



University of HUDDERSFIELD

University of Huddersfield Repository

Armitage, Rachel

Crime Prevention through Environmental Design (CPTED) and Secured by Design (SBD): What Works

Original Citation

Armitage, Rachel (2017) Crime Prevention through Environmental Design (CPTED) and Secured by Design (SBD): What Works. In: Strategic Command Course, College of Policing, 11th January 2017, Sunningdale, UK. (Unpublished)

This version is available at <http://eprints.hud.ac.uk/id/eprint/31239/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Crime Prevention through Environmental Design (CPTED) and Secured by Design (SBD): What Works?

Professor Rachel Armitage
Director: Secure Societies Institute

Inspiring tomorrow's professionals



Crime Prevention through Environmental Design (CPTED)

What is it?

Inspiring tomorrow's professionals



A method of reducing crime through the design and manipulation of the built environment (planning stage)

Houses

Schools

Hospitals

Commercial

Railway stations

Here comes the theory...

- Opportunity theories (Rational Choice Theory, Routine Activity Theory and Crime Pattern Theory).
- Opportunities play a **role** in influencing crime.
 - For a crime to occur there has to be a **suitable target**, a **likely offender** and the **absence of a capable guardian**.
 - Offenders select targets based upon what they become **aware of** as they go about their **daily activities** and move between places.
 - Offenders seek to maximise the **benefits** and minimise the **risks** of offending.

CPTED aims to block those opportunities through the design of the environment so that:

- Offenders are **less likely to ‘pass by’** your house as part of their day-to-day activities.
- If they do, the design and layout of your house and surrounding properties will influence their **‘perceptions’ of risk.**
- If they are not deterred by the perceptions of the risk of being noticed/challenged, they will find **physically overcoming the security** too difficult.

Creating Defensible Space

Use of design to create **symbolic barriers** that portray the message that an area is private.



Limiting through movement

Less opportunities to **notice** the house.

Less **access/escape** routes.



Maximising surveillance

Offenders are more likely to be **observed** (or feel like that are being observed) by neighbours and/or passers by.



Management and maintenance

The area is well maintained giving the impression that **people care** and would challenge the offender if observed.



Standards of physical security

The house is **difficult to get into**. Doing so would take time and would be likely to raise suspicion.



What CPTED is not



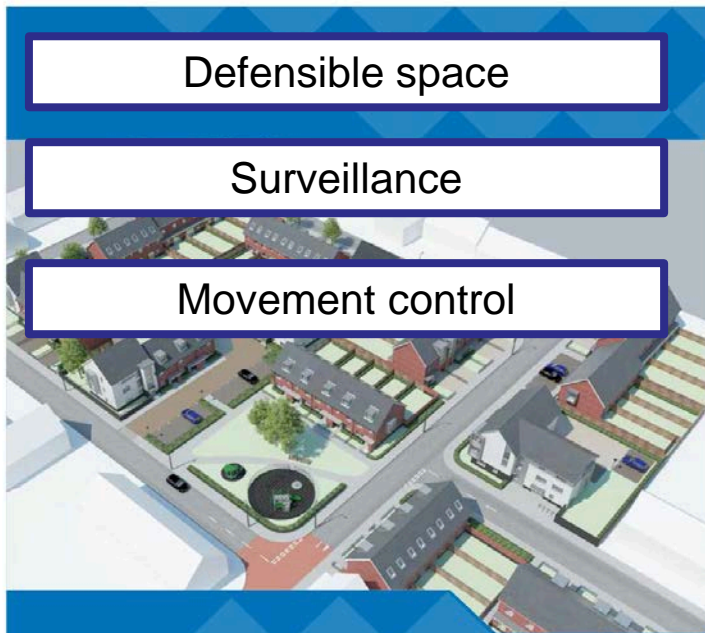
Secured by Design: Standards based on principles of CPTED

University of
HUDDERSFIELD

Defensible space

Surveillance

Movement control



SECTION 1:
THE DEVELOPMENT
– LAYOUT & DESIGN
(PLANNING ISSUES)

Physical security



SECTION 2:
SECURITY OF
DWELLING

Implementing CPTED/SBD in the UK

Inspiring tomorrow's professionals



How is CPTED delivered in England and Wales

University of
HUDDERSFIELD

Crime Prevention Design Advisors & Police Architectural Liaison Officers

To find your nearest crime prevention design advisor, click on the map below or chose from the drop-down menu.



Architectural Liaison Officer

Crime Prevention Design Advisor

Designing out Crime Officer

Select your local police force from the drop-down menu

Please select

- British Transport Police
- States of Jersey Police
- Guernsey Police
- Isle of Man Constabulary
- Police

- Each police force has ALO/CPDA/DOCOs.
- Traditionally warranted police, but move towards civilian role (GMP).
- Police station/local authority planning dept.
- Review planning applications, advice on crime risk, deliver SBD, influence planning policy/strategy.
- Jan 2009 – 347
- Nov 2014 - 125

The Delivery of CPTED/SBD

- What works?

Inspiring tomorrow's professionals



What works (and doesn't) - delivery

It's an open plan office. It's hot seating. Half the time you'll go in you'll find somebody sitting in your seat and you haven't got the table space. I have to work at home. I have the

Architects' plans spread out on the lounge carpet. That's the only way I can do it.

Convincing others of the importance of CPTED

- It takes a long time for any benefits to become apparent.

- F

- It

It's not sexy. You don't go there on a blue light.

- Some

- bec

- A

- V

- Y

It's not going to get you a promotion between Inspector and Chief Inspector so they are not interested in it.

apparent

- It's boring – it's not sexy!

CPTED/SBD – Individual elements of Design What works?

Police recorded crime

Which design features influence crime? University of HUDDERSFIELD

Design Features Checklist

Development:	31 design features specific to the property	
Date:		
Time:		
Environment		
1. Does the development have a purpose for young people e.g. youth centre?	No	
2. Does the street layout make it easy to find your way around?	2193 houses	
Layout		
3. Are there gates or barriers to the development?	12 developments	
4. If there are footpaths within the development, do the footpaths lead to:	Open land	
	Across 3 police forces	
		area
	Maze or Footpaths	
5. If there are footpaths, are they adequately lit?	Police recorded crime data for 3 years	
		equate

Through movement





Compared to a true cul-de-sac, through roads experienced 93% more crime.



Compared to a true cul-de-sac, leaky culs-de-sac experienced 110% more crime.

Road layout



Being located on a corner plot increased risk of crime by 18%.

Surveillance



Properties overlooked by 3 or more other properties experienced 38% less crime

[European Journal on Criminal Policy and Research](#)

March 2011, Volume 17, [Issue 1](#), pp 29–54

It Looks Good, but What is it Like to Live There? Exploring the Impact of Innovative Housing Design on Crime

Authors

[Authors and affiliations](#)

Rachel Armitage , Leanne Monchuk, Michelle Rogerson

CPTED/SBD – Individual elements of Design What works?

Offender decision making

What works...in the words of the offender?

- 22 adult prolific burglars currently serving a prison sentence (Whealston, Armley, Newhall).
- 16 photographs:

*“From what you can see from the photo,
can you describe what would **attract** you to this property when selecting a
target for burglary”*

*“From what you can see from the photo,
can you describe what would **deter** you (put you off) from selecting this
property as a target for burglary”*

The principles of CPTED

University of
HUDDERSFIELD

Surveillance

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE

Secured by Design New Homes

University of
HUDDERSFIELD

“For the majority of housing developments, it will be desirable for dwelling frontages to be open to view, so walls, fences and hedges will need to be kept low”

“Planting should not impede the opportunity for natural surveillance”.

“Dwellings should be positioned facing each other to allow neighbours to easily view their surroundings”.

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE



Surveillance – don't like clear visibility

*This is a burglar's dream house!
The hedge is high and blocks the
view from the road. The gate is so
high, no-one can see you and the
busy road masks any noise that I
make.*

*Open fences
would put me off.*

*This would be a perfect target.
Passers by can't see in so
they wouldn't notice you
breaking in. The high gate and
hedges block the view so no-
one can see what is going on
inside.*

*I'd feel more
exposed
if the walls and
fences
were lower.*

Surveillance – don't like houses facing the street

I'd keep away – wouldn't want anything to do with that. They could be gawping out the windows – you only need one of them on that street

Surveillance – don't like the true cul-de-sac

I wouldn't target houses on a cul-de-sac because you feel trapped and it's difficult if someone challenges you. They might say 'what are you doing?' and you say you are lost and then you have to walk back out the way you came in and they are looking at you.

If it's a cul-de-sac then it's usually one way in, one way out. You'd be stupid to do a cul-de-sac.

The principles of CPTED

University of
HUDDERSFIELD

Physical security

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE

Secured by Design New Homes

University of
HUDDERSFIELD

Physical security – Part 2 of SBD

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR



THE AWARDS
2012
WINNER
Entrepreneurial University of the Year





Physical security – don't like good quality locks

Yes, I can tell by looking at the lock that it would be easy to snap.

Having mole grips is like having the key to the door!

The hinges are on the outside of that door for God's sake, it's a 3 minute job. It's a cheap arse door that one!

This lock can easily be mole-gripped. You can tell because it's thin. The new ones are chunkier.

If manufacturers know that we can mole grip a lock, why don't they change that lock to make it harder to break in?


I would snap the cylinder on the side door – it's a really poor design is that door.

Physical security – not deterred by burglar alarms

*Good alarms like *** don't
stop when you pull them off
the wall.*

The cheap ones do!

Physical security – attracted to excessive security



*The security grille
makes me think
there's something
worth taking.*

The principles of CPTED

University of
HUDDERSFIELD

Through movement

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE

Secured by Design New Homes

University of
HUDDERSFIELD

“Whilst it is accepted that through routes will be included within development layouts, the designer must ensure that the security of the development is not compromised by excessive permeability.”

“Footpaths linking culs-de- sac to one another can be particularly problematic, and in such cases the layout may need to be re-considered.”

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE



Through movement - gives them legitimacy

Yes, this is perfect! Easy pickings. I would first walk up and down this footpath. No-one would give me a second glance. Even if I was a tramp walking up and down I wouldn't look out of place – it's a footpath, no-one can question you.

If I was in there and the police came I would be boxed in and wouldn't have an excuse for being in there. I couldn't say 'I'm just walking home Officer'

Through movement – allows them to evade police

The appeal of a footpath is that you know how you are getting in and how you escape

Having ginnels on an estate is great, cos you know the area better than the police, you'll easily lose them. You know the routes!

Those ginnels and footpaths are more or less an escape route.

Burglars like footpaths, it makes it easy as the police can't get there easily

Through movement - don't have to retrace their steps

*On a cul-de-sac,
you have to walk
back out the way
you came in.*

*If it's a cul-de-sac
it's usually one way
in, one way out.
You'd be stupid to
do a cul-de-sac.*

*I wouldn't go further into the
cul-de-sac. There is no reason
to be on a cul-de-sac unless
you live there. You aren't going
anywhere so you are a
stranger. If it's a through road
you can just keep walking
through.*

The principles of CPTED

University of
HUDDERSFIELD

Defensible space

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE

Secured by Design – New Homes

University of
HUDDERSFIELD

“Where it is desirable to limit access/use to residents and their legitimate visitors, features such as rumble strips, change of road surface (by colour or texture), pillars, brick piers or narrowing of the carriageway may be used”.

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE



Defensible space – don't like feeling that everyone knows each other

University of
GUELPH

If a burglar had anything about them they'd know that all the people that live in those houses know each other and would be chatting to each other.

I wouldn't go up this street it's far too open.

People living here will have a bee in their bonnet. This is a private road for private people. I would feel awkward here. It's all about the bluff and I couldn't pull it off here.

Everyone that lives there will be focused on the entrance and what goes on. They'll all know each other, keep an eye out for each other, give the key to the coal man – that sort of thing.



University of Huddersfield Repository



You are here: [Uni home page](#) » [Research and Enterprise](#) » [Repository](#)

Create

- Home
- About
- Help
- Search ▶
- Browse ▶
- Author Corner ▶

“Why my house?” – Exploring the influence of residential housing design on burglar decision making.

Armitage, Rachel and Joyce, Chris (2016) “Why my house?” – Exploring the influence of residential housing design on burglar decision making. In: Re-building Crime Prevention through Environmental Design (CPTED). Routledge, Oxford, UK. (In Press)



Microsoft Word
Restricted to Repository staff only
[Download \(6MB\)](#)

Tools

EndNote

[find a copy](#)

[SHARE](#) [f](#) [t](#) [e](#) ...

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR



2012
THE AWARDS
WINNER
Entrepreneurial University of the Year



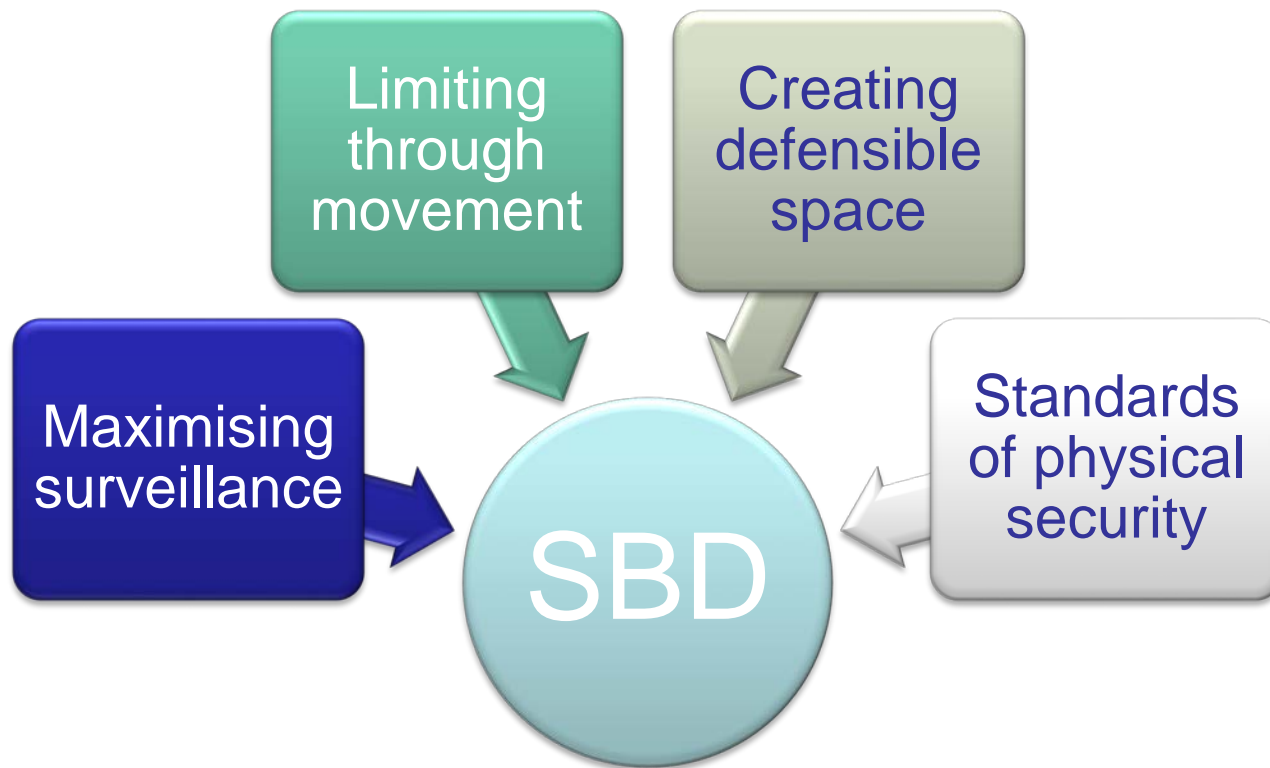
Evaluating the effectiveness of SBD

Does it work?

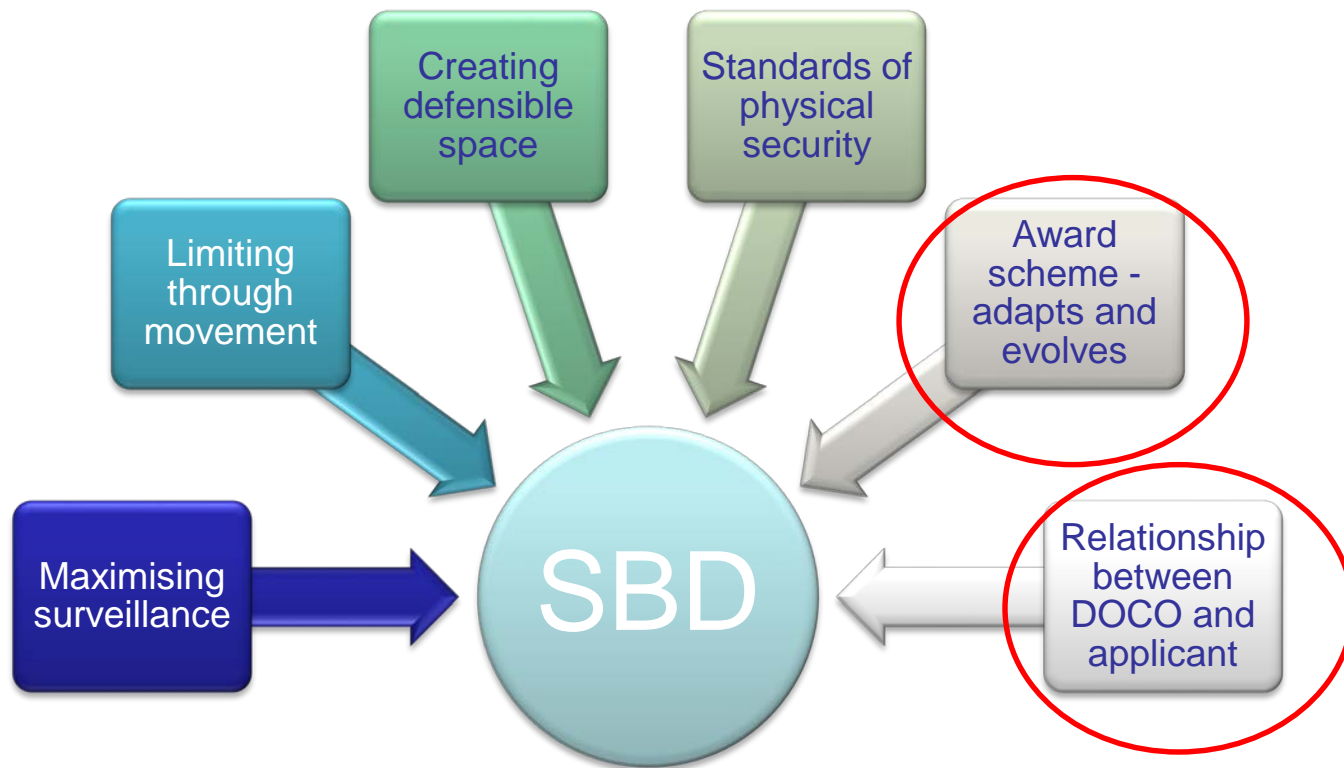
Inspiring tomorrow's professionals



SBD is based on CPTED but... CPTED is not SBD



SBD is based on CPTED but... CPTED is not SBD

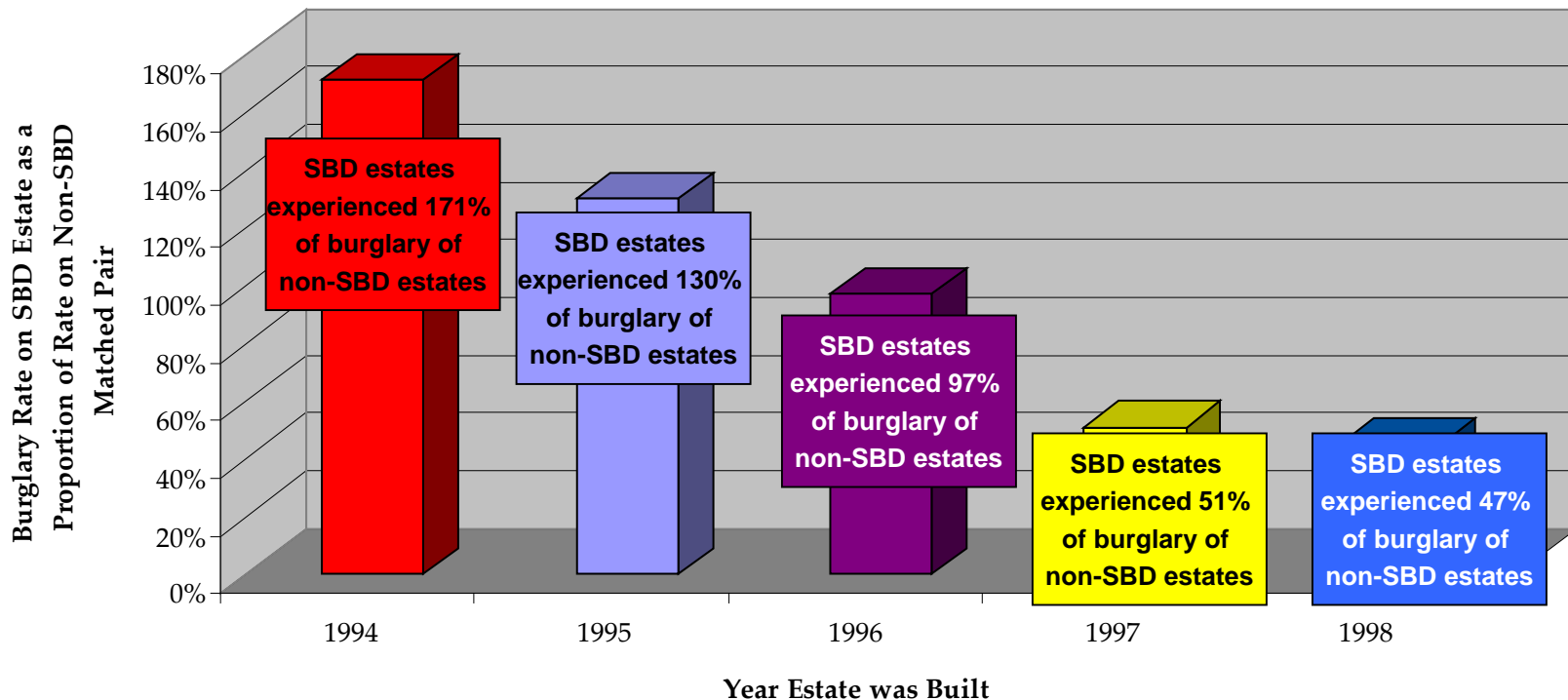


Evaluating Secured by Design (as a scheme)

Evaluation	Key findings	Issue/problem
Armitage 2000	<ul style="list-style-type: none">-55% reduction in crime (refurbs)-Burglary 71% higher NSBD-Total crime 34% higher NSBD-Self reported burglary 8.4% (NSBD), 2.9% (SBD)	Sample built 1994-1998
Pascoe 1999	Burglary 31% higher NSBD	Sample built pre-1999
Brown 1999	SBD 40% fewer burglaries/vehicle crime	Sample built pre-1999
Teedon and Reid 2009	SBD total housebreaking fell 61% NSBD fell 21%	Just Part 2 (windows and doors)

What's the problem?

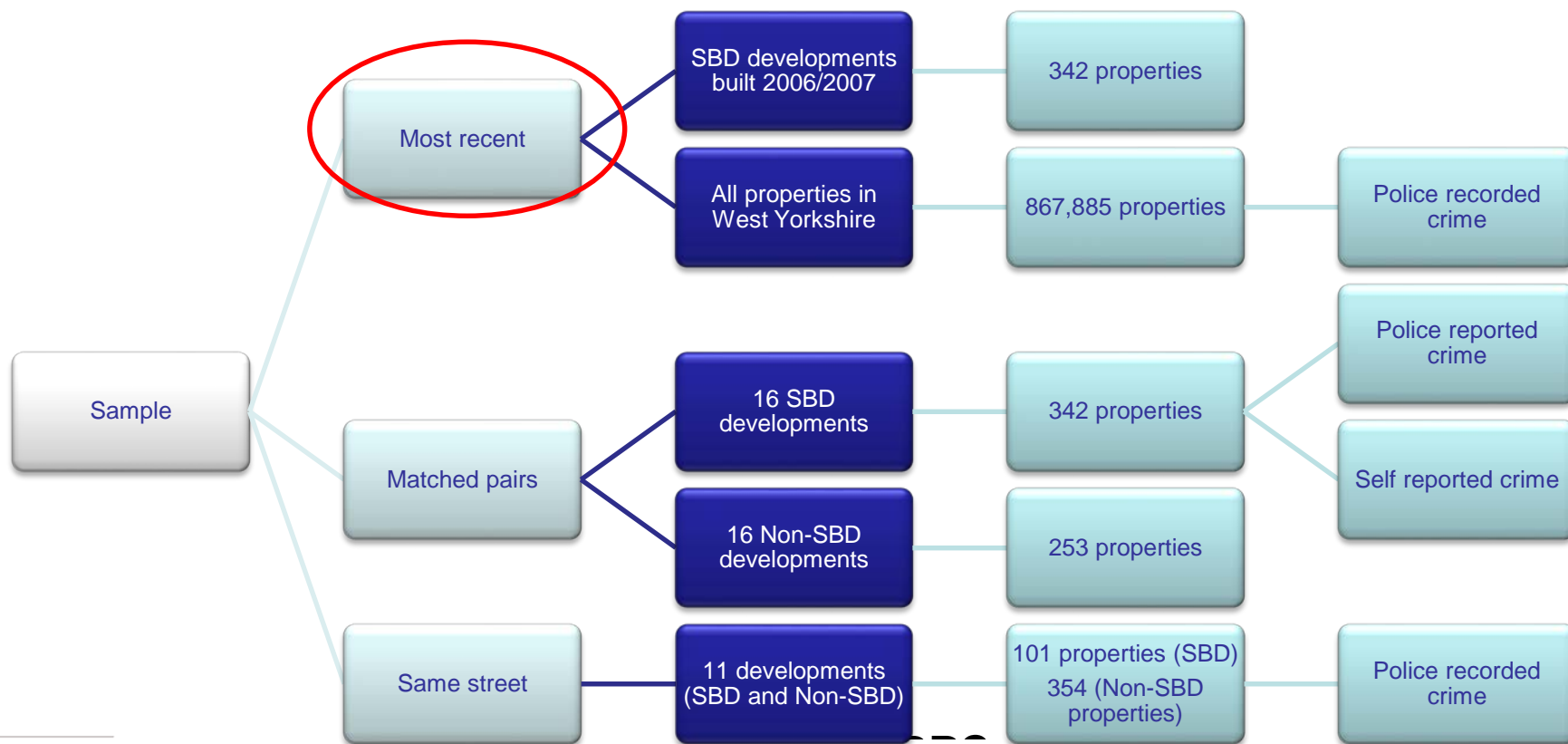
SBD as an Evolving Standard



Evaluation of Secured by Design in West Yorkshire

Armitage and Monchuk (2009)

Secured by Design in West Yorkshire (2009) University of HUDDERSFIELD

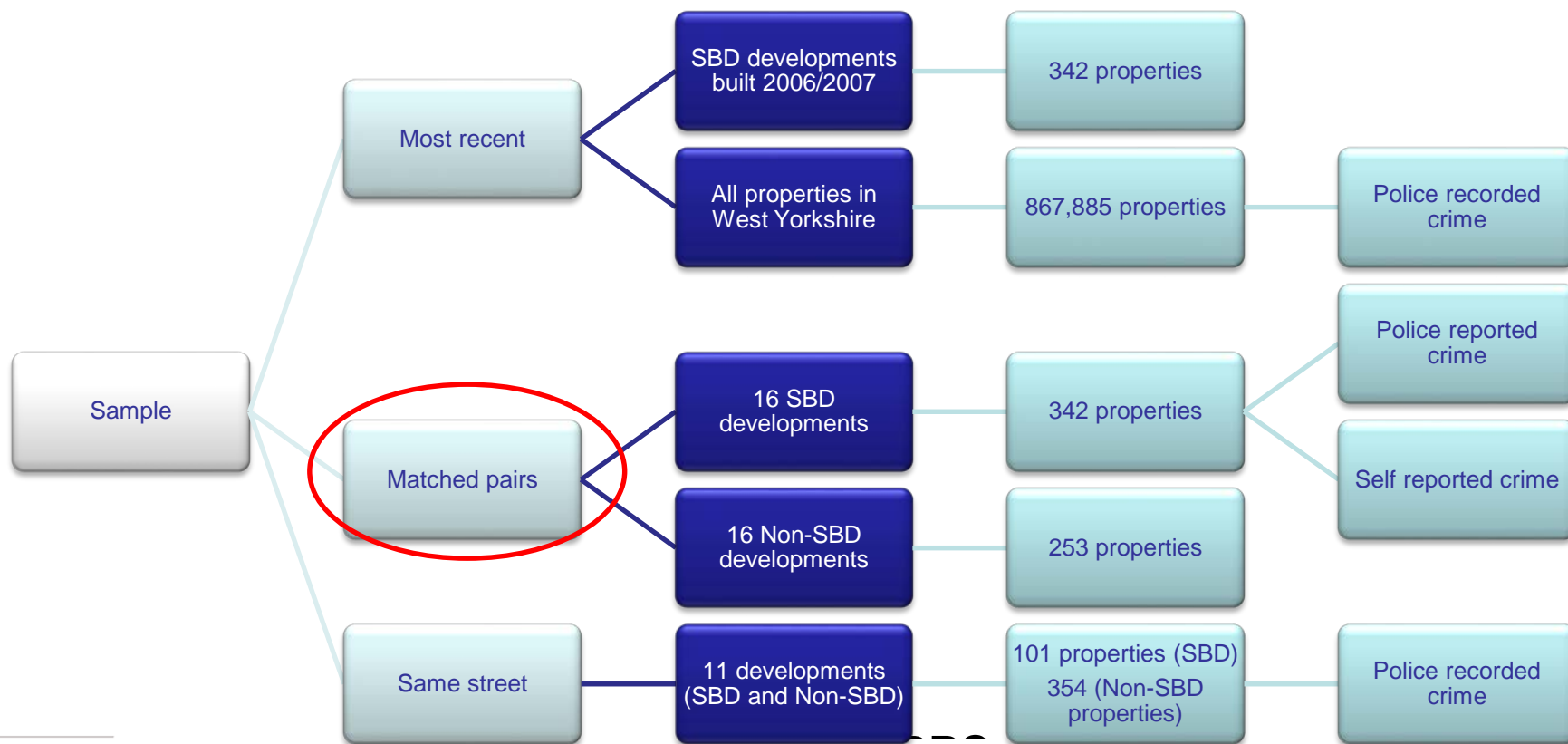


Secured by Design in West Yorkshire (2009)

University of
HUDDERSFIELD

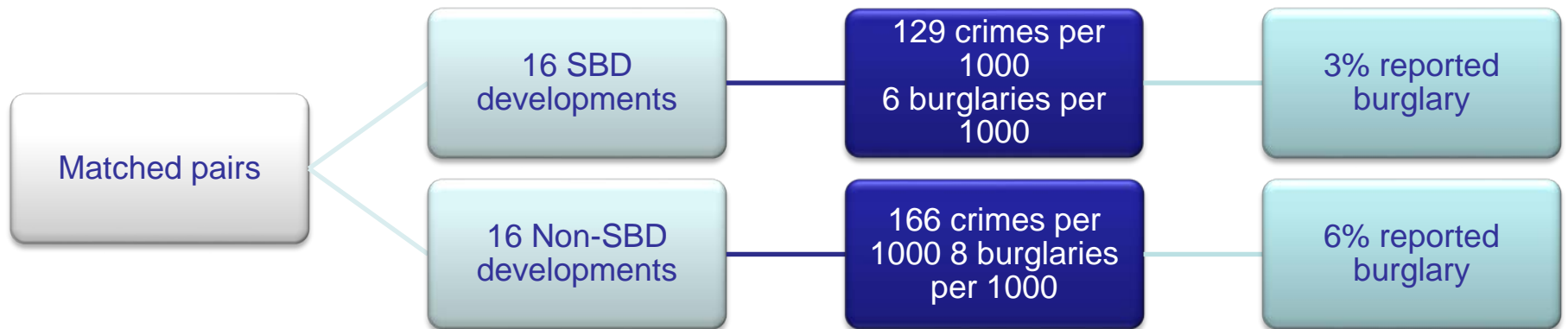


Secured by Design in West Yorkshire (2009) University of HUDDERSFIELD



Secured by Design in West Yorkshire (2009)

University of
HUDDERSFIELD



Secured by Design in West Yorkshire (2009) University of HUDDERSFIELD



Secured by Design in West Yorkshire (2009)

University of
HUDDERSFIELD



Tell us about your experience on SpringerLink and you could win a MacBook Pro. [Take survey.](#)



[Security Journal](#)

October 2011, Volume 24, [Issue 4](#), pp 320–343

Sustaining the crime reduction impact of designing out crime: Re-evaluating the Secured by Design scheme 10 years on

Authors

[Authors and affiliations](#)

Rachel Armitage , Leanne Monchuk



Restricted to Repository staff only
[Download \(6MB\)](#)

Inspiring tomorrow's professionals



What does it cost?

Upper
floor
apartment

£70

Ground
floor
apartment

£240

2/3 bedroom
detached
house

£170

4 bedroom
detached
house

£200



Two ongoing projects

- Evaluation of SBD in Hertfordshire & Devon/Cornwall
 - Built between 2011 and 2014.
 - Crime and ASB
- What Works Review of SBD (led by UCL).
 - Systematic review of all evidence on SBD
 - Guided by EMMIE



Thank-you

r.a.armitage@hud.ac.uk

 @DrRARmitage

Inspiring tomorrow's professionals

THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

theguardian
UNIVERSITY
AWARDS
Winner
2013

2012
THE AWARDS
WINNER
Entrepreneurial University of the Year


THE QUEEN'S AWARDS
FOR ENTERPRISE