1999 to 2009: Re-Evaluating Secured by Design (SBD) Housing in West Yorkshire

Leanne Monchuk and Dr. Rachel Armitage
This presentation...

- Presents the findings of a re-evaluation of SBD housing in West Yorkshire
- Conducted early 2009
- Funded by University of Huddersfield, ACPO CPI Ltd and West Yorkshire Police – entirely independent
- Based upon evaluation of SBD conducted in 1999 (Armitage, 2000)
Content of the presentation

• Why re-evaluate?

• What we did

• What we found

• Conclusions

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Why re-evaluate?

• 3 reasons......

1) June 2008, Quaver Lane in Bradford become 10,000th SBD property to be built in West Yorkshire

2) 2009 marked 10 year anniversary of original evaluation

3) Need to update sample utilised in 1999 evaluation

SBD evaluation began in 1999, and major changes were introduced with BS7950/PAS 24 in 1999.

The 1999 sample of SBD properties used did not include these changes.
SBD as an evolving standard

Burglary Rate on SBD Estate as a Proportion of Rate on Non-SBD Matched Pair

Year Estate was Built

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Therefore....
the original sample **did not** represent an accurate reflection of SBD in 2009
2009 Re-evaluation
What we did...

- Police recorded crime data
- **FOUR** levels of analysis:
  1) SBD v the whole of West Yorkshire
  2) Same street analysis
  3) Matched pair analysis
  4) Re-evaluating original sample
- Questionnaires sent to residents (self-recorded crime data)
- Visual audit
- Repeat victimisation

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Police Recorded Crime Data

<table>
<thead>
<tr>
<th>SBD</th>
<th>Whole of West Yorkshire</th>
<th>Same Street</th>
<th>Matched Pairs</th>
<th>Re-Evaluating Original Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built April 2006-March 2007</td>
<td>16 developments</td>
<td>11 developments</td>
<td>16 developments</td>
<td>2 developments</td>
</tr>
<tr>
<td>• 342 properties</td>
<td>• 101 properties</td>
<td>• 342 properties</td>
<td>• 36 properties</td>
<td>342 properties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-SBD</th>
<th>West Yorkshire 867,885 properties</th>
<th>11 developments</th>
<th>16 developments</th>
<th>2 developments</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 354 properties</td>
<td>• 253 properties</td>
<td>• 42 properties</td>
<td>342 properties</td>
<td></td>
</tr>
</tbody>
</table>
Self-reported crime data

3) MATCHED PAIRS

<table>
<thead>
<tr>
<th>SBD</th>
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| Non-SBD | • 16 developments           |
|         | • 253 properties            |

11% response rate
### Visual Audits

#### 3) MATCHED PAIRS

<table>
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<tr>
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</tbody>
</table>

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# Example of Visual Audit Schedule

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rater 1:</th>
<th>Rater 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs of Neglect</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graffiti within development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vandalism within development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litter/rubbish on streets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litter/rubbish in gardens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dog dirt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scoring

• 28 factors in total

• A score between 0 and 5 was awarded

• 28 x 0 = 0 lowest score possible for each development (positive)

• 28 x 5 = 140 highest score possible for each development (negative)
Findings...
1) SBD v whole of West Yorkshire

1) WHOLE OF WEST YORKSHIRE

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August 2007-July 2008
2 burglaries
5.8 per 1,000 properties*

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<th>West Yorkshire</th>
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<tbody>
<tr>
<td></td>
<td>867,885 properties</td>
</tr>
</tbody>
</table>

August 2007-July 2008
19,701 burglaries
22.7 per 1,000 properties*
2) SBD against Same Street

**2) SAME STREET**

- **SBD**
  - Built April 2006-March 2007
  - 11 developments
  - 101 properties

- **Non-SBD**
  - 11 developments
  - 354 properties

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**August 2007-July 2008**

- **12 offences**
  - 118.8 per 1000 households*
  - **0 burglary dwelling offences**
  - 0 per 1000 households*

- **93 offences**
  - 262.7 per 1000 households*
  - **5 burglary dwelling offences**
  - 14.1 per 1000 households*
## Crime Categories recorded within the ‘Same Street’ sample (August 2007-July 2008)

<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Non SBD</th>
<th>SBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Rate</td>
<td>No.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Assault</td>
<td>24</td>
<td>67.8</td>
</tr>
<tr>
<td>Criminal Damage</td>
<td>12</td>
<td>33.9</td>
</tr>
<tr>
<td>Burglary Other</td>
<td>7</td>
<td>19.8</td>
</tr>
<tr>
<td>Burglary Dwelling</td>
<td>5</td>
<td>14.1</td>
</tr>
<tr>
<td>Theft from vehicle</td>
<td>7</td>
<td>19.8</td>
</tr>
<tr>
<td>Theft of vehicle + twoc</td>
<td>3</td>
<td>8.5</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>93.2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>93</td>
<td>262.7</td>
</tr>
</tbody>
</table>
3) SBD and non-SBD Matched Pairs

3) MATCHED PAIRS

SBD
Built April 2006-March 2007
• 16 developments
• 342 properties

166 per 1000 households
2 burglary dwellings
5.9 per 1000 households

Non-SBD
• 16 developments
• 253 properties

166 per 1000 households
2 burglary dwellings
7.9 per 1000 households

August 2007 – July 2008
44 crimes
128.7 per 1000 households

August 2007 – July 2008
42 crimes
166 per 1000 households
2 burglary dwellings

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<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Non SBD No</th>
<th>Non SBD Rate</th>
<th>SBD No</th>
<th>SBD Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault</td>
<td>7</td>
<td>27.7</td>
<td>17</td>
<td>49.7</td>
</tr>
<tr>
<td>Criminal Damage</td>
<td>12</td>
<td>47.5</td>
<td>8</td>
<td>23.4</td>
</tr>
<tr>
<td>Burglary Other</td>
<td>1</td>
<td>4.0</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td>Burglary Dwelling</td>
<td>2</td>
<td>7.9</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td>Theft from vehicle</td>
<td>1</td>
<td>4.0</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td>Theft of vehicle + twoc</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>8.8</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>75.1</td>
<td>9</td>
<td>26.3</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>166.0</td>
<td>44</td>
<td>128.7</td>
</tr>
</tbody>
</table>
Self-Reported Crime Data

3% victim of burglary
3% victim of theft of vehicle
6% theft from vehicle

3) MATCHED PAIRS

SBD
Built April 2006-March 2007
• 16 developments
• 342 properties

3% victim of burglary
3% victim of theft of vehicle
6% theft from vehicle

Non-SBD
• 16 developments
• 253 properties

6% victim of burglary
6% victim of theft of vehicle
17% theft from vehicle

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4) RE-EVALUATING ORIGINAL SAMPLE

SBD
- 2 developments
- 36 properties

Non-SBD
- 2 developments
- 42 properties

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### 1999 – 2009: Matched Pair One

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SBD Street</td>
<td>14</td>
<td>1</td>
<td>71.43</td>
<td>1</td>
<td>71.43</td>
</tr>
<tr>
<td>Non-SBD Street</td>
<td>14</td>
<td>1</td>
<td>71.43</td>
<td>8</td>
<td>571.43</td>
</tr>
</tbody>
</table>

- SBD performs better than (or same as) non-SBD for both time periods
- Crime on SBD remained same
- Crime on non-SBD increased by 700%

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**1999 – 2009: Matched Pair Two**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SBD Street</strong></td>
<td>22</td>
<td>1</td>
<td>45.45</td>
<td>3</td>
<td>136.36</td>
</tr>
<tr>
<td><strong>Non-SBD Street</strong></td>
<td>28</td>
<td>5</td>
<td>178.57</td>
<td>6</td>
<td>214.29</td>
</tr>
</tbody>
</table>

- SBD performs better than non-SBD for both time periods
- Crime on SBD increased by 200%
- Crime on non-SBD increased by 20%
Sustainability of Crime Reductions 1999-2009

- SBD performs better than (or same as) non-SBD on both pairs in both time periods.
- Pair one - SBD sustained crime reduction, non-SBD saw crime increase.
- Pair two – SBD saw crime increase at a greater rate than non-SBD
Visual Audits

3) MATCHED PAIRS

SBD
Built April 2006-March 2007
• 16 developments
• 342 properties

SBD development score = 317

Non-SBD
• 16 developments
• 253 properties

Non-SBD development score = 388
Visual Audits

• Of 16 matched pairs:
  – 1 showed SBD and non-SBD to score the same
  – 12 showed SBD to score lower (positive)
  – 3 showed SBD to score higher (negative)

• Of the 32 developments, the best five (lowest score) were all SBD
• Of the 32 developments, the worst five (highest score) contained 4 non-SBD and 1 SBD
Conclusions

• Variety of methods and datasets to establish:
  – Whether SBD properties experience less crime than non-SBD properties
  – Whether residents living in SBD properties have lower levels of fear of crime than non-SBD counterparts
  – Whether SBD developments show less visual signs of disorder than non-SBD developments
  – Whether SBD has maintained its effectiveness as a crime reduction measure
Conclusions

1. **SBD versus ‘West Yorkshire’**
   - Burglary rates are lower within the SBD sample (5.8 per 1000 households compared to 22.7)
   - All crime categories lower in SBD sample

2. **SBD versus non-SBD ‘Same Street’**
   - Burglary rates are lower within the SBD sample (0 burglaries per 1000 households compared to 14.1)
   - All crime categories (with exception of criminal damage) lower in SBD sample

3. **SBD versus non-SBD ‘Matched Pairs’**
   - Burglary rates are lower within the SBD sample (5.9 burglaries per 1000 households compared to 7.9)
   - Assault, vehicle crime and burglary other higher in SBD sample

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4. 1999 versus 2009
   - For both matched pairs SBD was performing either the same or better than non-SBD in both time periods of 1999/2000 and 2007/08
   - Pair one sustained crime reduction, non-SBD saw crime increase; pair two – SBD saw crime increase at a greater rate than non-SBD

   • Self-Reported Crime
     - Twice as many non-SBD residents had experienced a crime within the previous year
     - For all crime categories, the proportion of SBD respondents experiencing the crime was lower in the SBD sample

   • Visual Audits
     - SBD sample scored lower than non-SBD sample (317 against 388)
     - Of the 16 matched pairs, 3 revealed SBD to perform worse than non-SBD, 1 showed the same score and 12 showed SBD to perform better
Conclusions

• To be complacent about the merits of any crime prevention measure is to ignore the evolving nature of crime

• SBD has continued to reduce crime and the fear of crime and SBD estates show less signs of visual disorder

• The effectiveness of SBD developments built more recently has exceeded that shown in the original evaluation
Thank-you for listening

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