Cycling Data: A Policy Perspective

Holger Haubold, Fiscal and Economic Policy Officer
Velo-city Dublin, 26 June 2019
Overview

1. Policy and Project Evaluation
2. Monitoring through Key Performance Indicators (KPIs)
3. Common definitions + harmonisation
4. Crowdsourcing + big data
5. Conclusions
1. Policy + Project Evaluation

• Status quo:
  • no systematic evaluation
  • no harmonised methodology
  • insufficient links to global policy targets
1. Policy + Project Evaluation

New development: RISM directive

• needs of cyclists and pedestrians to be taken into account in road infrastructure projects related to the TEN-T network

• Commission to provide guidance on quality requirements regarding pedestrians + cyclists: opportunity to push for minimum standards + evaluation

• cyclist + pedestrian flows need to be analysed in planning phase of projects – need for data

• Cycling traffic and cycling infrastructure are on the indicative list of data to be collected in the new procedure of network-wide road assessment
1. Policy + Project evaluation

• Recommendations
  • **stimulate exchange** of best practices and joint initiatives
  • **provide funding** for development of common tools and methodologies
  • always **include evaluation measures** in European, national, regional and local cycling strategies
1. Policy + Project Evaluation

- Best practice example: Cycling Barometer, Province of Antwerp
2. Key Performance Indicators: 

a) Cycle Use

- included in some national travel surveys and many local surveys, but lack of harmonisation
2. Key Performance Indicators:

a) Cycle Use

• Overview at EU level: Support study on data collection and analysis of active modes use and infrastructure in Europe (COWI/KU Leuven, 2017)

• Gives an overview of existing data at country and capital level and makes recommendations for harmonisation – but no new data
2. Key Performance Indicators: b) Cycling Infrastructure

• Common definitions are crucial
• Should also take into account quality factors + user satisfaction
• RISM Directive + EU Guidance can form starting point
2. Key Performance Indicators: c) Bicycle Business Performance

• Measuring the contribution of cycling to the economy
• Needs harmonised methodology
2. Key Performance Indicators
d) Health and Safety

• USE EXPOSURE DATA!!!
• Absolute numbers of accidents don’t tell you much
2. Key Performance Indicators
d) Health and Safety

• Ongoing project at EU level: SUMI – Sustainable Urban Mobility Indicators
• ECF responsible for Indicator on Active Modes Safety – using fatalities data related to exposure
• data to be collected from 2 cities per EU country
2. Key Performance Indicators:

e) Climate

- Best Practice Example: Climate Value of Cycling project (NL)

<table>
<thead>
<tr>
<th>Name</th>
<th>Population</th>
<th>Total CVoC per year [tons CO₂]</th>
<th>CVoC per capita per year [kg CO₂]</th>
<th>Bicycle Passenger Kilometer Travelled (PKT) per capita per year [km]</th>
<th>Total Bicycle PKT per day [km]</th>
<th>Average cycling distance per person per day [km]</th>
<th>Cycling share in modal split [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>747,090</td>
<td>41,091</td>
<td>56</td>
<td>1,003</td>
<td>2,053,496</td>
<td>2.8</td>
<td>21%</td>
</tr>
<tr>
<td>Utrecht</td>
<td>294,740</td>
<td>27,140</td>
<td>92</td>
<td>1,290</td>
<td>1,041,470</td>
<td>3.5</td>
<td>22%</td>
</tr>
<tr>
<td>Groningen</td>
<td>182,480</td>
<td>26,055</td>
<td>143</td>
<td>1,644</td>
<td>821,832</td>
<td>4.5</td>
<td>36%</td>
</tr>
<tr>
<td>Eindhoven</td>
<td>210,330</td>
<td>25,088</td>
<td>124</td>
<td>1,284</td>
<td>739,869</td>
<td>3.5</td>
<td>26%</td>
</tr>
<tr>
<td>The Hague</td>
<td>475,680</td>
<td>22,064</td>
<td>46</td>
<td>735</td>
<td>957,249</td>
<td>2.0</td>
<td>18%</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>582,950</td>
<td>20,014</td>
<td>34</td>
<td>538</td>
<td>859,363</td>
<td>1.5</td>
<td>14%</td>
</tr>
<tr>
<td>Tilburg</td>
<td>202,090</td>
<td>19,921</td>
<td>99</td>
<td>846</td>
<td>468,615</td>
<td>2.3</td>
<td>25%</td>
</tr>
<tr>
<td>Enschede</td>
<td>154,750</td>
<td>17,588</td>
<td>114</td>
<td>1,023</td>
<td>433,900</td>
<td>2.8</td>
<td>32%</td>
</tr>
<tr>
<td>Breda</td>
<td>170,960</td>
<td>15,137</td>
<td>89</td>
<td>913</td>
<td>427,714</td>
<td>2.5</td>
<td>24%</td>
</tr>
<tr>
<td>Amersfoort</td>
<td>141,210</td>
<td>14,721</td>
<td>104</td>
<td>969</td>
<td>396,524</td>
<td>2.7</td>
<td>27%</td>
</tr>
</tbody>
</table>
3. Common definitions + harmonisation

• Very basic definitions missing:
  • Bicycle
  • trip/stage
  • Urban area
3. Common definitions + harmonisation

• Harmonisation: ex-post measures to compare existing statistics without having to change time series
4. Crowdsourcing + Big Data

• high potential for data collection
• Cost-efficient
• can be only as good as definitions + harmonisation methods applied
5. Conclusions

DEFINE KPIs
5. Conclusions

HARMONISE
5. Conclusions

EXPLORE BIG DATA
Thank you

www.ecf.com

Holger Haubold, Fiscal and Economic Policy Officer
h.haubold@ecf.com