CPTED and Post-earthquake Reconstruction in Christchurch New Zealand…
Introduction...

Sue Ramsay
Crime Prevention Team Leader
Christchurch City Council
New Zealand

- CPTED Programme
- Crime Prevention Programme
- Safe City Officer Programme
- Late Night Precincts
The earthquakes

4 September 2010  4.35am Magnitude 7.1

• 99 aftershocks by midnight
• 7 aftershocks over Magnitude 5.0 that day
• maybe 18,000 damaged households

Before 21 February  -  8 more aftershocks over Magnitude 5.0

• over 4,400 aftershocks – heightened anxiety
• hundreds of houses red-stickered
• over 1,300 residents displaced
• 26 December, Boxing Day Quake in CBD
The earthquakes…

12.51pm 22 February 2011 Magnitude 6.3

- 185 lives lost, many injured including 28 severely injured
- 5 aftershocks over magnitude 5 that day
- over 11,000 aftershocks in sequence to date
- more large shocks are expected
- Population 370,000 – 60% directly impacted
- 8,000 homes demolished, 118,000 to be repaired
- 80% of CBD buildings demolished
- estimated NZ$40B rebuild costs
Meshblocks affected by liquefaction and significant building damage in 4 September 2010 and 22 February Earthquakes with Area Unit Boundaries (Indicative only)

Source: CCC GIS layers, CCC Building Assessment Data, LooC Liquefaction Data
Prepared by: Monitoring and Research Team
7 April 2011

Areas affected by Earthquake Damage to nearest meshblock
- Impacted by Both Earthquakes (125)
- Impacted only by February 22 Earthquake (665)
- Impacted only by September Earthquake (115)

Disclaimer: This map is based on the best information available at the point in time. However, due to the lack of direct data this is purely indicative until better information is available.
Some names…

CER Act 2011 – Canterbury Earthquake Recovery Act

CERA – Canterbury Earthquake Recovery Authority

CCDU – Central Christchurch Development Unit

Central City Red Zone

Residential Red Zones
CPTED development

- MOJ National Guidelines for Crime Prevention Through Environmental Design in New Zealand 2005
- Safer Canterbury: Creating Safer Communities Guideline 2005
- Safer Christchurch Strategy 2005
- Safer Christchurch Interagency Group 2005
  - Crime Prevention Coordinating Committee
  - Injury Prevention Coordinating Committee
  - Road Safety Coordinating Committee
- CBD Alcohol Accord 2007
- Graffiti Programme 2008
- Safe City Officer Programme 2008
- World Health Organisation
  - Safe Community Accreditation 2008
CPTED development...

Safer Christchurch Team 2009
Crime Prevention Project Facilitator
- CPTED training workshops
- CPTED assessments
Injury Prevention Project Facilitator
- IPTED development

Community Safety Team 2011
Crime Prevention Team Leader
- CPTED Programme
- MOJ Funding for CPTED
CPTED Advisor
Crime Prevention Advisor
Injury Prevention Advisor
CPTED development...

CPTED included in Christchurch Central Recovery Plan 2012

- CPTED specified in urban design matters for city core
- safety through design project - entertainment precinct(s)
- street lighting project
- commitment from the City Council for all public spaces and facilities to have CPTED assessments at design stage
CCDU’s Blueprint, showing Anchor Projects
CPTED development...

Design Out Crime Advisory Service 2012

- CPTED Clinics
- pre-application advice
- CPTED statement advice
- seminars – professional and community groups
- training workshops

What issues will DOCAS consider?

The Advisory Service may consider:

- General safety principles, including natural supervision, access control, protection of private space, and quality surroundings.
- The qualities of safer places, including safe movement and connections, being able to see and be seen, layout, activity mix, visible, and maintenance and management.
- Context and proximity to activity generators or crime hotspots.
- Positive or negative impacts on surroundings.
- Night time context, including contribution to pedestrian lighting, unlighted uses and activities.
- Anti-graffiti strategies.
- Design of pedestrian access and internal public areas.
- Design of publicly accessible toilet facilities.
- Design and placement of lighting.
- Design and placement of plantings.
- Car parking, service lanes and entrances.
- Storage spaces for incoming goods, rubbish, cycles, equipment.
- Definition of public, semi-public and private spaces.
- Identifying potential concealment and entrapment zones and recommending safe alternatives.
- How to include effective safety design while enhancing amenity values and usability.

What does it cost?

There is no cost for any of the services provided by the Design Out Crime Advisory Service at present.
CPTED development...

Practitioners Group 2012

- graduates of training workshops – introductory, intermediate and advanced
- about 25 members
- invited to site assessments, clinics
- advanced training
CPTED in Rebuild Programmes

- Temporary Villages
- Suburban Centres Programme
- Central City Cordon Reduction
- Resource Consent pre-application meetings
- Outline Development Plans
- Resource Consent assessments
- advising (external) architects, designers, planners and developers
- planning for new late night precinct(s)
- Transitional Projects
- development of IPTED
- CCDU Anchor Projects
- Citywide Cycleway Project
<table>
<thead>
<tr>
<th>Location</th>
<th>Issue</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Doors at rear and side unsecured.</td>
<td>Request owner / contractor to secure to prevent public entry.</td>
</tr>
<tr>
<td>150 Lichfield Street.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Entrapment zone created from exposed basement.</td>
<td>Request owner / contractor to secure to prevent public entry.</td>
</tr>
<tr>
<td>152 Lichfield Street.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Building rubbish on vacant lot.</td>
<td>Request owner / contractor to clear.</td>
</tr>
<tr>
<td>156 Lichfield Street.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How we approach CPTED practice in Christchurch

- CPTED development is led by Crime Prevention
- creating livable communities
- community and partner organisation involvement
- **DESIGN** – management - technology / target hardening
- early involvement gives the most benefit for the least cost
- input throughout project life cycle, from concept to post construction
- appropriate interventions from conversations to full assessments
- understanding evening and late night activities, uses and misuses
- by experienced, competent practitioners
**CPTED assessments**

**Issues discovery**
- crime hot spot data and trends
- community profiles
- community stakeholders
- activity and usage patterns – pedestrian and vehicle
- day and night site assessments – the more the better

**Analysis**
- behavioural analysis – misuses, deactivated places
- micro spatial analysis
- context and connections

**Recommendations**
- design, management, technology
- “quick fixes’, six months, long term
- photo illustrations
- present to stakeholders
- follow up implementation
Stewart Plaza . . .
3:00am Stewart Plaza / Colombo Street
Challenges

- challenging working conditions
- speed of the rebuild
- previous low profile of CPTED
- perception that CPTED is less complex than it is
- the National Guidelines contain all knowledge
- long term funding
- heavy workload
- creating a sustainable pool of competent practitioners
- strengthening the policy framework
- letting the public know
Gains

- greater awareness of CPTED and its benefits
- focal point for CPTED in crime prevention
- recognition of need for greater expertise
- CPTED included earlier and across more projects
- building a pool of practitioners
- increasing community awareness and involvement
- evolved multiagency collaboration
- IPTED developing
- towards a safer and more livable city
Architects are researching crime hotspots in Christchurch to avert design mistakes in the rebuild. WILL HARVIE reports.

A city built to help fight crime

Architects and designers make buildings and public places, they don’t "naturally prevent crime, but there’s a growing movement across to make architecture do just that, and if this movement pays off, Christchurch could become a global leader in crime-fighting architecture.

modern city on a scale rarely possible" that the goal was to make Christchurch the "safest city in the world" and "build a body of work recognised as best practice internationally."

These lofty goals aren’t new the city council’s Christchurch Earthquake Recovery Authority is an early proponent in its Central City Reinvestment Plan and its "transformation plan that crime criminals, according to the theory, have witnessed and so are less likely to commit crimes where they can be observed.

In building design, this means locating shops, offices, libraries and student accommodation at the front of buildings, placing windows and doorways that overlook the streets and public places. It’s about eliminating "convenience" spots, where criminals can lurk or deal in drugs.