Cycling as a Catalyst for Sustainable Living

Session 4D:
The Planning System, Private Developments and Cycling
“If you plan for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places”

William H White, The social life of small urban spaces (1980)
Irish Context
## Typical Modal Split

<table>
<thead>
<tr>
<th>Mode</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On foot</td>
<td>1,060</td>
<td>19%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>247</td>
<td>4%</td>
</tr>
<tr>
<td>Bus, minibus or coach</td>
<td>301</td>
<td>5%</td>
</tr>
<tr>
<td>Train, DART or LUAS</td>
<td>1,393</td>
<td>25%</td>
</tr>
<tr>
<td>Motorcycle or scooter</td>
<td>25</td>
<td>0%</td>
</tr>
<tr>
<td>Car driver</td>
<td>1,616</td>
<td>29%</td>
</tr>
<tr>
<td>Car passenger</td>
<td>522</td>
<td>9%</td>
</tr>
<tr>
<td>Van</td>
<td>95</td>
<td>2%</td>
</tr>
<tr>
<td>Other (incl. lorry)</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Work mainly at or from home</td>
<td>101</td>
<td>2%</td>
</tr>
<tr>
<td>Not stated</td>
<td>146</td>
<td>3%</td>
</tr>
</tbody>
</table>
A New Approach

- More sustainable living
- Goodbye to old Stereotypes
- Cycling for All!
Stereotypes

MAMIL
The Aim
A New Approach

External to Developments

Local and National Authorities must follow through on the delivery of committed sustainable transportation projects. In the absence of this delivery, commitments made by developers cannot be realised, no matter how great the will or the need.

Internal to Developments

- Smaller developments must curtail car parking and provide convenient, prominent bicycle parking, as well as good walking and cycling links to public transportation.
- Larger developments must focus on walking and cycling as dominant modes for all regular transportation needs.
How?

The Dutch Approach

Public sector commits to deliver (and actually delivers!) infrastructural improvements:

- Trunk public transport infrastructure
- Dedicated cycling infrastructure
- Segregation, including short-cuts (e.g., cycling-only bridges/tunnels contra-flow cycling on one-way streets)
- Convenient, safe public bike parking

Private sector designs around the bicycle:

- Bicycle parking
- Bicycle paths
- Showers, storage, etc.

Public sector provides education and training so cyclists of all ages and abilities can travel safely
Case Study: Houten

“The Dutch Cycling City”

- Suburb / satellite town of Utrecht (14km)
- Designed Town 1970s
- Buildings address green walking and cycling routes, rather than roads for cars;
- Cars and servicing are managed on a separate access network to the rear of properties;
- Interfaces between green routes and roads are either grade separated or favour the green route.
- Fully accessible for cars and service vehicles but no through roads.
Case Study: Houten

Images courtesy of Mr. André Botermans, Cycling Ambassador, Utrecht

Houten Bicycle Infrastructure
Case Study: Houten
Case Study: Houten
## Case Study: Houten

### Modal split in % (2011-2012)

<table>
<thead>
<tr>
<th></th>
<th>&lt;7.5 km</th>
<th>7.5-15 km</th>
<th>&gt;15 km</th>
<th>In general</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicles</td>
<td>21.3</td>
<td>64.6</td>
<td>66.8</td>
<td>41.3</td>
</tr>
<tr>
<td>Public transport</td>
<td>03.9</td>
<td>15.1</td>
<td>29.7</td>
<td>13.7</td>
</tr>
<tr>
<td><strong>Cyclists</strong></td>
<td><strong>43.1</strong></td>
<td><strong>16.4</strong></td>
<td><strong>01.7</strong></td>
<td><strong>26.3</strong></td>
</tr>
<tr>
<td>Pedestrians</td>
<td>30.5</td>
<td>00.0</td>
<td>00.0</td>
<td>17.2</td>
</tr>
<tr>
<td>Others</td>
<td>01.2</td>
<td>04.0</td>
<td>01.8</td>
<td>01.5</td>
</tr>
</tbody>
</table>

Courtesy of Mr. Ronald Tamse, Utrecht City Council
## Typical Modal Split Ireland

### Residential Areas in Sandyford Business District if Houten Cycling % Achieved

<table>
<thead>
<tr>
<th>Mode</th>
<th>Modal Split</th>
<th>Number</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>On foot</td>
<td>14.2%</td>
<td>781</td>
<td>-279</td>
</tr>
<tr>
<td>Bicycle</td>
<td>26.3%</td>
<td>1450</td>
<td>+1203</td>
</tr>
<tr>
<td>Bus, minibus or coach</td>
<td>4.0%</td>
<td>222</td>
<td>-79</td>
</tr>
<tr>
<td>Train, DART or LUAS</td>
<td>18.6%</td>
<td>1027</td>
<td>-366</td>
</tr>
<tr>
<td>Motorcycle or scooter</td>
<td>0.3%</td>
<td>18</td>
<td>-7</td>
</tr>
<tr>
<td>Car driver</td>
<td>21.6%</td>
<td>1191</td>
<td>-425</td>
</tr>
<tr>
<td>Car passenger</td>
<td>7.0%</td>
<td>385</td>
<td>-137</td>
</tr>
<tr>
<td>Van</td>
<td>1.3%</td>
<td>70</td>
<td>-25</td>
</tr>
<tr>
<td>Other (incl. lorry)</td>
<td>0.1%</td>
<td>6</td>
<td>-2</td>
</tr>
<tr>
<td>Work mainly at or from home</td>
<td>1.3%</td>
<td>74</td>
<td>-27</td>
</tr>
<tr>
<td>Not stated</td>
<td>2.0%</td>
<td>108</td>
<td>-38</td>
</tr>
</tbody>
</table>

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[Map of Sandyford Business District if Houten Cycling % Achieved]
Major Development Opportunities in Dublin and Cork

All of these sites have capacity for major residential developments, but severely constrained car accessibility.

Major Dublin Opportunity Sites (Several thousand residential units each)

Cork Docklands
Community Considerations in New Developments

Bicycle centric movement patterns:
- No car parking at houses but high quality convenient secure parking for multiple bicycles;
- Car share facilities for necessary external car travel;
- Centralised, managed long-term car storage and car hire for longer distance travel;
- Delivery service from shops – electric vehicles and/or cargo bikes;
- Severely restricted car access to schools, including for teachers;
- E-scooters and e-bikes for the less physically able

Community
- To be viable, it must work for all members of society;
- Accessible community facilities – amenities, post office, places of worship, community centre, nursing home etc, all with bicycle centric movement;

See cyclingwithoutage.org for community initiative in Copenhagen for the young to bring the old out cycling
Cycling for All

2-4 years

5-7 years

8-10 years

Cycling enlarges ‘the world’ of youngsters

- Average cycling distance (in kilometers)
- Age (in years)

Legend:
- elementary school
- secondary school
Cycling as a Catalyst for Sustainable Living

- Increased environmental awareness
- Reduced environmental impact and carbon footprint
- Increased health awareness and longer life
- Increased community spirit
- Better mental health
- Setting good example for the next generation
- Inspires other communities!
Thank You

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