

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



2013 ICA International Conference Sue Ramsay



Christchurch
City Council 

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

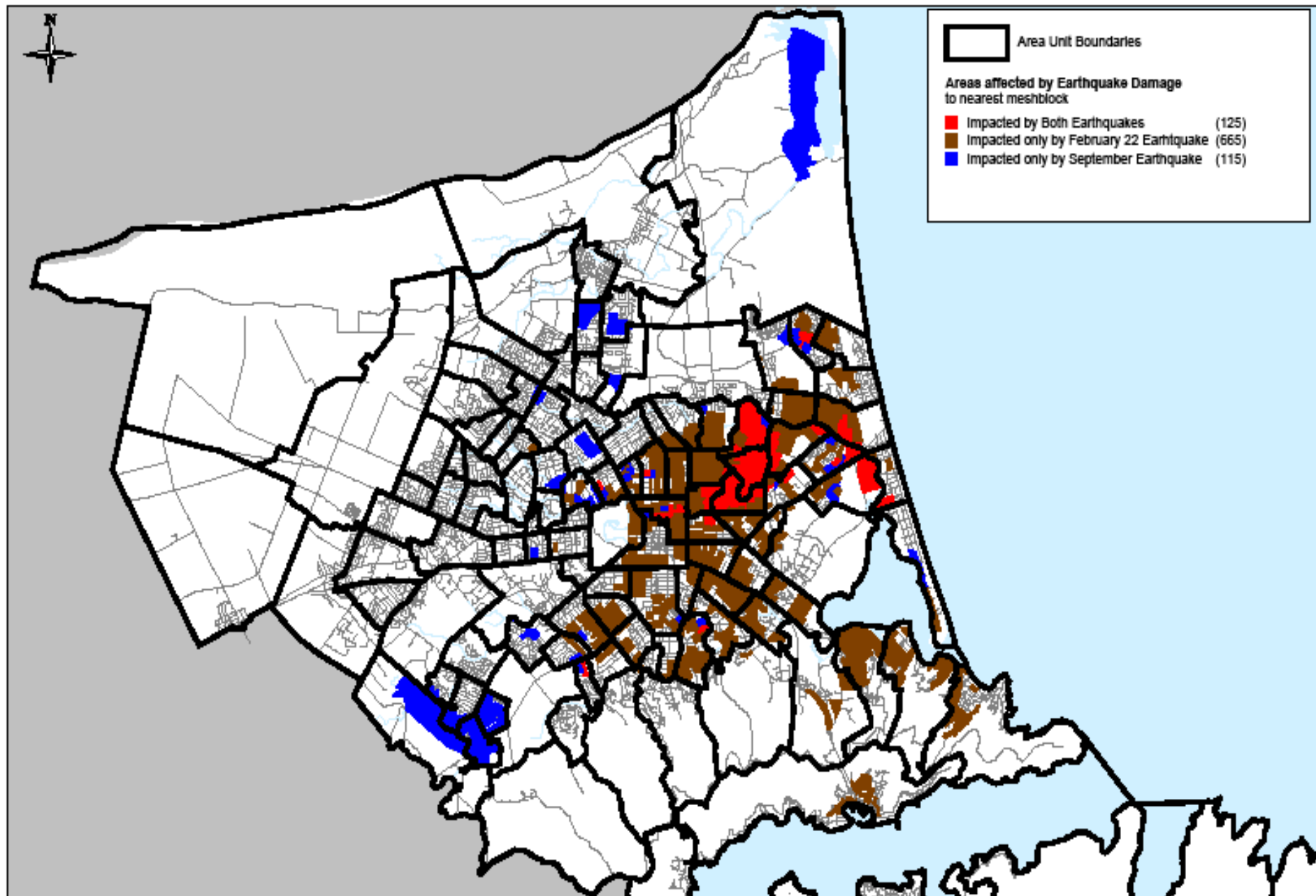
Before 21 February - 8 more aftershocks over Magnitude 5.0

- 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



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

Meshblocks affected by liquefaction and significant building damage in 4 September 2010 and 22 February Earthquakes with Area Unit Boundaries (Indicative only)

Christchurch City Council



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









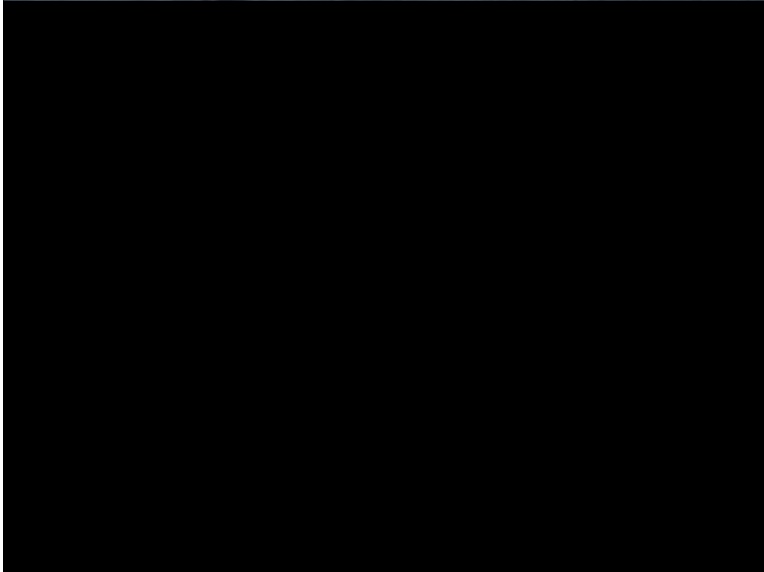
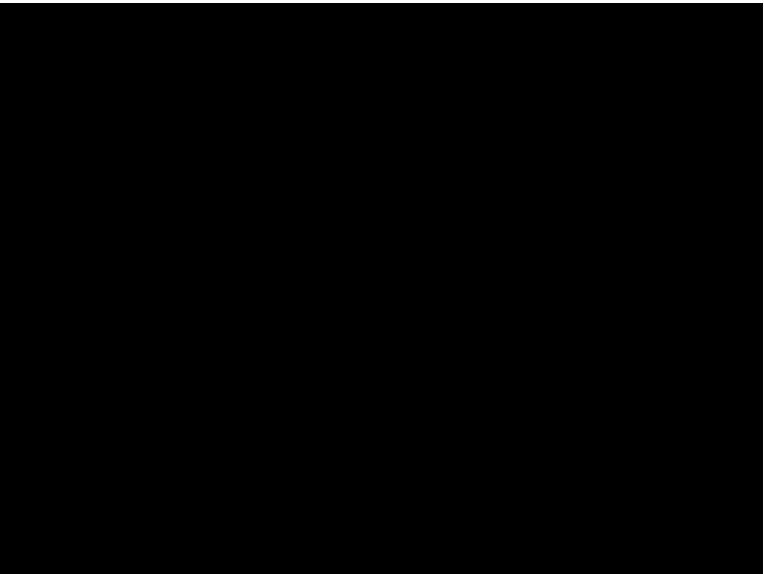














Image: Google Maps







Some names...

CER Act 2011 – Canterbury Earthquake Recovery Act

CERA – Canterbury Earthquake Recovery Authority

CCDU – Central Christchurch Development Unit

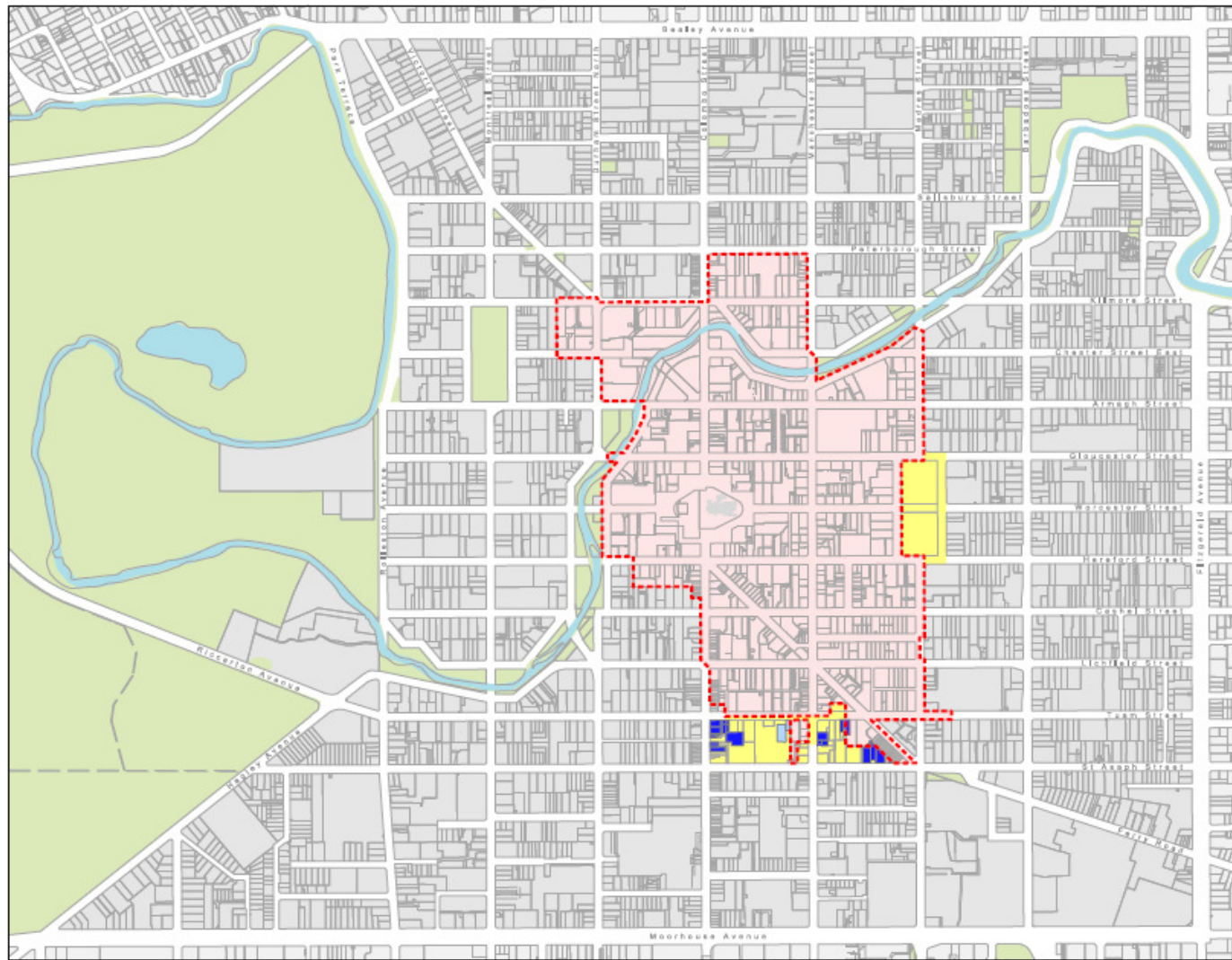
Central City Red Zone





Residential Red Zones

Planned Cordon Reductions Dec 11

CHRISTCHURCH
CENTRAL CITY PLAN

Christchurch City Council 07/12/2011
Scale 1:5,000@A1



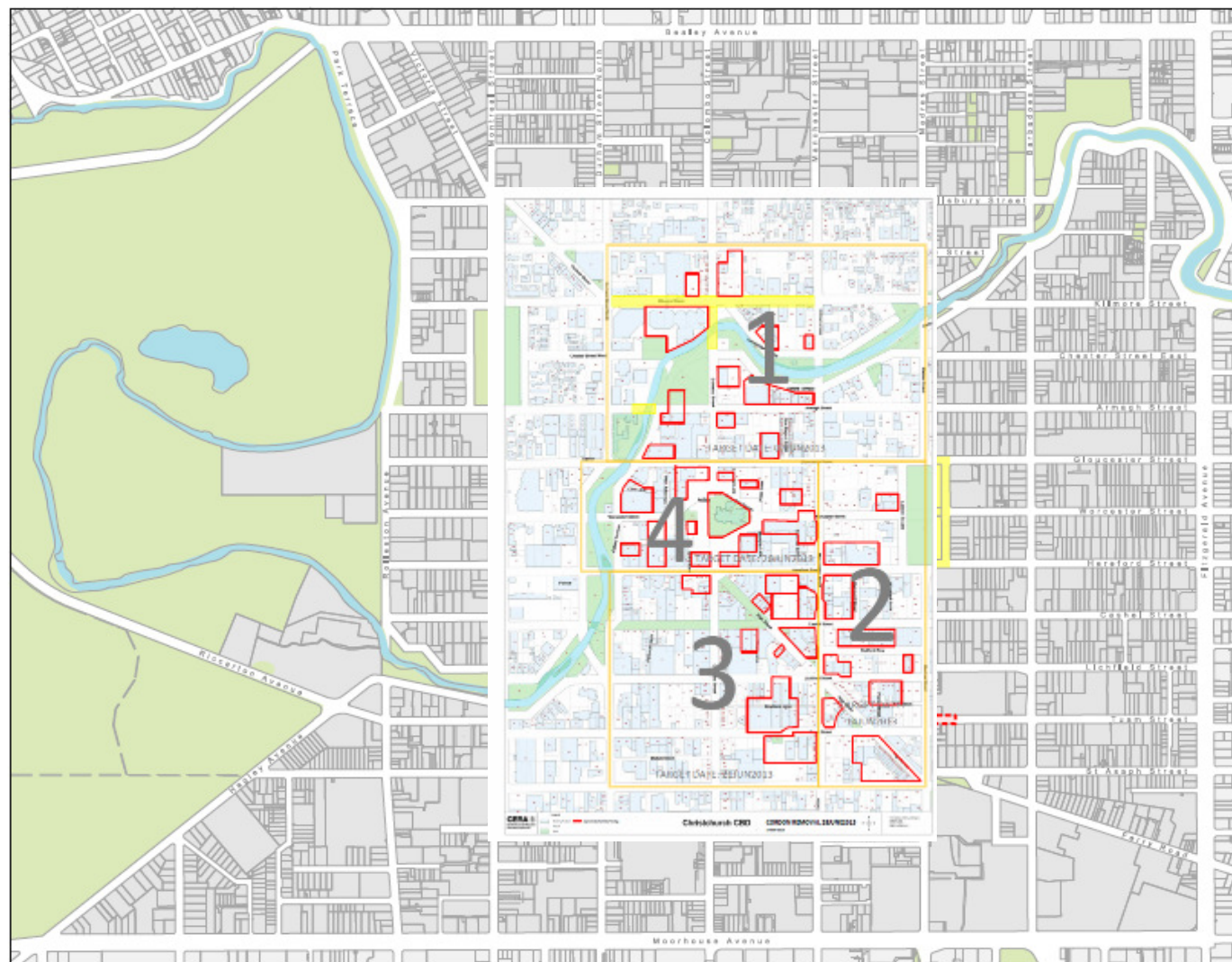
-  Cordon Area
-  Area Coming out of Cordon
-  Partial Building Demolition
-  Underway or Proposed to be Demolished Buildings
-  Demolished Buildings

Planned Cordon Reductions Dec 11

CHRISTCHURCH
CENTRAL CITY PLAN

Christchurch City Council 07/12/2011
Scale 1:5,000@A1

-  Cordon Area
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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



Safer Canterbury

Creating Safer Communities



CPTED development...

Safer Christchurch Team 2009

Crime Prevention Project Facilitator

CPTED training workshops

CPTED assessments

Injury Prevention Project Facilitator

CPTED development

Community Safety Team 2011

Crime Prevention Team Leader

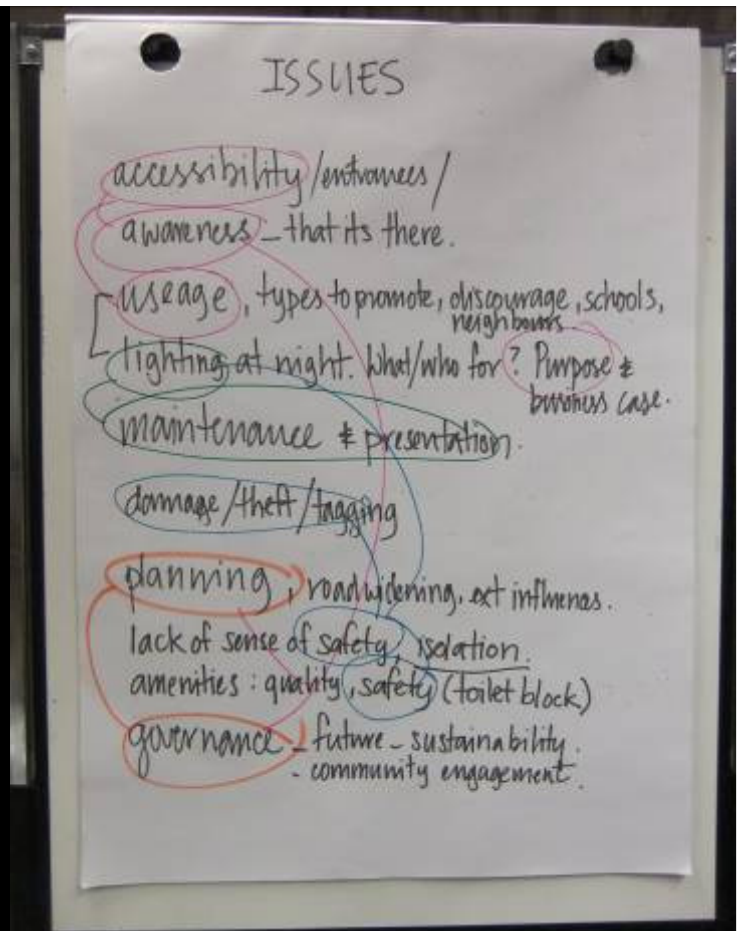
CPTED Programme

MOJ Funding for CPTED

CPTED Advisor

Crime Prevention Advisor

Injury Prevention Advisor



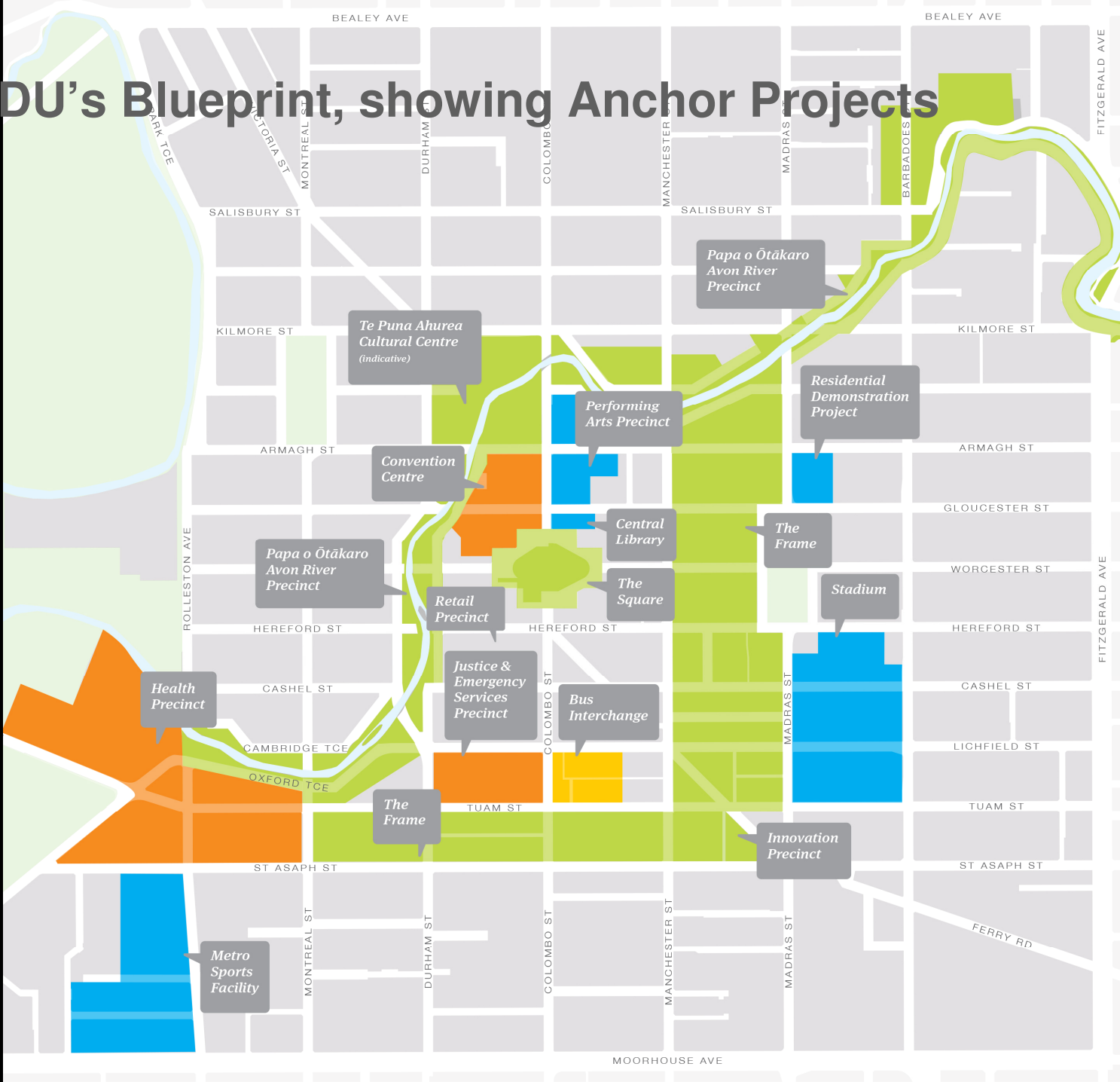
CPTED development...

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, ownership, 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, unanticipated 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.

The group can assist with...

- Providing expert advice, ideas and recommendations on designing out crime.
- Providing pre-application advice to architects, planners and planning consultants, developers and internal stakeholders.
- Early identification of potential crime attractors and crime facilitators with advice on practical, cost effective alternatives.
- Adding value to developments by designing for safety, without holding up the process.



For more information

Additional information and guidance is available on the Council website, www.ccc.govt.nz/safetybydesign

Contact:

The Crime Prevention Team Leader
Community Safety Team
Community Support Unit
Christchurch City Council
53 Hereford Street
PO Box 73 016
Christchurch
safetybydesign@ccc.govt.nz

Christchurch City Council

FREE
design out crime
advisory service

*how we can help you design
safety from crime into your
development*



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

Image: Hereford Holdings Ltd



4.2 Table 1 Area 2 Issues and Treatments (continued 4)

	Location	Issue	Treatment
	<p>19  </p> <p>150 Lichfield Street.</p>	<p>Doors at rear and side unsecured.</p>	<p>Request owner / contractor to secure to prevent public entry.</p>
	<p>20 </p> <p>152 Lichfield Street.</p>	<p>Entrapment zone created from exposed basement.</p>	<p>Request owner / contractor to secure to prevent public entry</p>
	<p>21 </p> <p>156 Lichfield Street.</p>	<p>Building rubbish on vacant lot.</p>	<p>Request owner / contractor to clear.</p>

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



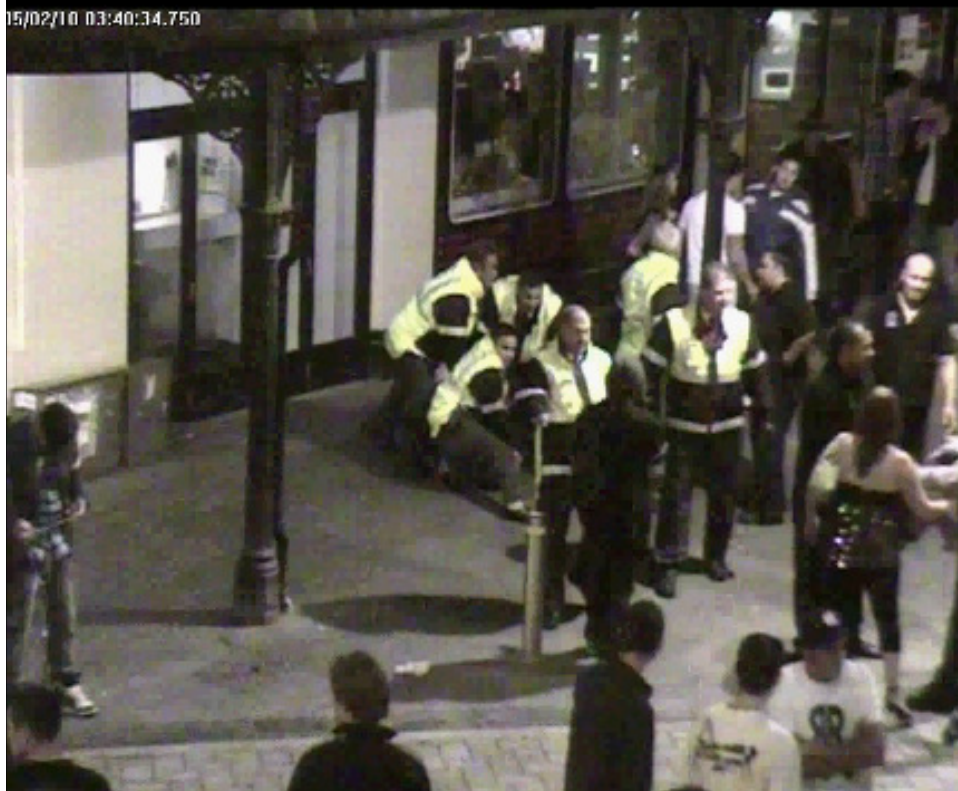
Stewart Plaza . . .



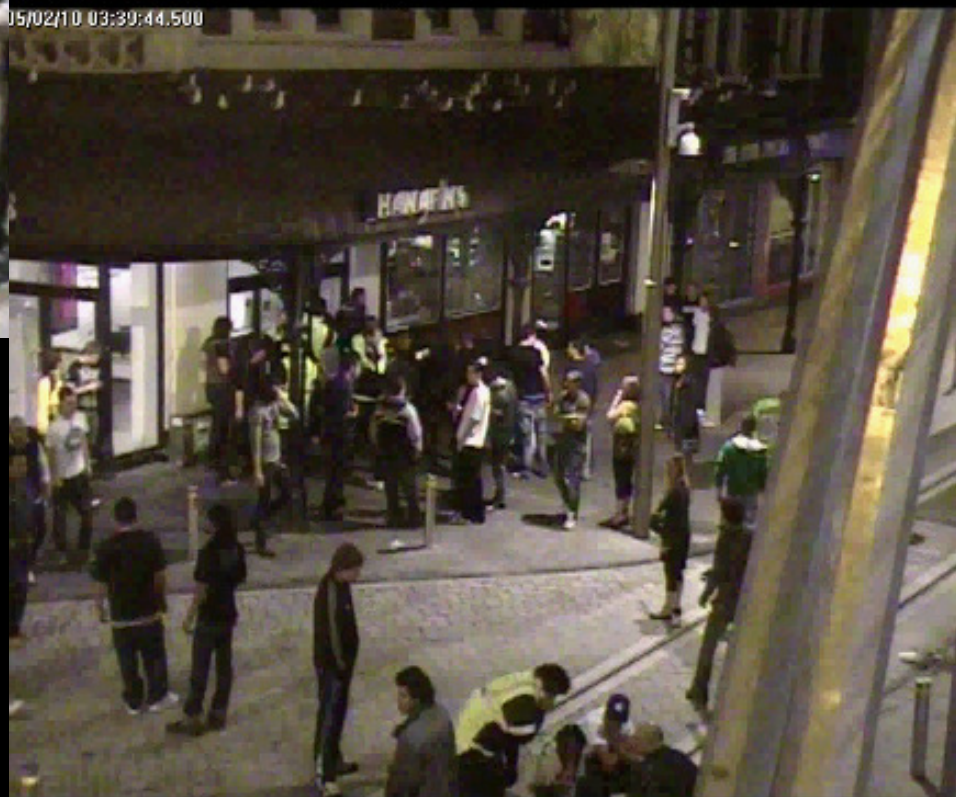


3:00am Stewart Plaza / Colombo Street

15/02/10 03:40:34.750



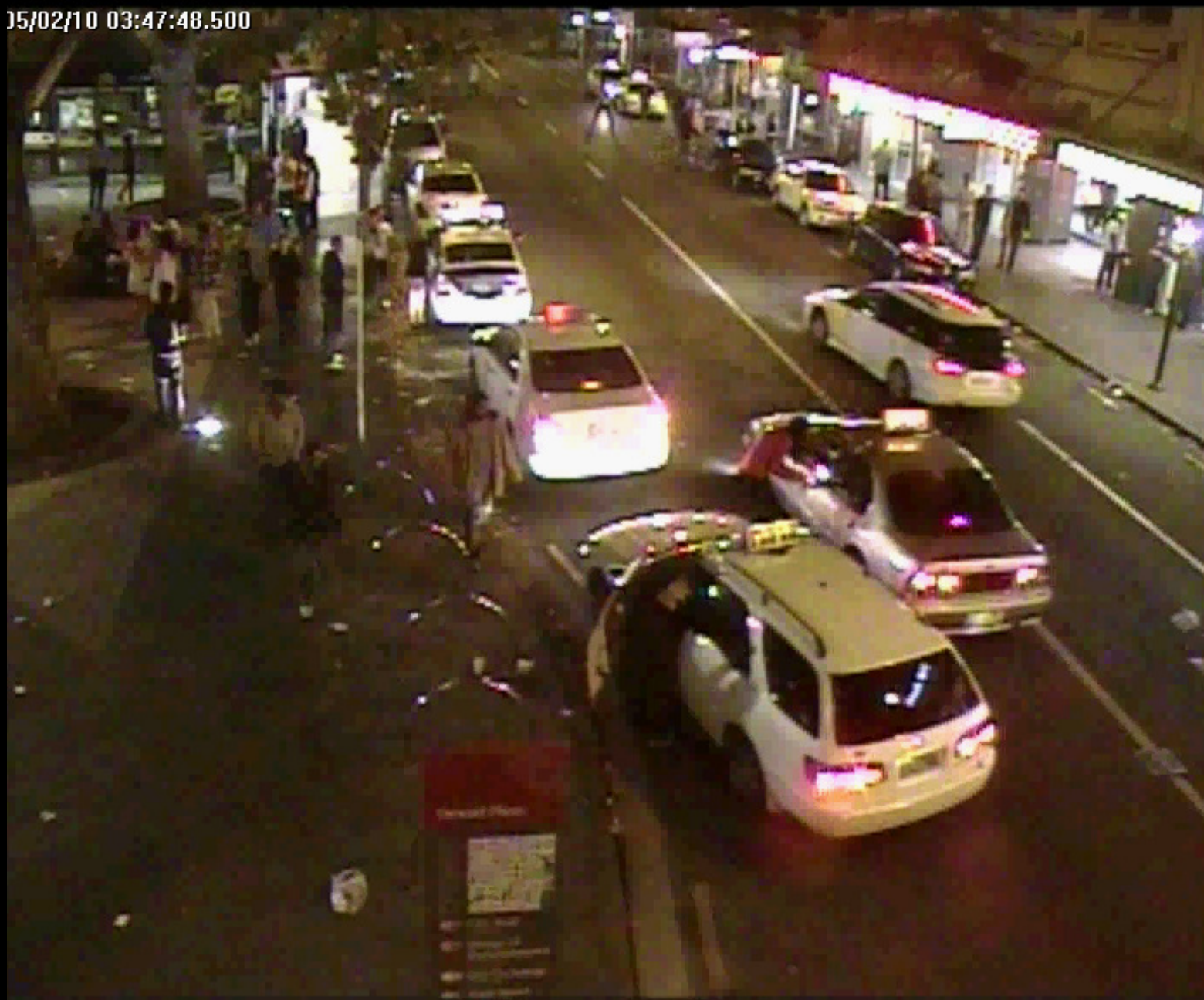
15/02/10 03:39:44.500



05/02/10 03:45:06.000



15/02/10 03:47:48.500



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



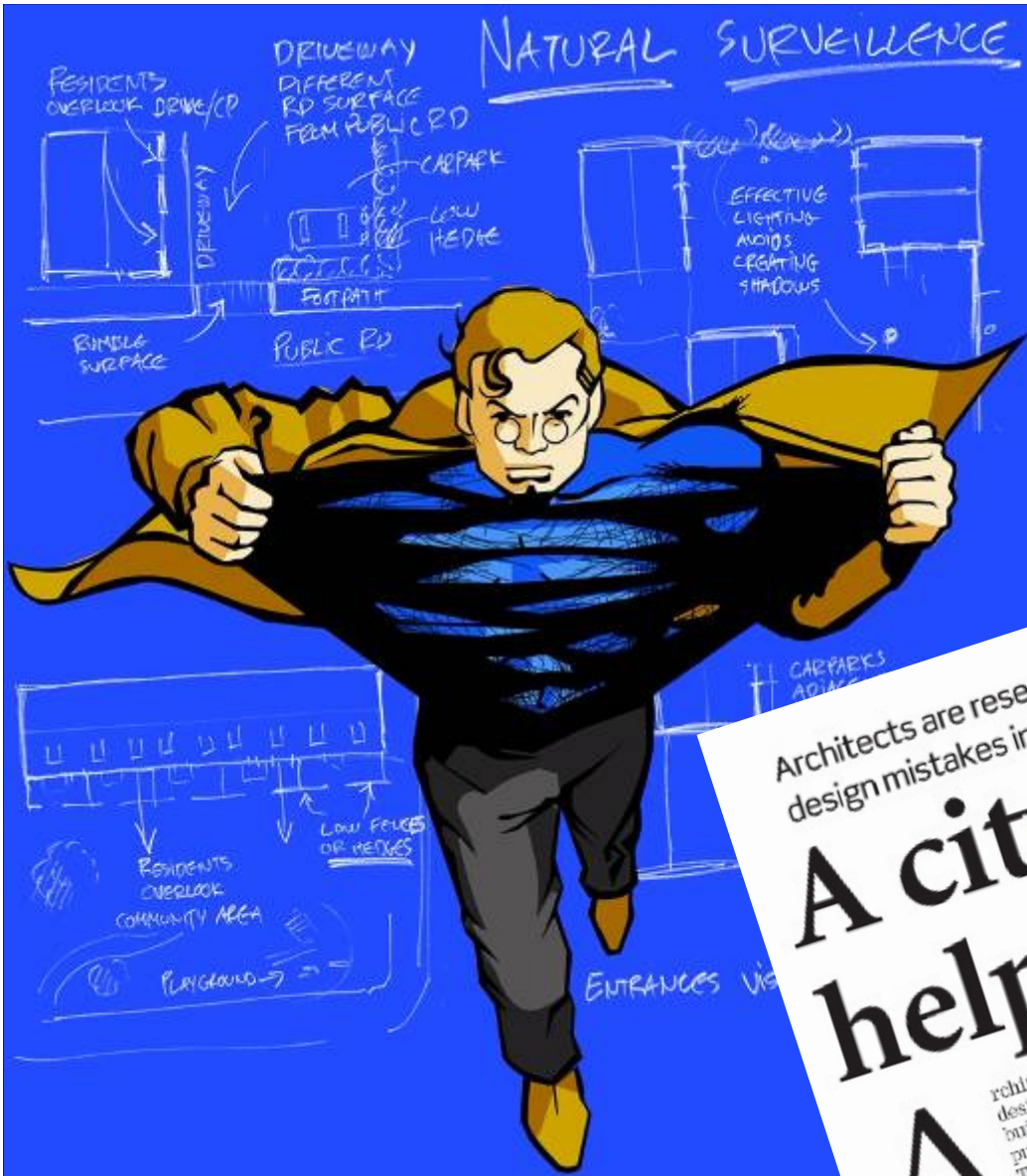


Image: The Christchurch Press

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 normally prevent crime. But there's a growing movement afoot to make architects do just that, and if this movement gets legs, Christchurch could become a global leader in crime-fighting architecture.

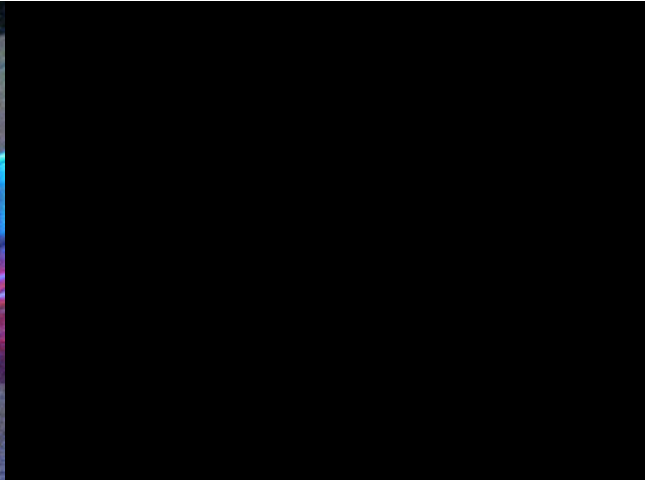
modern city on a scale rarely possible", that the goal was to make Christchurch the "safest city in the world" and to build a body of work "recognised as best practice internationally".

Those lofty goals aren't just the city council's. The Canterbury Earthquake Recovery Authority is on board, promising in its Central City Recovery Plan and its Transportation Plan that crime

criminals, according to the theory, hate witnesses and so are less likely to commit crimes where they can be observed.

In building design, this means locating shops, offices, lounges and kitchens at the front of buildings, placing windows and doorways that overlook the street and public places. It's about eliminating "entrapment" spots, where criminals can lurk or drag or

The Christchurch Press Sat 4 May 2013



Questions . . .