A comparative analysis of crime risk assessments and their application in Greater Manchester (England) and New South Wales (Australia)

LEANNE MONCHUK and GARNER CLANCEY

Abstract. *While the principles of crime prevention through environmental design (CPTED) are well documented and feature in design and planning documents, they are still not typically considered and successfully incorporated in the design and planning of a new development. Failure to incorporate the principles of CPTED in the initial design of a development can delay the planning application if later changes are required, impact on crime if left unattended and impact negatively upon the aesthetics of the development if retrospective crime prevention measures are required.*

This paper describes how attempts have been made to embed the principles of CPTED into the planning process in Greater Manchester (England) and New South Wales (Australia). It will outline the mechanisms these two jurisdictions have adopted namely the Crime Impact Statement (Greater Manchester) and the Crime Risk Assessment (New South Wales) and will provide a critical analysis of the similarities and differences between the two approaches. Through this comparative analysis, key positive features from each approach will be identified, leading to the identification of potential ways forward in embedding CPTED into design and planning processes.

INTRODUCTION

Although evidence suggests that the design of the built environment can contribute to crime and disorder[i], it is argued that this evidence is rarely considered by those involved in the design and planning of new developments (such as residential, commercial and mixed use developments). A failure to consider crime and disorder at the planning stage can result in the creation of developments which subsequently require regular policing, the installation of retrospective security measures or a complete redesign of the area in an attempt to curtail further issues. As Schneider and Kitchen (2007) describe, failing to carefully consider what impact design can have upon crime can be an expensive omission and '...it is surely better (and in the long term, much cheaper) to produce a safe and secure environment at the first time of asking than it is to have to remodel a built environment where the experience of living or working in it has been a negative one from a crime perspective' (p. 2). This is also reiterated more recently by the work of Pease and Gill (2011) who summarise that the 'crime consequences of poor design of residential developments are there for the long term' (p.6).

It is therefore imperative that the design of a development (from its initial design and layout, to the physical security of individual dwellings[ii]) is carefully considered from the outset. However, as highlighted by Schneider and Kitchen (2007), there are a number of factors which need to be considered in urban design, crime being only one. Planning is a complex process and often involves a multitude of different agencies, such as those responsible for traffic engineering for example. One could therefore argue that engaging and involving those responsible for crime prevention is

unnecessary and can further delay the already complicated and lengthy planning process (Local Housing Delivery Group, 2012). Nevertheless, those responsible for crime prevention are often frustrated that built environment professionals typically fail to consider the effects their design may have on crime and disorder.

Similarly, one could argue that built environment professionals may be reluctant to amend a proposed design based simply upon a prediction of risk as to what *might* happen should the development be built.

Attempts to embed processes enabling crime and disorder risks to be considered during the design and planning process will be considered here.

ASSESSING CRIME RISKS IN THE BUILT ENVIRONMENT

Attempting to predict and consequently avert potential risks is a well established concept which has permeated the criminal justice system (and wider institutions) in a variety of forms (see Beck, 1992; Simon, 2007; O'Malley, 2010; Walklate & Mythen, 2011). Within the field of CPTED, risk assessment tools have been developed to help those involved in the design of residential developments assess and modify their proposed design against factors which, based upon previous evidence, can facilitate crime and disorder. Such examples of environmental risk assessment tools include the environmental risk index developed by Winchester and Jackson (1982) and the Burgess checklist developed by Armitage (2006). Other procedures now also operate in attempt to assess the crime risks of proposed developments.

This paper reports on two mechanisms (Crime Impact Statements – Greater Manchester and Crime Risk Assessments – New South Wales). These mechanisms aim to embed the principles of CPTED early into the design process to attempt to design in security from the outset.

Prior to outlining each mechanism, it is pertinent to highlight a number of important factors which may help contextualise the two areas selected for comparison. The areas which are being compared are not comparable in terms of size or density. The conurbation of Greater Manchester covers a geographical area of approximately 1276 square kilometres, comprises of ten local authorities and has an approximate population of 2.5 million. In comparison, New South Wales is one of six Australian states, covering a geographical area of approximately 802,000 square kilometres, comprising of 152 local authorities (which are all planning consent authorities) and an approximate population of 7.3 million – one third of the Australian population (NSW Government, 2012).

These two areas have been chosen as the vehicles for this comparative paper because each of the authors has conducted (and continue to conduct) research in their respective jurisdiction on the use of Crime Impact Statements and Crime Risk Assessments. Moreover, as described in a subsequent part of this paper, at the time of writing the mechanism through which Crime Impact Statements are embedded into the planning process in Greater Manchester is, in many respects, very atypical when

compared to others areas of England and Wales whereas in New South Wales, the compilation of a Crime Risk Assessment is a requirement across the State. Thus, the compilation of a paper which compares and contrasts these approaches seemed appropriate for inclusion in this journal given its international and comparative focus.

THE IMPORTANCE OF DESIGNING OUT CRIME IN ENGLAND AND WALES

The importance of designing *out* crime and designing *in* crime prevention has been documented, albeit in some instances briefly, in a number of government planning guidance documents (OPDM, 2004; OPDM, 2005a; DCLG, 2009 for example). However, the planning system in England is currently undergoing a multitude of changes in an attempt to make the planning process a more effective and less time consuming exercise. The publication of the National Planning Policy Framework (DCLG, 2012) aims to condense numerous planning advice and guidance documents into a single, stand-alone document encompassing fifty-nine pages. Nevertheless, reference to the importance of considering and incorporating crime prevention into the design of new developments has remained and the framework states that planning policies:

> 'should aim to ensure that developments create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion (DCLG, 2012 p.15).

Although the importance of considering the impact design can have on crime and disorder is documented in the National Planning Policy Framework, the mechanisms through which this policy is translated into practice are absent. While Section 17 of the Crime and Disorder Act 1998 states each local authority should '...do all that it reasonably can to prevent, crime and disorder in its area' (HMSO, 1998), at present there is no legal requirement stipulating that crime and disorder must be considered in the design and planning of new developments. Those whose role it is to deliver crime prevention across England and Wales are referred to as Architectural Liaison Officers (ALOs) or Crime Prevention Design Advisors (CPDAs)[iii] and at the time of writing, there is at least one ALO working in each of the forty three police forces in England and Wales. ALOs are not a named statutory consultee in the planning process. Thus, it is not a legislative requirement their advice is sought on proposed planning applications and for many ALOs, this is a frustration. In their comprehensive evaluation of the role of ALOs, Wootton *et al* (2009) recommended that ALOs should seek to gain statutory consultee status. As Wootton *et al* (2009) state, 'there is a strong belief amongst ALOs that more legislative leverage is required for the ALO to be involved earlier in the planning process' (p. 82).

Gaining statutory consultee status would help to ensure that the principles of CPTED are considered earlier in the design and planning process. However, as a result of the Comprehensive Spending Review (CSR) and the subsequent planned twenty percent reduction in policing budgets by 2014/15 (HM Treasury, 2010) the role of ALOs are viewed as one resource which can be reduced, or even removed to help make these savings. This can be evidenced by reviewing the number of ALOs in post

over the past three years. In January 2009, Wootton *et al* (2009) report that there were approximately 347 ALOs across England and Wales, this decreased to approximately 305 in August 2009 and a recent review reveals that as of August 2012, there are less than 200 ALOs in post (Monchuk, forthcoming). Thus, if it was decided that ALOs were to obtain statutory consultee status in the immediate future, one must question whether there is the resource to meet and satisfy the demand. One must also question whether the introduction of additional statutory consultees (such as the police) would be logical when attempts are being made to make the planning process easier and less bureaucratic.

The decision to reduce costs by reducing the number of ALOs is, it could be argued, short sighted. Designing out opportunities for crime and disorder at the drawing stage, could potentially save the cost of having to police a crime ridden area in the future. Surely this would be a more sustainable and cost effective means of policing in the long term? However, one issue which plagues this arena is that the benefits of designing out crime cannot be viewed immediately. It may take a considerable amount of time from the planning permission being granted to the development actually being built and resided in before any benefits can be assessed. It is also important to consider the quality of the lives of residents living in homes which are poorly designed and which may be more vulnerable to burglary (Maguire, 1980; Brown & Harris, 1989; Beaton *et al*, 2000).

As ALOs are not statutory consultees, the way in which they currently try to engage with the planning system is ad-hoc. Typically, a protocol is developed between the relevant ALO and the Local Planning Authority (LPA) outlining the criteria for applications which the ALO will review and comment on (e.g. ten residential dwellings or more) (Kitchen & Morton, 2005; Wootton *et al*, 2009). However, many argue that this is too late in the design and planning process - the opportunity for designing out crime is reduced and often the advice provided by the ALO at this late stage is ignored.

In an attempt to become involved earlier in the process, Greater Manchester Police (GMP) along with the LPAs across Greater Manchester has stipulated that crime and disorder must be considered prior to the submission of a planning application.

Crime Impact Statements (Greater Manchester)

When seeking planning permission, a number of documents are required to be submitted to the LPA and these are outlined in each LPAs 'validation checklist'. The documents which are required to accompany the planning application include i) national requirements and ii) local requirements. The OPDM (2005b) outline that national requirements are:

> 'suggested compulsory requirements including some matters that are required by law in any event and other matters that this best practice guidance suggests local planning authorities may generally wish to require in all cases' (p.9).

In addition to national requirements, the validation checklist also allows LPAs to list any *local* requirements which may be specific to the area covered by the LPA. If the applicant fails to provide any information listed in the validation checklist (whether a national requirement or a local requirement) the LPA are able to invalidate the application.

The conurbation of Greater Manchester comprises of ten LPAs[iv]. For each of these LPAs, attempting to incorporate the key elements of CPTED into the initial design and layout of proposed development (whether residential, commercial or mixed use) is a key consideration. In conjunction with GMP, each of the ten LPAs stipulates that any major planning application must be accompanied with a Crime Impact Statement (CIS). This stipulation is one of the local requirements outlined in each of the LPAs validation checklists. Failure to submit a CIS can invalidate the planning application.

The CIS was introduced in 2006 by GMP. The aim of a CIS is to identify, predict, evaluate and mitigate the crime and disorder effects of a development proposal early in the design process. As stated above, a common frustration amongst those whose role it is to prevent crime is that often crime is not considered in the design and planning process. The CIS is a mechanism which ensures that those wishing to develop across Greater Manchester consider the impact design may have on crime and disorder. Thus, it aims to engage crime prevention specialists at the concept or design stage to highlight any potential design features which may facilitate crime and disorder once the development has been built.

The CIS represents a process which leads to the formation of a document referred to as the 'Crime Impact Statement'. Although a document is produced, ultimately it is the result of a series of processes which is of importance. These processes include reviewing architectural plans and liaising with relevant design personnel. Through these discussions, changes to the intended development can be made. The CIS document captures some of these processes, as well as including detailed information about local crime and disorder etc.

The CIS process is the key mechanism through which GMP and the ten LPAs across Manchester attempt to incorporate the principles of CPTED into the design and planning process.

Within each validation checklist, there is set criterion outlining the types of developments which would require a CIS. This generally comprises of the following[v]:

- Residential development (comprising of ten or more dwellings);
- Office/Industrial/Warehousing (where 500sqm gross of floor space is created);
- Retail (where 500sqm gross of floor space is created);
- Community facilities (e.g. schools or hospitals);
- Leisure/Recreation;
- Other commercials (e.g. hot food takeaways) and

- Transport infrastructure (e.g. tram stations).

THE IMPORTANCE OF DESIGNING OUT CRIME IN NEW SOUTH WALES (AUSTRALIA)

At the time of writing the NSW planning system is undergoing an extensive review. Based on initial documentation emanating from this review, there are likely to be substantial changes to the NSW planning system in the coming years. Consequently, the information provided reflects existing arrangements in April 2012. Given that the impetus for this review is partly due to the complexity of the planning system, it is difficult to provide a simple and accurate overview of the planning regimes operating in NSW. Only a broad overview will be provided here, with more specific detail provided in relation to the key elements that relate to CPTED.

As it stands, the development of land in NSW is essentially governed by the *Environmental Planning and Assessment Act 1979 (NSW)*. This Act has numerous objectives, including the 'promotion and co-ordination of the orderly and economic use and development of land' (s5.a.ii). To achieve this, the Act classifies development in three ways:

- Development that does not need consent;
- Development that needs consent and
- Development that is prohibited (Gurran, 2007, p. 242).

Development that needs consent requires the submission of a development application to a consent authority. For the sake of simplicity, there are two major consent authorities in NSW – local and State government. The 152 local councils have responsibility for approving various developments within their boundaries. The State government has traditionally assumed responsibility for developments of 'state significance'. While this has changed recently, this broad distinction still largely holds true. While it is likely that there will be changes to the current planning system, consent authorities will continue to be responsible for approving the development/re-development of land and planning controls will continue to guide development.

Similar to the case in England and Wales, various planning controls need to be satisfied before consent is granted for any development. Planning controls that must be satisfied will vary depending upon the nature and location of the development. In general terms, conditions of the *Environmental Planning and Assessment Act* will need to be addressed, as will relevant requirements of the various layers of planning policies. These include, for example, State Environmental Planning Policies (SEPPs), Local Environmental Policies (LEPs) and Development Control Plans (DCPs). Together, these planning controls will set restrictions on the nature, size, type, function, and environmental impact of the proposed development.

Crime Risk Assessments (New South Wales)

One consideration within the plethora of planning controls is assessment of crime risks. In April 2001, the then Department of Urban Affairs and Planning (DUAP) introduced *Crime prevention and the assessment of development applications: Guidelines under section 79c of the Environmental Planning and Assessment Act 1979.* These guidelines, which comprise of only five pages of text, were intended to 'help councils [i.e. local government authorities] identify crime risk and minimize opportunities for crime through the appropriate assessment of development proposals' (DUAP, 2001 p. 1). The guidelines suggest that 'councils have an obligation to ensure that a development provides safety and security to users and the community' (DUAP, 2001 p. 2). Where a development presents a crime risk, the 'guidelines can be used to justify:

- Modification of the development to minimize the risk of crime; or
- Refusal of the development on the grounds that crime risk cannot be appropriately minimized' (DUAP, 2001 p. 2).

The guidelines contain two parts – Part A describes a crime risk assessment (one page), while Part B outlines key crime prevention through environmental design (CPTED) principles (two pages). Councils should consider the principles outlined in Part B when assessing all developments.

Part A defines a crime risk assessment as being a 'systematic evaluation of the potential for crime in an area. It provides an indication of both the likely magnitude of crime and likely crime type. The consideration of these dimensions (crime amount and types) will determine the choice and appropriate mix of CPTED strategies' (DUAP, 2001 p. 3). The guidelines then state that there are two key steps when assessing crime risk: i) 'obtain an understanding of the crime risk of the area, and if required ii) apply (CPTED) treatments that correspond with levels of risk present in the area' (DUAP, 200 1p. 3). It is the stated that 'These guidelines outline how councils are to assess crime risk in local developments. They are not sufficient in themselves, however, to inform councils how to conduct crime risk assessments. To gain a detailed understanding of how to conduct crime risk assessments and how to apply CPTED, *council planners need to attend approved training courses*' (emphasis in original) (DUAP, 2001 p. 3).

Formal crime risk assessments will be required for any development posing crime risks (in the council's opinion) and would include 'a new/refurbished shopping centre or transport interchange, a large scale residential development (more than twenty dwellings), or the development/re-development of a mall or other public place, including the installation of new street furniture' (DUAP, 2001 p.2). The guidelines encourage councils and police to develop a local consultation protocol stipulating which developments would require a formal crime risk assessment and state that 'typically, crime risk assessments are conducted in cooperation with trained local police' (DUAP, 2001 p. 2).

Beyond this guidance, the guidelines also suggest that 'when conducting individual crime risk assessments, the consequences and likelihood of crime are identified and measured using recorded crime statistics, hotspot analyses and Australian Bureau of Statistics (ABS) socio-economic data' (DUAP, 2001 p. 3). This is in effect, the total direction provided in relation to crime risk assessments.

Part B of the guidelines essentially provides definitions and examples of the four CPTED principles that need to be used in the assessment of development applications to minimise the opportunity for crime (DUAP, 2001 p. 4). These principles are surveillance, access control, territorial reinforcement and space management.

While these guidelines are the major instrument ensuring that crime risks are considered during the review of development applications, a number of councils have produced Development Control Plans (DCPs) that specifically address CPTED considerations. In these areas, not only should the s79c guidelines be addressed, but so to should the CPTED DCP. Many of the DCPs produced by local councils in NSW are more comprehensive than the actual s79c guidelines.

This paper will review a number of pertinent themes surrounding the creation of the CIS' and CRAs in Greater Manchester and NSW including: who is responsible for compiling the reports; what is data/information is included within the documents and whether crime data is used to assess the potential risk of the proposed development from a crime and disorder perspective. At the time of writing, a comprehensive evaluation of GMP DFSC is being undertaken by one of the authors. Although this paper does not present any direct findings from this evaluation, it does provide a contextual review regarding the process in place at GMP DFSC and raises a number of points for consideration. The second author however, has undertaken a number of small evaluations reviewing the use of CRAs in NSW, thus where relevant these findings are referred.

WHO COMPILES THE CIS' AND CRAs?

Greater Manchester

The majority of CIS' which are submitted to LPAs across Greater Manchester are compiled by Greater Manchester Police Design for Security Consultancy (GMP DFSC). GMP DFSC describe themselves as 'a design-led crime prevention consultancy based within Greater Manchester Police' (www.designforsecurity.org). Obviously, owing to the knowledge the police possess about crime and those who commit crime, it seems rational that the police are best placed to author documents which assessing crime risks. It is also important to note that the police are also independent of the design and planning process and have no vested interest in whether a development is built or not. Their primary concern is relates to what impact the development may have upon local crime and disorder once it is built. They are therefore attempting to prevent crime from occurring in the first instance, the fundamental principle underpinning the creation of the police, opposed to reacting to incidents of crime once it has occurred (Lentz & Chaires, 2007).

Unlike many police forces in England and Wales, those delivering designing out crime advice in GMP are not warranted police officers or individuals with policing experience. At the time of writing, there are a total of six Design for Security consultants employed by GMP who are all located at GMP Headquarters. Each of these consultants has been recruited from a built environment background (such as planning or architecture). Thus, they do not have any operational policing experience – something which is often identified as a criticism and is atypical when compared to the majority of other forces in England and Wales[vi]. Nevertheless, a recent review of ALOs (Monchuk, forthcoming) has revealed that in an attempt to reduce resources, the role of an ALO is increasingly becoming civilianised. For example, ALOs who are serving police officers are often being redeployed to frontline policing with the vacant ALO role filled by police civilian staff, often with neither policing nor built environment experience.

As outlined earlier, all of the LPAs stipulate that a CIS must accompany a planning application. However, there is some variation across the LPAs regarding who should compile the CIS. For example, two LPAs (Salford and Rochdale) specify that a CIS *must* be compiled by GMP DFSC and that CIS' which have been compiled by other individuals or organisations will not be accepted. This is highlighted in the following excerpt from Salford City Council's validation checklist:

> 'You are required to contact Design For Security, who are part of Greater Manchester Police to produce the Crime Impact Statement. Crime Impact Statements produced by any other person or organisation will not be accepted' (Salford City Council, 2011 p. 23).

Five LPAs (Manchester, Oldham, Stockport, Trafford and Wigan) direct the applicant to GMP DFSC as an organisation who can compile a CIS, without specifically stipulating they must author the document. For example, in Stockport Council's validation checklist they recommend that:

> 'Details of the form and content of a CIS can be obtained from the Greater Manchester Police Design For Security Unit' (Stockport Council, 2011 p. 13).

It is interesting to note that although one of these five councils (Wigan) does not directly state that a CIS should be compiled by GMP DFSC, it lists a number credentials which must be met by the author of the CIS. This outlines that the author:

- Must be independent of the design process;
- Be accredited through the National Police Improvement Agency (NPIA);
- Have access to raw crime data and
- Have contact with police colleagues (such as the Counter Terrorism Unit).

Thus, this LPA is stipulating, albeit indirectly, that GMP DFSC should author a CIS as what other individual/organisation could gain access to local crime data and intelligence regarding counter terrorism?

The remaining three LPAs (Bolton, Bury and Tameside) do not direct the applicant to GMP DFSC, they simply outline the purpose of a CIS as highlighted in the following extract:

> '[A CIS is] a statement of how the application has taken into account existing crime in the area development has been designed to both address issues of crime and minimize its impact on the safety and security of the area' (Tameside Council, 2011).

Unlike other police services, GMP DFSC charge a fee for compiling a CIS which is used to maintain staffing levels to ensure the efficient delivery of the service. This is often criticised by those in the field who argue that the police should not charge for the delivery of its services. The charging element used by GMP DFSC is also often described as a mechanism through which income is generated. GMP DFSC state that they are a not for profit organisation, with the funds raised from the production of the CIS used to support the work of the department, including contributing towards salary costs. As stated earlier, owing to the twenty percent reduction in policing budgets there is less resource available to sustain service levels. The removal of the ALO post is one way in which resource can be saved, alternatively charging for the service and using the income generated to help sustain staffing levels is another.

The charges for compiling a CIS, unlike the costs involved in compiling a CRA in NSW, are transparent and readily available on GMP DFSC's website. Generally, the fee is calculated upon the size of the proposed development. For example, a CIS for a residential development is charged at £30 per dwelling. For a proposed residential development of 100 dwellings the cost of the CIS would be £3,000. There is a maximum fee of £10,000. A similar charging structure is in place for commercial and mixed used proposals.

New South Wales

In research conducted by Clancey *et al* (2011), thirty-three crime risk assessment reports prepared in NSW were reviewed. These reports were submitted between 1 January 2007 and 31 October 2010 and were published on the NSW Department of Planning's active tracking system (and placed on public display at http://majorprojects.planning.nsw.gov.au).

The proposed developments for which crime risk assessment reports were prepared varied considerably. The majority of the developments fell within the Greater Metropolitan Sydney area, with a small number also located on the north or south coast of NSW.

Figure 1 provides a rough indication of the nature of the thirty-three developments:

Insert Figure 1 here please

These broad categories help to demonstrate the diversity of the developments. However, the size of the development, the complexity of assessing crime risks and the challenges of compiling a crime risk

assessment report for the particular development are not illuminated by the above information. Without divulging specific information that might lead to the identification of particular sites or developments, it can be stated that the size and nature of each varied considerably. One of the residential developments consisted of the re-development of an existing public housing estate; one of the mixed use developments entails a large inner-city re-development that will result in many thousands of new apartments and associated infrastructure; one of the health care facilities involves extension and partial re-development of a major hospital.

In analysing the reports prepared for the aforementioned developments, Clancey *et al* (2011) found that the crime risk assessment reports were prepared by various different companies (or sole traders). They varied in size and background, ranging from independent consultants to major property development companies. Twenty-four separate companies compiled the thirty-three reports. Three of the consultancy companies engaged in the crafting of these reports (accounting for five of the reports) specialised in crime prevention. These organisations were mostly sole traders, rather than larger companies with multiple employees. Other companies responsible for producing crime risk assessment reports had backgrounds in social planning, architecture, engineering and property development.

At the outset, Clancey *et al* (2011) had been expected that all reports would have been prepared by companies or entities separate to those responsible for the overall development. It was discovered that five reports were prepared by the property development company who was responsible for the overall development. While it is difficult to gauge the potential impact of this situation, it does raise numerous questions. If the report is drafted by the same organisation responsible for the overall development, is the author of the report afforded greater access to design and architectural teams? Conversely, is there greater pressure to document positive aspects of the development in such a situation? Further research is required to determine the ramifications for this finding.

Companies responsible for the production of multiple reports generally adopted internally consistent approaches across the different developments. This meant that their reports followed standard formats including use of specific headings. In the case of one company, each of the four reports that they prepared were identical, in terms of the advice provided, apart from the reference to the location of the proposed development. Given that crime risk assessment reports will generally be submitted to different consent authorities (i.e. local councils), there is considerable scope for this practice to go unnoticed.

CONTENT OF THE REPORTS

Greater Manchester

It is important to reiterate that the term ‘CIS’ represents both a *process* and the creation of a *document*. The CIS document is a written account of GMP DFSC’s appraisal of the proposed planning application. This document symbolises the process and evidences that the police have had an

opportunity to review and comment on the proposed plans and discuss any areas of concern with the applicant. It is the CIS *document* which then accompanies the planning application and fulfils the requirement of the LPAs validation checklist.

By reviewing the CIS' compiled by GMP DFSC it is evident that the document is produced by GMP DFSC owing the corporate branding of each document. Although each CIS is bespoke and tailored to a specific development, each CIS follows a standardised structure.

Firstly, each document (after the title page) includes a brief executive summary of GMP DFSCs appraisal of the development. Owing to the large number of reports which have to be reviewed by those in planning when making a planning decision, it may not be convenient, nor a priority, for the planner to read the full CIS. Therefore, the executive summary succinctly categorises the appraisal of the development into the following:

i) the proposal is satisfactory in principle, but minor changes advised;
ii) the proposal is generally acceptable subject to the advice in the CIS or
iii) the significant material changes are advised.

The three categories document the consultant's appraisal of the proposed development clearly to the reader.

Following the executive summary, a CIS document is structured using the following headings:

- visual audit – a review of the local area to identify any visual signs of crime and disorder and/or crime attractors/generators;
- crime statistics and analysis – a detailed review of recorded crime and disorder in the area surrounding the proposed development;
- risk factors – a review of security risks specific to that development type;
- design considerations – a brief review of key documents such as Safer Places and Secured by Design;
- design layout and appraisal – a detailed review of the proposed development highlighting positive aspects of the proposal and areas which require changes or amendments;
- physical security – provides specific physical security standards which would be required for the proposed development;
- external features – advice relating to landscaping, lighting and CCTV for example;
- management and maintenance – advice relating to the key elements of the development which will require constant management and maintenance throughout the longevity of the scheme and
- construction – to ensure that developers ensure that the site is safely secured to prevent unauthorised access during the construction phase.

The length of the report varies dependent upon the type and size of the development and upon the extent to which the consultant has outlined suggested recommendations. However, from undertaking an extensive amount of non-participant observation with GMP DFSC, it is evident that a CIS document may not include an exhaustive account of *all* the amendments which have been made as a result of the CIS process. An example which highlights this includes a CIS which was compiled for a leisure facility. The initial design included a footpath which connected the facility to a local residential development. After completing a site visit, the GMP DFSC consultant concluded that the proposed footpath could be a potential area for crime and disorder to occur owing to the proposed location of the footpath and the lack of surveillance overlooking the footpath. Upon raising these concerns verbally with the applicant, the applicant removed the proposed footpath. The plans were amended and revised plans sent to the GMP DFSC consultant. As the client successfully amended the plans, the concerns about the proposed footpath were not discussed in the CIS document. The process of undertaking site visits and liaising with the applicant throughout the creation of the CIS document is often not documented.

New South Wales

In the research conducted by Clancey *et al* (2011), the content of the thirty-three CRAs were reviewed. While it might seem like a straightforward task to assess the length of each crime risk assessment report, various issues emerged. Unlike the majority of CIS' compiled by GMP DFSC, CRAs in NSW are provided by a number of different individuals and companies. Thus, unlike the CIS, there is no standardised or corporate structure to the CRAs. The review found that title pages, content pages, covering letters and other similar devices were common. Appendices were also frequently included. In the case of one report, an entire crime map report (running to some forty pages) from the NSW Bureau of Crime Statistics and Research was appended to the crime risk assessment report.

The length of the reports (not including appendices) ranged from two to thirty-five pages. While this generally demonstrates the variance in the crime risk assessment report length, the type of development or complexity of the development is not considered – such variables have the potential to impact on the length of the report and the nature of the analysis undertaken.

All reports contained generic CPTED information. In the main, this included defining and explaining key CPTED principles and was generally limited to the four CPTED principles covered by the NSW guidelines (i.e. surveillance, access control, territorial reinforcement and space management). In some instances, a significant proportion of the reports were dedicated to the explanation of these concepts.

There is obviously some justification for providing generic CPTED information in a crime risk assessment report. However, as Clancey (2011a) has noted, it is possible that some of these CPTED concepts will be of little relevance for some developments or at the time a crime risk assessment is compiled. For example, a public thoroughfare or public place development will generally not include forms of access control. Its purpose will be to promote access, rendering one of the four CPTED

principles incorporated into the NSW guidelines redundant. Moreover, as has been noted previously, the NSW Guidelines state that space management strategies include 'activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements' (DUAP, 2001 p. 5). Many of these activities commence post completion of the development. Thus, it is generally not possible to anticipate what arrangements will exist after the completion of the development to address these issues. This renders another one of the four CPTED principles incorporated into the NSW guidelines redundant, which leaves just two (surveillance and territorial reinforcement) that are likely to be relevant to all developments.

Numerous authors have advocated wider interpretation of CPTED. Cozens *et al* (2005) include consideration of target hardening and image as key elements of CPTED, while Saville and Cleveland (1998, 2008) introduce social cohesion, connectivity, community culture and threshold capacity (known as second generation CPTED). Moreover, Schneider and Kitchen (2007) suggest that space syntax and new urbanism are also emerging concepts that have relevance in designing out crime. While these theorists and perspectives differ in the detail, there is general consensus that first generation CPTED (which is what the four concepts used in the NSW guidelines have been referred to) does not capture key concepts relevant to designing neighbourhoods and communities. This suggests that there is room to broaden the key concepts covered by the guidelines to ensure that wider issues are considered than those covered by the four, first generation CPTED principles.

CPTED Guidelines adopted in all other Australian States and Territories include much broader CPTED elements. The Victorian Guidelines, for example, include ten design elements, which cover urban structure, activity centres, building design, parks and open space, walking and cycling paths, public transport, car park areas, public facilities, lighting and signage (Victorian Department of Sustainability and Environment, 2005).

CRIME DATA

In terms of assessing the crime risk of a proposed development, understanding the immediate crime issues in the area is imperative. As Clarke and Eck (2003) outline, it is important that those trying to prevent crime carefully assess the levels of crime within a locality. The following section of this paper reviews the extent to which crime data is referred in the crime risk assessments/statements.

Greater Manchester

Each CIS written by GMP DFSC contains crime data which is detailed, yet anonymised and is used to justify any relevant alterations to the proposed development. GMP DFSC employs a dedicated crime analyst who is responsible for compiling a crime pattern analysis to help prepare a CIS and subsequent recommendations. The crime pattern analysis is undertaken by identifying crime reported to GMP in the twelve months prior to the creation of the CIS for a one square kilometre around the

proposed development and includes a review of the following crime types: burglary dwelling; burglary other; criminal damage; less serious wounding; miscellaneous theft; robbery; serious wounding; theft from motor vehicle; theft of motor vehicle; theft of pedal cycle. The number of recorded crimes for each crime type by day of week and time of day, along with any patterns in the *modus operandi,* are also included. As outlined earlier, the staff at GMP DFSC are not warranted police officers and do not have any prior operational policing experience. This, perhaps, could be identified as a criticism of the how crime prevention is delivered in Greater Manchester as the staff do not have firsthand experience of apprehending and detaining offenders. Nevertheless, as GMP DFSC is a department within the police, they are able to readily access data at a strategic level from their policing colleagues at police Headquarters and more localised data from colleagues in counter-terrorism and from operational officers on division.

A small number of CIS' which have not been undertaken by GMP DFSC have been submitted to a number of LPAs across Greater Manchester. In some instances these have been accepted by the LPA as the applicant has supplied a CIS. Other LPAs however, will not accept a CIS which has not been compiled by an independent organisation and who does not have access to detailed crime and disorder data. Some LPAs (e.g: Salford) specifically state that CIS' which are not authored by GMP DFSC will not be accepted. However, this does raise the question – can such crime risk assessments be completed using generic crime data which is now widely available to the public online? How important is detailed crime data in assessing and predicting the risk that crime may or may not occur at a development which has not yet been built?

Armitage *et al* (2010) would suggest that accessing detailed crime data is imperative to further explore the links between residential housing and crime. In their micro analysis of six case study sites across England, they reviewed police recorded crime data, along with *modus operandi* data and local anecdotal information, to identify which specific design features may encourage crime and disorder to occur. For example, their detailed micro analysis found that the inconsiderate and inappropriate allocation of car parking had resulted in incidents of neighbour disputes and criminal damage.

New South Wales

The NSW guidelines state that 'when conducting individual crime risk assessments, the consequences and likelihood of crime are identified and measured using recorded crime statistics, hotspot analyses and Australian Bureau of Statistics (ABS) socio-economic data' (DUAP, 2001 p.3).

Of the reports reviewed by Clancey *et al* (2011), some form of crime data was presented for only sixteen of the thirty-three reports (48.5%). Some reports included crime maps copied from the NSW Bureau of Crime Statistics and Research (BOCSAR) crime map reports or hotspot maps. Others included crime data tables for the relevant local government area (LGA), also downloaded from the BOCSAR website.

While data was provided in close to half of the reports, there is some question about the utility of the data provided. As Minnery and Lim (2005) have highlighted, 'CPTED is a local, intimate, small-scale phenomenon' (p. 331). Therefore, data for an entire local government area (LGA) is of little relevance to proposed developments that constitute a comparably small parcel of land (Clancey, 2011b). Moreover, questions are raised about the utility of crime data being reported that bear no functional relationship to the development. There are certain crimes that might be considered relevant to a residential development – domestic violence; break, enter and steal; steal motor vehicle; steal from motor vehicle; and malicious damage to property are probably the most voluminous offences related to residential developments. Not all of these offences are necessarily amenable to being designed out or to physical prevention techniques. Thus, it is argued that only the offences which directly relate to the functionality of the proposed development and which can be remedied through physical design *should* be included in any crime risk report.

While the NSW guidelines are generally silent on stakeholder consultation, it does encourage councils and police to develop a local consultation protocol stipulating which developments would require a formal crime risk assessment and state that 'typically, crime risk assessments are conducted in cooperation with trained local police' (DUAP, 2001 p. 2).

Only thirteen of the thirty-three reports (39.4%) reviewed by Clancey *et al* (2011) made reference to stakeholders being consulted during the preparation of the crime risk assessment report. Where stakeholders were consulted, police were the most frequently cited stakeholders (twelve of the thirteen reports). This means that approximately 36% of the total number of reports reviewed mentioned some form of consultation with local police, which seems at odds with the direction of the guidelines that 'typically, crime risk assessments are conducted in cooperation with trained local police' (DUAP, 2001 p.2).

Of those reports that mentioned stakeholder consultation (other than with police), four referred to consultations with personnel from the relevant local council; two reports specifically mentioned consultations with architects for the project or the general manager of the venue; and consultations with planners, developers and neighbouring residents were only mentioned in one report each.

DISCUSSION AND CONCLUSIONS

It is evident that there a number of similarities and differences between the CIS process in Greater Manchester and that of the CRA in NSW. These are displayed in Tables 1 and 2 below and outlined in the following section.

The main similarity, and perhaps the most important, is that the fundamental objective of both the CIS and the CRA is to provide a mechanism through which crime and disorder is considered by built environment professionals in the design of new developments. One of the main concerns by those in the field is that the opportunity to design out crime decreases as an application progresses through the design and planning process. The CIS and the CRA therefore aim to ensure that designing out crime

is considered at the pre-planning stage so that plans can be easily amended. Nevertheless, in some instances it does appear that in NSW CRAs are sought immediately prior to submitting a planning application, which to some extent contradicts its purpose.

Another similarity is that there is a charge for compiling the CIS and CRA. In terms of the CIS, there is a standard charging structure which includes a minimum fee of £500 and a maximum fee of £10,000. In NSW, there is no standardised charging structure owing to the various numbers of independent consultants who produce them. It would also not make commercial sense for these independent consultants to advertise their charges in an attempt to remain competitive. The concept of charging for such a report is one of interest. In NSW, charging for a CRA does not appear to be questioned, in England the approach that GMP DFSC have adopted to delivering a CIS is frequently questioned and criticised by those in the field as seldom do the police charge for the services they provide. However, as described previously, the funding generated through charging for a CIS is used to maintain staffing levels and further support the work of the department.

Table 1 to be inserted here please

There are a number of differences between the CIS and the CRA. In NSW, it is a legislative requirement that a CRA accompanies a planning application. This is outlined by the *Environmental Planning and Assessment Act 1979 (NSW)*. In England, there is no legislative requirement that such a crime risk assessment *must* accompany a planning application. The requirement for a CIS across GMP is outlined in each of the ten LPA validation checklists. The legislative requirement underpinning the CRA in NSW is perhaps something which could be transferred and considered in England to promote the importance of design and its potential impact on crime and disorder. However, currently this is unlikely as the government is seeks ways in which it can reduce the levels of bureaucracy surrounding the planning system to encourage development. Similarly, if such a requirement was legislated, owing to the reduction of ALOs in post across forces outside of Greater Manchester, would there be the resources to deliver this by the police? Conversely, it could be argued that by specifying what should be covered by a statutory requirement reduces the discretion of the LPA particularly where a proposed development may not raise any significant crime prevention issues.

The CIS' across Greater Manchester are predominantly compiled by GMP DFSC. GMP DFSC is independent from the planning process and do not have a vested interest whether or not a development is built. As the CIS process is conducted prior to the applicant submitting the planning application, it could be argued that the only interest GMP DFSC have is to prevent crime should planning permission be granted and the development built. Subsequently, they will be critical of any proposals if they predict the proposed development may impact upon crime and disorder. This concern may be communicated to the planners by indicating in the executive summary that 'significant material changes are advised' and objecting to the planning application once it is submitted. However, CRAs in NSW are compiled by a number of independent consultants or companies. As there is a vested commercial interest in the plans which the independent consultants are commenting on, it

could be argued that they may be more favourable of the scheme to satisfy their client and seek further consultations. Thus, the level to which they provide a critical and independent appraisal is questionable.

The use of crime data is an integral component to the CIS. Data relating to a number of key crime types is contained within the document to provide an indication of the crime risk in the local area in which the development is proposed. This data also includes information relating to common *modus operandi* and used to justify and support specific design advice provided by the GMP DFSC consultant. GMP DFSC also, where necessary, liaise with other key policing colleagues (e.g. Counter Terrorism Unit) to obtain further intelligence. In NSW however, crime data is rarely used to support the recommendations made in the CRA and when it is, this may encompass the crime data for a large geographic area and therefore failing to be context specific.

Table 2 to be inserted here please

Further research

As previously stated, a comprehensive evaluation of GMP DFSC is currently being undertaken which includes undertaking semi-structured interviews with representatives from each LPA in Greater Manchester and a longitudinal study of a number of residential developments which have been followed through the CIS process, which have been built and resided in. Police recorded crime data, along with local anecdotal data will be analysed to assess the levels of crime and disorder at these developments.

For NSW, further research is required to explore the relationship between the crime risk assessment process and the relevant architectural plans, and to understand exactly when in the development process the crime risk assessment is undertaken. Given the nature of the crime risk assessment reports and their tendency to provide uncritical commentary of the proposed development (see Clancey 2011a or Clancey *et al* 2011 for a fuller discussion), it is perhaps important to better understand when crime risk assessments are conducted. If, as it appears, CRAs are completed just prior to the submission of a development application, there is much less opportunity for any recommendations that might be made by the author of the crime risk assessment to be adopted or incorporated into the design. A CRA in this instance becomes a form of purchased endorsement rather than an objective assessment of crime risk that is considered throughout an iterative process of design, unlike the process outlined in Greater Manchester.

In addition, the authors suggest that further research should be conducted to identify the long-term benefits of ALO work to consider how their role may be integral to preventing crime and disorder in the longer term and subsequently improving the quality of lives' for residents.

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[i] See Armitage *et al,* 2011 for a recent and comprehensive review of such evidence in relation to specific design features.

[ii] Design and layout and physical security are the two fundamental concepts underpinning the UK's Secured by Design accreditation award (ACPO Secured by Design, 2010).

[iii] Throughout the remainder of the article to term ALO will be used to refer to both ALOs and CPDAs.

[iv] Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.

[v] This list has been adapted from Salford City Councils Validation Checklist (2011).

[vi] Research by Monchuk (forthcoming) explores the relationship between GMP DFSC consultants and their working relationship with the Local Planning Authorities (LPAs). This aims to identify how LPAs view the service provided by GMP DFSC and their perceptions of built environment professionals undertaking this role, opposed to warranted police officers.