Crime is inextricably linked to the places where it is committed. An analysis of where criminal acts occur shows that many incidents are not spontaneous or opportunistic, but that certain places are selected by offenders because they lend themselves to criminal activity. Research conducted by CSIR Building and Construction Technology over the past few years in South Africa's major cities shows how different types of environments contribute to the occurrence of different types of crime. For example murder, rape and serious assault – although not confined to open and vacant spaces – generally occur in these undeveloped areas. Robberies and hijackings often take place at isolated intersections and in hidden driveways, while many housebreakings occur as a result of the layout and land use of the affected residential areas.

The importance of the link between crime and place means that professionals working with land management and development are central to any local crime prevention effort.

**Linking urban planning and crime prevention**

Internationally, planning has seen a major shift over the past few years from a profession concerned with mediating the interests of different players over land and its use, to one that facilitates public participation in decisions about how to manage and develop land. This shift has also occurred in South Africa: one of the main tools for planners, the Integrated Development Plan (IDP), outlines the necessity and procedure for public participation. The IDP and the municipality’s budget are closely linked - the latter cannot be approved without the IDP being in place. The intention is that the plan reflects the expressed priorities of the local people.

Concerns about crime rank among the top three priorities of every IDP in the country. But despite this, the ability to incorporate crime prevention plans into the local development agenda is limited. Crime prevention through environmental design (CPTED) presents a clear opportunity for municipalities to respond to the needs of their constituencies.

CPTED directly addresses the link between crime and place. It aims to “[reduce] the causes of and opportunities for criminal events and to address the fear of crime by applying sound planning, design...”
and management principles to the built environment. CPTED principles include ideas like natural surveillance and visibility, a sense of ownership among people living or working in an area, and other factors that make it more difficult or risky to commit crime in a particular place.

In other words, crime prevention through environmental design is about a lot more than ‘target hardening’ - the term that describes using burglar bars or high walls, for example, to deter criminals from stealing property. Internationally, CPTED currently includes approaches as diverse as those favouring mixed land use and an integrated approach to urban development, to those that separate and exclude through an over-emphasis on target hardening.

In South Africa, the question is how we should plan to reduce crime at a neighbourhood level, so that it responds to residents’ needs without infringing on the future good functioning of the city. An obvious example is the ongoing debate over ‘boomed-off suburbs’ and their impact on crime, the rights of those using the areas in question, and the functionality of the city. This article addresses the question by looking at two practical approaches to neighbourhood crime prevention – one that emphasises fortification and segregation, and one that applies a participatory process and encourages greater integration.

Using physical barriers against crime

Businesses in the municipalities of Johannesburg and Tshwane have reacted to crime by increasing security measures to protect their property. They make use of methods that range from changes to the interior of buildings, for example closed-circuit surveillance (CCTV) cameras and bullet-proof glass in banks and in 24-hour garage shops, to exterior changes such as burglar bars in front of windows, security gates on doors, shutters covering entire facades, high fences or walls around properties, and access-control entrances.

Residents likewise have responded with increased security measures. These vary from the installation of electronic devices such as closed-circuit surveillance cameras, alarm systems, panic buttons, electronic gates and intercom systems, to physical modifications such as burglar bars, security gates, fences and walls around properties. The extent and nature of the changes depend, among other things, on the location of people’s homes, their financial abilities, the measure of security perceived to be necessary, and perceptions about the risk of victimisation.

However, for many urban South Africans the implementation of these measures is not enough. They want to live in a more secure neighbourhood. This has led to an increase in the number of security villages and enclosed neighbourhoods in both Johannesburg and Tshwane. Security villages include different types of developments with different uses, ranging from smaller townhouse complexes to larger office parks and luxury estates. These areas are purpose-built by private developers for whom security is the foremost requirement in spite of the importance of other lifestyle considerations.

Another type of gated community is the enclosed neighbourhood. These neighbourhoods are characterised by road closures, with fences or walls around entire neighbourhoods in some cases. Applications to the municipality for the right to restrict access are essential, and residents can apply to enclose their neighbourhoods on security grounds alone.

A national survey conducted by the CSIR in 2002 confirmed that Johannesburg and Tshwane have the most enclosed neighbourhoods in the country, with large numbers of security estates in addition to other types of gated communities, such as office parks, secure townhouse complexes and secure high-rise apartments. More specifically:

- The City of Johannesburg indicated that there were 49 legal neighbourhood closures with a further 37 whose approval had expired. In addition, there were an estimated 188 illegal closures and 265 pending applications.
- The City of Tshwane had formal applications from 75 neighbourhoods to close off their areas. Thirty-five further applications had been approved.

This clearly demonstrates a huge demand by the public. As stated above, the main reason for the proliferation is considered to be crime and the fear of it. In both municipalities, the enclosed
neighbourhoods and security estates have developed in regions with comparatively high property crime rates.

Impact of gated communities
Recent studies have highlighted the impact of different types of gated communities in South Africa. Some of the positive aspects include a reduction in crime within the gated area, either temporarily or on a more permanent basis, as well as a significant reduction in the fear of crime. This has often led to increased use of the urban spaces inside the gated communities by the residents. The greater use of communal space, together with the process of creating the gated neighbourhood, has contributed to a better sense of community among those residents who supported these initiatives.

In Gauteng, almost all the security companies interviewed reported a reduction in crime in the enclosed neighbourhoods, while a number of large security estates still experienced some isolated crime incidents. The SAPS likewise generally agree that crime is reduced through physical target hardening on a neighbourhood scale. They do, however, recognise that crime is often displaced by these methods to surrounding neighbourhoods. One of the consequences is that residents in adjacent communities feel increasingly vulnerable and subsequently also apply for road closures or move to a security estate. The net result is an increase in the number of gated communities.

In addition to crime displacement, gated communities have several other negative impacts, particularly those that close off large areas or entire neighbourhoods. These include spatial fragmentation, social exclusion and problems that relate to urban management and maintenance.

The physical closure of neighbourhoods results in a coarse urban form that is made up of enclosed, separated residential cells that are linked by rapid transport routes. This not only negates current planning policies that promote greater integration, but also leads to problems of accessibility and traffic congestion. Pedestrians and cyclists are forced to use busy thoroughfares, resulting in increased travelling time, discomfort and danger due to high traffic volumes on congested roads. Social exclusion also occurs when urban residents are prohibited from entering closed-off areas or using public facilities within these gated areas.

Gated communities can improve the sense of community among those who support these developments. But they similarly give rise to tension and conflict between those opposing them, as well as between residents living inside and adjacent to, the enclosed neighbourhood.

The closure of existing neighbourhoods and strict access control in security estates where infrastructure maintenance remains the council’s responsibility, also limits access to those whose job it is to maintain public facilities and infrastructure, and increases response times for emergency services.

Alternative approaches
Taking into account these negative consequences, several neighbourhoods in Johannesburg (such as Sandton and Parktown) and Tshwane (such as Groenkloof) have engaged in crime prevention initiatives that do not entail erecting barriers. These include using private security services (patrol vehicles, guards on bicycles, etc.), establishing local crime prevention committees to work closely with the police, and in some instances involving local employees (such as domestic workers) to act as the ‘eyes on the street’ and report suspicious behaviour.

The question that arises is, therefore, how to plan against crime at a neighbourhood level and still retain the positive impacts of gated communities (such as an increased feeling of safety, community involvement and cohesion), without exacerbating the negative concerns, such as spatial fragmentation, social exclusion and problems regarding accessibility. One way is to focus on local participation with the aim of integrating rather than segregating the community.

Involving residents in the planning process
For the past few years, CSIR has been researching the application of planning practices to the local crime prevention field. To this end a model was developed through action research in Mamelodi, north east of Tshwane. The model was piloted earlier this year in...
six policing areas in the Northern Cape and is also being used in KwaZulu-Natal as part of a broader local crime prevention strategy. So far, the evidence suggests that the model has significant potential to enhance local safety.

The model consists of a workshop process that is based on the understanding that people know best the opportunities and problems of their area. The intention is to work with local residents to identify specific places that they consider dangerous. It is known that certain places are often predictably selected for the opportunities they represent for criminals. The workshops attempt to enable residents to understand what makes these places dangerous, and how they could be altered to become safer.

Through the identification process it becomes clear that contrary to the common belief that crime is ‘random and happens everywhere’, it in fact occurs in specific and identifiable places. During the process of analysing these different areas, it becomes apparent to participants that the responsibility for altering the nature of these localities does not lie with the police. In many cases it is the municipality or the community itself whose job it is to make the identified places safer.

Interactive workshops
Because the physical nature of the area is being investigated, principles for crime prevention through environmental design provide the framework for the analysis. Consequently, techniques for understanding spatial issues are used, such as maps, conceptual diagrams and drawings, and site visits rather than talking and writing. The entire process is directed towards enabling individuals to understand their fear of particular places and to realise that there are certain common places that also present a threat to others.

The one-and-a-half day interactive experiential workshop takes place with some 20 participants and focuses on gaining a spatial understanding of the neighbourhood, and the role that physical aspects of a place can play in the execution of a crime.

The size of the area under review during the workshop depends on various factors. Defining boundaries is always problematic and to date a flexible and pragmatic approach has been adopted that depends on who the facilitation method focuses on. For example in the Northern Cape it was the sector police, and in KwaZulu-Natal (KZN) it was the eSikhawini community police forum in the uMhlathuze municipality. The areas covered in the former coincided with the sector policing boundaries, while those in KZN conformed to the ward boundaries. Town planners using this method should ideally base the ‘neighbourhood’ in question on the IDP planning areas that coincide more or less with the ward boundaries.

The composition of the workshop groups is an important aspect of the methodology. Ideally, participants are people who live in and/or use the area for work or recreation purposes. The group should, where possible, represent the various ages, genders, etc. of the area’s population. In order to canvass a sufficient range of opinions, it has been necessary to run a series of workshops in each area.

The introductory steps to the workshop conclude with the facilitator drawing a cognitive map of where she lives and where she personally feels scared. This example encourages people to realise that each of their experiences are individual but that they share common elements. The participants use the example to draw their own maps of where they live and where they feel threatened. These individual maps are transposed onto prepared large-scale maps of the neighbourhood. Usually, many of the identified ‘hotspots’ will be the same. The majority of community workshops end up identifying some 15 to 20 hotspots. This is approximately five times as many places as the police identified in similar workshops that they attended.

During site visits to the selected hotspots, the individual who identified the place articulates his/her own problems. This allows personal knowledge to be shared, as well as highlighting different experiences based on age, gender, etc. Photographs are taken at each hotspot, enabling the picture-taker to focus on the specific characteristics of the place. The remaining half-day session is devoted to preparing analyses of the different hotspots, prioritising these and presenting the problem areas to the larger group.
How these places are viewed depends on the facilitation. The objective is to reach a common understanding that most crime does not happen randomly but rather because particular opportunities present themselves in specific places. Based on how the problem is defined, a solution that takes into account the context of the place and its surroundings can be developed. The solution likewise outlines the roles and responsibilities of the different actors involved in its execution.

It is important for all the participants to realise that the solution is often more complex than just identifying someone (usually the police) to blame for not doing their job. A solution might well require the coordinated input of several players other than the police, such as local government councillors and officials. Through this facilitated process, the realisation dawns that crime prevention is not only a policing function, but that it requires a partnership approach.

Benefits of the participatory process
The value of the method relates to the information and intelligence that is gathered about crime hotspots. At all the workshops, more than four times the information already known to the police was provided by the public participants. The information is also of a better quality, providing clues as to offenders’ modus operandi and how the space is being used for criminal ends.

Equally important is that by taking part in the process to define the problem and articulate their needs, people become more willing to participate in reducing crime. Also, through exploring crime and safety issues, it becomes apparent that preventing crime is not just the police’s job: the municipality must, for example, provide street lighting, maintain the vegetation and develop the vacant land appropriately.

Similarly it becomes apparent to workshop participants that it is their civic duty to report anti-social behaviour. The process provides an opportunity to develop and establish a relationship between residents and the police. This helps to reduce the antagonism and lack of confidence in the police that prevails in many communities. In this regard, the police have commented that since the workshops, many unsolved crimes have been successfully dealt with as a result of improved communication and mutual respect.

That people feel empowered by the workshop goes without saying: their opinions about how the place functions are being solicited and their knowledge is recognised as a considerable asset.

Limitations of the approach
In spite of these benefits, the police have noted that the process is time consuming. The need to conduct several workshops in one area, and ensure that workshop participants are representative of their area, add to the time required to complete the process.

A related problem is that much of the information emanating from the workshops cannot be acted upon immediately or in an ad hoc fashion. Some of the solutions would need to be fed into the municipality and police’s strategic planning frameworks for the area, in order to secure funding. This process means that up to one year can pass before the projects are implemented.

Finding the best facilitator is likewise viewed as a constraint: the appropriateness of the local police is questionable in spite of the current emphasis on sector or neighbourhood policing. Ideally, local government officials should assist, and local residents’ opinions and knowledge of their area should inform the IDPs and spatial development frameworks (SDFs). This would, however, mean adding a crime prevention function to the already limited capacity of these officials.

Although this kind of integrated approach is time consuming, the benefits of the participatory approach for both town planning and policing policy at this stage outweigh the limitations.

Integration rather than separation
This article has highlighted the importance of community participation in local crime prevention, both to identify the crime problems and hotspots, and to assist in solving the problems. It has also shown that planning against crime is a local government function requiring partnerships between the police,
the municipality, and the community they serve. To succeed, this approach to local safety will require integration at three levels:

• First, there is a need for crime prevention initiatives that are based on spatial integration like mixed-use streets and public spaces, higher densities through an appropriate built form, permeable fences, symbolic barriers, opportunities for natural surveillance, etc. Mixed-use can furthermore be achieved by people using the same streets and the same facilities at the same time of the day. It also calls for the improvement of public spaces for all urban residents, including the reduction of derelict vacant land and the development of existing public spaces.

• Second, there is a need for social integration through inclusive participatory processes in which local residents take part in the identification and solution of their crime problems. This not only encourages local empowerment and social cohesion, but also provides a more accurate reflection of public needs as regards neighbourhood crime.

• Third, there is a need for institutional integration. In this respect, the IDP becomes a valuable mechanism to guide the process and ensure that planning against crime becomes a reality in practice. When crime informs the IDP by identifying locations for strategic interventions, greater integration can begin to occur. It will also help to make the IDP more responsive to people’s priorities. The workshop method discussed here can become part of the IDP participation phase. This will also ensure that crime prevention responses take into account their impact on the surrounding neighbourhoods and the rest of the city.

Given this discussion, the emphasis of local crime prevention initiatives should be on public participation through spatial, social and institutional integration rather than on fortification. Relying too heavily on physical barriers against crime often causes fragmentation and segregation, and ultimately tension and conflict within the city.

Endnotes

1 P Healey, Towards a more Place-focused Planning system in Britain, in A Madanipour, P Healey and A Hull (eds), The Governance of Place: Space and planning processes, Aldershot, Ashgate, 2001, p 278.
3 For more on CPTED see Kruger et al, ibid.
4 The national survey was conducted by the CSIR Building and Construction Technology in 2002 and the numbers therefore indicate the situation at that time. See K Landman, A National Survey of gated communities in South Africa, Pretoria, CSIR Publication, BOU/I 252, 2003.
5 These studies included four case studies of two types of gated communities, security estates and enclosed neighbourhoods in Johannesburg and Tshwane, carried out towards the end of 2002 and 2003. See K Landman, Gated communities in South Africa: Comparison of four case studies in Gauteng, Pretoria, CSIR Publication, BOU/I 347, 2004.
6 In response to the spatial legacy of the apartheid city, the post-apartheid planning policies promote integration through aspects such as integrated neighbourhoods linked through activity corridors and nodes (without large buffer strips and rapid transport routes dividing them), mixed use (different land uses, eg. residential and commercial in one area), a range of choices for different groups, including types of housing and income groups, densities of people (number of people staying in an area), etc.
8 This refers to well developed public spaces for all people, for example, paved and landscaped squares with appropriate vegetation and street furniture, well designed and maintained parks for different users (like children or the elderly), etc.
9 Well functioning neighbourhoods and cities offer a variety of choices for different groups (single younger people, families, the elderly, etc) from different income categories in different housing types. Having a higher density of people in a neighbourhood can assist to support a wider range of facilities, shops and transport modes. Appropriate housing types and public spaces can accommodate more people in closer proximity without creating opportunities for crime or leading to overcrowding.
10 Symbolic barriers refer to visible clues or signs in the built environment conveying a message to users, for example gate posts at a road entrance indicating a semi-public area or entrance to park, reminding people that they should respect the local bylaws and norms of public behaviour. Another example is a low wall around a children’s play space in a park, indicating a reserved space for smaller children and their supervisors.