

Community-painted street designs and corner tea stations in Portland's Intersection Repair.



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Designing cities to minimise crime

By **Gregory Saville**, Founder, and **Tinus Kruger**, Board Member, International CPTED Association

Crime is, to a large degree, absent from the contemporary debate on sustainability. Yet it is difficult to think of sustainable cities without considering crime and safety in the design, planning and development process. Some argue that ecological or environmental aspects are disproportionately favoured in the public discourse. The sustainability of a city, as a complex system, involves much more. The authors contend that attention should also be paid to social and economic aspects, and more consideration given to the devastating impact of crime and violence.

For over four decades, Crime Prevention Through Environmental Design (CPTED), and offshoots such as Design Out Crime and Safer By Design, has been the primary source for reducing crime opportunities with design. CPTED strategies, such as territorial reinforcement and improved sightlines, are well documented and they will not be discussed here. Similarly, the scientifically evaluated

effectiveness of CPTED is also well documented in various bibliographic reviews.

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The purpose of this article is to describe possible ways to sensibly incorporate safety planning and sustainability in tomorrow's cities. This is illustrated with experiences using a holistic form of CPTED from two different contexts. Examples from North America demonstrate an approach followed in a developed country, while experiences from a developing country are illustrated with examples from South Africa.

NORTH AMERICA

Some CPTED work in high crime neighbourhoods has now evolved into a holistic form of CPTED called SafeGrowth.

Newspaper box, resident-built with cob material at Portland's Intersection Repair.



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SafeGrowth is an integrative planning process for creating safe neighbourhoods, improving local trust and cohesion among residents, and reducing crime and fear.

SafeGrowth is an extension of the Smart Growth environmental movement in urban planning. Most Smart Growth design principles apply, such as sustaining ecological capacity, human scale design, and transit oriented development. SafeGrowth also builds a local capacity to create and sustain safe communities.

SafeGrowth uses CPTED strategies to accomplish these goals, such as improving the area image with streetscaping (following the 'broken windows' theory). SafeGrowth also incorporates social programmes to reinforce neighbourhood cohesion. The key to successful implementation in all holistic CPTED is the engagement of local residents in the process.

“Because of the intense use of art and painting, cars slow to safer speeds.”

Of course neighbourhood engagement for community-building is not new. Successful examples of cultural development include the Intersection Repair programme in Portland, Oregon. Over the past eight years Portland residents have worked together to activate a traditional street intersection using decorative painting and children's play areas. Designs include a newspaper dispenser 'beehive' (the paper is called the *Bee*) constructed from cob, a cement-like material of clay, straw and sand mixed by residents

Community-designed bus shelter in Hollygrove.



© Jason Tudor AARP

themselves during an annual community festival. It also includes recycled materials and green 'growing' roofs on the community bulletin boards.

These activities make intersections more interesting places where neighbours congregate and socialise. Because of the intense use of art and painting, cars slow to safer speeds thereby increasing road safety in the vicinity.

Intersection Repair has now spread to over 30 intersections and a dozen cities. In this case it did have the added benefit of creating what CPTED calls 'activity support', but it was not initially conceived as a crime prevention programme.

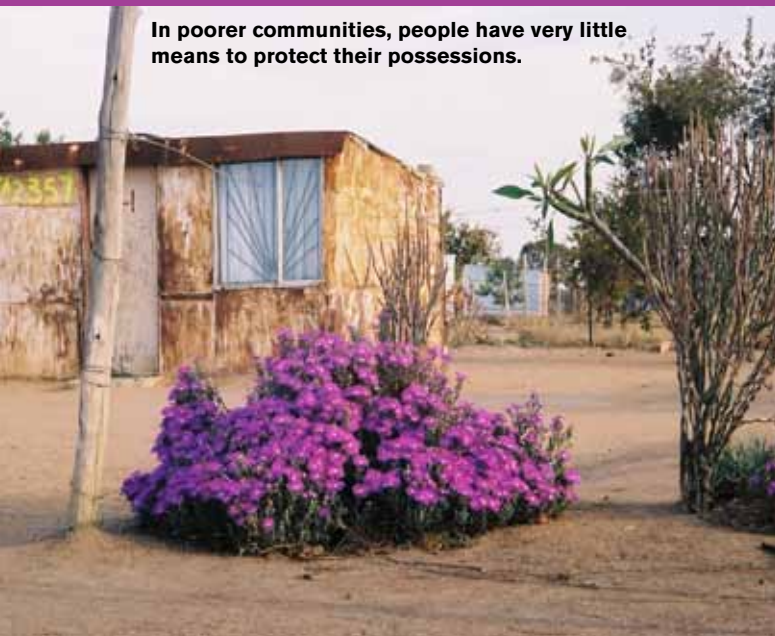
“Unused public transit contributes to global warming.”

On the other hand SafeGrowth provides an explicit and coherent way to integrate these kinds of activities into planning, particularly when addressing crime. City officials partnering with local residents might seem an obvious role for municipal government. But effective models to do this as a regular part of planning are very rare, at least in the North American context.

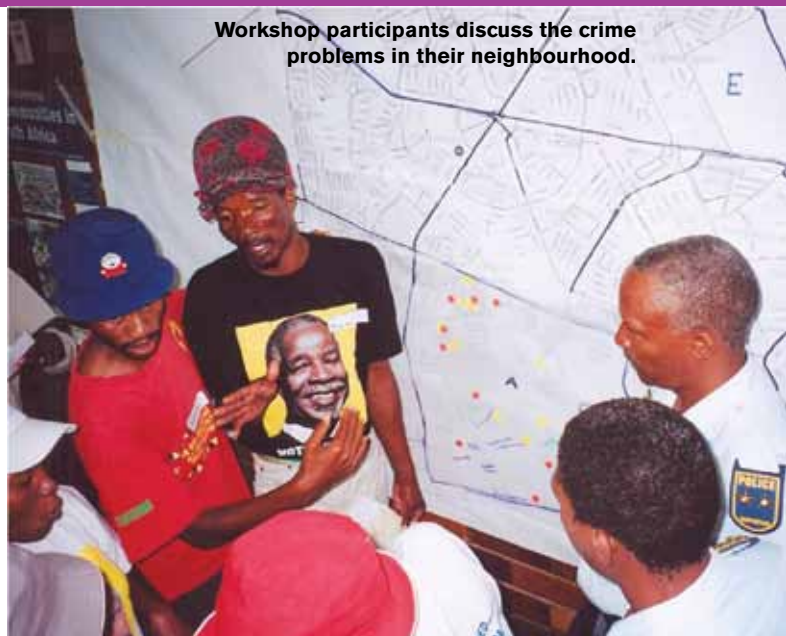
Hollygrove, in New Orleans, is an example of how SafeGrowth helped trigger positive change. Hollygrove is a low income, residential neighbourhood of approximately 4,000 residents. For many years it had poor social conditions, unemployment, gangs, drugs and crime. In the worst years Hollygrove suffered over 20 murders annually.

Co-ordinated by a local chapter of a well-respected national interest group, the AARP, residents took local actions to improve conditions. This began with walking programmes to promote health for senior residents, and led to site visits by residents in order to observe and discuss local problems. That led to voluntary street clean-ups. It also helped identify dark sidewalks and, where the municipality had no resources to install street lights, residents raised

In poorer communities, people have very little means to protect their possessions.



Workshop participants discuss the crime problems in their neighbourhood.



funds and installed their own. This not only improved night-time safety but the social activities strengthened neighbourhood cohesion.

Bus stop locations in Hollygrove were dilapidated, no doubt contributing to low ridership on public transit. Unused public transit contributes to global warming. Therefore ridership is both a safety and a sustainability issue. Architecture students worked with residents to build a neighbourhood-designed bus shelter. The shelter not only used recycled materials but it reflected the neighbourhood history and provided an opportunity to show off neighbourhood pride.

In summary, combined efforts of AARP and residents, along with a SafeGrowth orientation, has led to new sense of neighbourhood pride. This has resulted in crime in Hollygrove declining in all categories. Notably homicides dropped to 6 in 2011 from over 20 a few years ago, a figure that continues to decline in 2012.

SOUTH AFRICA

Urban sustainability within the South African context cannot be discussed without reference to the country's apartheid history. The historic planning policies have resulted in features that not only create opportunities for crime, but also have a negative impact on urban sustainability, including:

- Spatial dislocation of the poor, which results in long and costly commuting patterns and exposes commuters to victimisation;
- Separation of communities and the vacant land (buffer strips) used in the past to divide people, providing many opportunities for criminal activity;
- Rigid mono-functional zoning of land which leaves some areas deserted at night and others deserted during the day, increasing opportunities for crime;
- Disparities in living levels evident in the depressed quality of life and degraded built environments experienced by many residents;
- Exclusion of many residents from the amenities and economic opportunities offered by the city.

Severe levels of poverty and inequality compound the spatial challenges mentioned above. In addition, the relatively high levels of crime, particularly violent crime, as well as the fear of crime experienced by so many citizens, have a significant impact on the sustainability of towns and cities. These factors all add to the complexity of developing crime-prevention initiatives that suit the diverse needs of poor and more affluent communities.

The South African interpretation of CPTED acknowledges inequalities stemming from the country's past. It focuses on measures that contribute to the general transformation of society through changes to urban form and the built environment. As such, it is a holistic form of CPTED that compliments initiatives aimed at improving the sustainability of South Africa's cities.

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In order for CPTED to also make a difference in communities that are not well resourced, a people-driven process was developed that relies on the participation of community members, municipal officials, councillors and police officers in the process of identifying environment-related crime problems and developing appropriate responses. The design commences with a community-based crime-mapping exercise that requires participants to draw a map of the area where they live and to indicate specific places where they feel threatened. That information is then transferred onto large-scale maps of the neighbourhood where each participant's house is plotted together with the dangerous places they have identified.

The participants then visit the crime hot spots to discuss problems. This allows them to share different experiences

Residents taking responsibility for the areas immediately surrounding their houses.



© Alexandra Renewal Project

based on age, gender, etc. Photos are taken of the problem areas to later assist in assessing the possible relationship between crime problems and the physical environment.

Information gathered during the field visit is documented and organised according to the crimes, victims, offenders and the characteristics of the place. The type of activity influenced by these characteristics as well as the spatial relationship between the environment and crime types are also assessed.

“The South African interpretation of CPTED acknowledges inequalities stemming from the country’s past.”

Problem places are prioritised and the three or four most critical areas are then selected and possible responses developed. These responses range from involving the community in cutting grass and cleaning up a dangerous open field, to lobbying the municipality to provide street lights, or demanding the closing of an illegal liquor outlet. The private sector can also get involved, for instance by providing paint for the community to paint houses with numbers to enhance finding the way, and improve response times for emergency vehicles.

The implementation of CPTED initiatives in South Africa not only reduces the opportunities for crime, but also provides a physical environment that supports economic activities and social interaction, thereby contributing to the creation of more sustainable human settlements.

CONTRIBUTING TO A SUSTAINABLE FUTURE

The experiences described above from both a developed and developing country suggest that there is a clear relationship between sustainability and crime, violence

and the fear of crime. There is certainly a synergy between the holistic version of CPTED we discuss here and other initiatives aimed at creating sustainable living environments. It therefore stands to reason that planning, design and management initiatives aimed at reducing crime could contribute substantially to more sustainable communities.

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When considering the sustainability of human settlements, much more consideration should be given to the devastating impact of crime and violence. Policy-makers should consider CPTED models that incorporate sustainability and coherent planning methods for neighbourhoods. Therefore we are convinced CPTED practitioners can make a substantial contribution to a safer and more sustainable future. ■

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Crime Prevention Through Environmental Design (CPTED) is defined as a multi-disciplinary approach to deterring criminal behavior through environmental design. The International CPTED Association (ICA) supports local organisations, practitioners and communities that utilise CPTED principles to create safer communities and environments.

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