (Ekblom, 2008)".

The scope and scale of the Designing Out Crime Strategy is systematic, targeted and optimistic, and it will be intriguing to monitor how the vision is implemented and evaluated. The systems approach to developing policy should arguably be underpinned by a systems approach to implementation and action. Ultimately, only time will tell whether the frameworks, resources and partnerships develop to facilitate further progress from systems thinking to systems action. The recent State elections in WA resulted in a change of government in September 2008, and the Liberal Party are now in office. Although designing out crime approaches are attractive to politicians across the ideological spectrum (Smith, 1987) it will be interesting to monitor both the extent of government support for the Designing Out Crime Strategy (if any) and the future for the systems thinking which underpinned its development.

ENDS 3,402 words

## References

- Armitage, R. (2000), An Evaluation of Secured by Design Within West Yorkshire, Home Office Briefing Note 7/00, Crown Copyright, London.
- Aronson, D. (1996), *Overview of Systems Thinking*.  
[http://www.thinking.net/Systems\\_Thinking/OverviewSTarticle.pdf](http://www.thinking.net/Systems_Thinking/OverviewSTarticle.pdf) Site visited 13.07.05
- Brown, J. (1999), An Evaluation of the Secured by Design Initiative in Gwent, South Wales, MSc Dissertation, Scarman Centre for the Study of Public Order. University of Leicester, Leicester.
- Clarke, R. (1999), Hot Products: Understanding, Anticipating and Reducing Demand for Stolen Goods. Stolen Goods, *Police Research Series Paper 112*, London: Home Office.
- Clarke, R. (ed) (1997), *Situational Crime Prevention: Successful Case Studies*. Albany, New York: Harrow and Heston.
- Cozens P and Hills J. (2003), Form, Function and Dysfunction: Designing for Use and Mis-use. *Journal of Ergonomics in Design*. Winter, Volume 11, No.1, pp12-16.
- Cozens, P. (2002), Sustainable Urban Development and Crime Prevention Through Environmental Design for the British City. Towards an Effective Urban Environmentalism for the 21st Century. *Cities: The International Journal of Urban Policy and Planning*. Volume 19 Number 2, pp129-137.
- Cozens, P. (2005), Designing Out Crime - From Evidence to Action. *Delivering Crime Prevention: Making the Evidence Work*. Australian Institute of Criminology and the Attorney-General's NSW Department. Carlton Crest Hotel Sydney, 21-22 November 2005. <http://www.aic.gov.au/conferences/2005-cp/cozens.html>.
- Cozens, P. (2007a), Planning, Crime and Urban Sustainability, pp.187-196. In *Sustainable Development and Planning III. Volume 1, WIT Transactions on Ecology and the Environment*, (Eds.) Kungolas, A., Brebbia, C. and Beriatos, E. WIT Press, Southampton. Online:  
<http://library.witpress.com/pages/PaperInfo.asp?PaperID=17257>
- Cozens, P. (2008), Crime Prevention Through Environmental Design (CPTED); Origins, Concepts, Current Status and Future Directions in Wortley, R., Mazerolle, L. and Rombouts, S. (Eds.) *Environmental Criminology and Crime Analysis*. Willan Publishing, Devon, UK. Chapter 9 pages to be advised.
- Cozens, P., Pascoe, T. and Hillier, D. (2007), Critically Reviewing the Theory and Practice of Secured-by-design for Residential New-build Housing in Britain. Chapter 20, pp345-361. In (Ed). Mawby, R. *Burglary: The International Library of Criminology, Criminal Justice and Penology - Second Series*. Ashgate Publishers Limited, Hampshire.
- Cozens, P., Saville, G. and Hillier, D. (2005), Crime Prevention Through Environmental Design (CPTED): A Review and Modern Bibliography. *Journal of Property Management*. Volume 23, Issue 5, pp328-356.
- Cozens, P.M. (2007b). Public Health and the Potential Benefits of Crime Prevention Through Environmental Design. *The NSW Public Health Bulletin*, 18 (11-12), pp232-237. Online:  
<http://www.publish.csiro.au/nid/226/issue/4094.htm>.
- Cozens, P.M., Thorn, M. and Hillier, D. (2008), Designing Out Crime in Western Australia: A Case Study. *Property Management*. Volume 26(5), pp???
- Crime and Disorder Act Section 17 (1998), Online at:  
[http://www.opsi.gov.uk/acts/acts1998/ukpga\\_19980037\\_en\\_3#pt1-ch1-pb4-l1g17](http://www.opsi.gov.uk/acts/acts1998/ukpga_19980037_en_3#pt1-ch1-pb4-l1g17)
- Crowe, T. (2000), *Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts* ( 2nd Edition). Butterworth-Heinemann. Oxford.
- Department of the Environment. (1994), *Planning Out Crime Circular 5/94*. Home Office, London.
- Dewberry, E. (2003), Designing Out Crime: Insights from Eco-Design, *Security Journal* 16, pp. 51-62.
- Du Plessis, C. (1999), The Links Between Crime Prevention and Sustainable Development, *Open House International*, Vol. 24 No. 1, pp. 33-40.
- Eck, J. (2002), Preventing Crime at Places. In Sherman, L., Farrington, D.P., Welsh, B and Mackenzie, D. (Eds.). *Evidence-Based Crime Prevention*, pp9241-294. Routledge, London and New York.
- Eklblom, P. (1997), Gearing Up Against Crime: A Dynamic Framework to Help Designers Keep Up with the Adaptive Criminal in a Changing World, *International Journal of Risk, Security and Crime Prevention* 2(4), pp. 249-265.

- Ekblom, P. (2005), Designing products against crime. In N. Tilley (ed.) *Handbook of Crime Prevention and Community Safety*, Willan Publishing, Cullompton, UK.
- Ekblom, P. (2008), Personal communication via email, received Tuesday, 8 January, 9:24pm.
- Ellsworth, J. (2002), Embedding Prevention in Policy and Practice. Report on the National Crime Prevention Council's Conference of State Partners. April 14-16, Phoenix, Arizona.
- Felson, M. (2002), *Crime and Everyday Life*. Sage, Thousand Oaks, CA.
- Jacobs J. (1961). *The Death and Life of Great American Cities*. Vintage Books, New York.
- Home Office. (2000), *Criminal Statistics, England and Wales*, Government Statistical Service, London.
- Home Office. (2007), *Cutting Crime: A New Partnership 2008–2011*. Crown Copyright, Home Office, London
- Home Office. 1999. *Criminal Statistics: England and Wales*. Stationery Office: London.
- Jeffery, C. (1971), (revised 1977), *Crime Prevention through Environmental Design*, Sage Publications, Beverly Hills, CA.
- Johnson H. (2005), Crime Victimization in Australia: Key Results of the 2004 International Crime Victimization Survey. *Research and Public Policy Series No. 64*. Canberra: Australian Institute of Criminology. Online at: <http://www.aic.gov.au/publications/rpp/64/rpp64.pdf>, accessed 22 June 2006.
- Lester A. (2001), Crime Reduction Through Product Design. *Trends and Issues in Crime and Criminal Justice No. 206*. Australian Institute of Criminology, Canberra.
- Love, T. and Cozens P. (2008), *Improving Pedestrian Access Way Planning Using Designing Out Crime*. Planning and Transport Research Centre (PaTReC) Research Forum Thursday, 2 October 2008 Edith Cowan University, Joondalup. Available online at <http://www.patrec.org/publications/index.php>.
- Mayhew P. (2003), Counting the Costs of Crime in Australia. *Australian Institute of Criminology Trends and Issues No. 247*. Canberra: AIC.
- Mirrlees-Black, C., Budd, T., Partridge, S. and Mayhew, P. (1998), *The 1998 British Crime Survey. Home Office Statistical Bulletin 21/98*. Home Office: London.
- National Crime Prevention Institute. (1989), *National Crime Prevention Institute Course Notebook*, pp2-3, University of Louisville, Louisville, Kentucky.
- Newman, O. (1973), *Defensible Space People and Design in the Violent City*, Architectural Press, London.
- O'Connor, J. and McDermott, I. (1997), *The Art of Systems Thinking*, London, Thorsons.
- Office of Crime Prevention. (2004), *Prevention Crime: State Community Safety and Crime Prevention Strategy*. Department of Premier and Cabinet, Perth, WA.
- Office of Crime Prevention. (2007), *State Designing Out Crime Strategy: A Journey From Common Sense to Common Practice*. Office of Crime Prevention, Perth, WA. Online at <http://www.crimeprevention.wa.gov.au>
- Office of the Deputy Prime Minister. (2004), *Places: The Planning System and Crime Prevention* (Office of the Deputy Prime Minister, Home Office, London).
- Pascoe, T. (1999), *Evaluation of Secured by Design in Public Sector Housing. Final Report*, BRE, Watford.
- Pease, K. (2001), *Cracking Crime through Design*, Design Council, London.
- Poyner, B. (1993), What Works in Crime Prevention: An Overview of Evaluations. In Clarke, R. (Ed.), *Crime Prevention Studies Volume 1*. Criminal Justice Press, Monsey, New York.
- Ross, C.E. and Mirowsky, J. (1999), Disorder and Decay: The Concept and Measurement of Perceived Neighbourhood Disorder. *Urban Affairs Review*. Volume 34, No.3, pp412-432.
- Smith, S. (1987), Designing Against Crime? Beyond the Rhetoric of Residential Crime Prevention. *Property Management*. Volume 5 (2), pp146-150.
- WAPC. (2004), *Network City: Community Planning Strategy for Perth and Peel*. Western Australian Planning Commission.
- WAPC. (2006a), *Designing Out Crime Guidelines*. Western Australian Planning Commission, Perth. [www.wapc.wa.gov.au](http://www.wapc.wa.gov.au)..
- WAPC. (2006b), *Designing Out Crime Planning Bulletin No.79*. Western Australian Planning Commission, Perth. [www.wapc.wa.gov.au](http://www.wapc.wa.gov.au).

Wilson, J. and Kelling, G. (1982), Broken Windows: The Police and Neighbourhood Safety. *The Atlantic Monthly*, Volume 3 No. 2, pp. 29-38.