CONTEXTUALLY APPROPRIATE TOOLS FOR THE ASSESSMENT OF THE SOUTH AFRICAN CYCLING ENVIRONMENT

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Promovendus/PhD Candidate, Technical University Eindhoven (‘20), The role of cycling-based mobility services within the Dutch urban mobility transition
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The Kommetjie Road Corridor (blue) within greater Cape Town
Racial Distribution in the Fish Hoek Valley (after Frith, 2015)

Legend (1 dot=100 persons)
- 'Black African'
- 'Coloured'
- 'Indian/Asian'
- 'White'
- 'Other'
- Kommetjie Road

Fish Hoek Valley
Masiphumelele
Kommetjie
Ocean View
Fish Hoek
Access and Connectivity in the Kommetjie Road Corridor
Nested socio-spatial disparities, and how the boundaries of wealth are policed

Movement across income differentials is rendered impossible by means both formal and informal – e.g. environmental designations, unauthorised but tolerated road blocking and fence-building.

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Methods

1. Review of cycling environment assessment tools from comparable contexts

<table>
<thead>
<tr>
<th>Year</th>
<th>Assessment Tool Title</th>
<th>Short Form</th>
<th>Issuing Authority</th>
<th>Region Assessed or Implemented</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>Davis Bicycle Safety Index Rating</td>
<td>DAIS INDEX</td>
<td>N/A</td>
<td>Florida</td>
<td>USA</td>
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<tr>
<td>1997, 2003</td>
<td>Landis, Vattikuti, Brannick (link), 1997; Landis et al. (intersection), 2003.</td>
<td>REAL-TIME PERCEPTIONS</td>
<td>N/A</td>
<td>Florida</td>
<td>USA</td>
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<tr>
<td>2006</td>
<td>Guidelines for Assessing Cycling Level of Service (G-CLoS)</td>
<td>WESTERN AUSTRALIA</td>
<td>State of Western Australia</td>
<td>Western Australia</td>
<td>AUS</td>
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<tr>
<td>2010</td>
<td>Highway Capacity Manual (HCM)</td>
<td>USA FEDERAL</td>
<td>Federal Highway Authority</td>
<td>USA</td>
<td>USA</td>
</tr>
<tr>
<td>2010</td>
<td>South African Pedestrian Environment Assessment Tool (PEAT)</td>
<td>SOUTH AFRICA PEDESTRIAN</td>
<td>N/A</td>
<td>Tshwane</td>
<td>SA</td>
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<tr>
<td>2014</td>
<td>Victoria Level of Service Audit Tool for Cycling Facilities (CLOSAT)</td>
<td>VICTORIA AUSTRALIA</td>
<td>VicRoads</td>
<td>Victoria</td>
<td>AUS</td>
</tr>
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<td>2014</td>
<td>Cycling Level of Service Assessment Matrix (CLOSM)</td>
<td>LONDON</td>
<td>Transport for London</td>
<td>London</td>
<td>UK</td>
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<tr>
<td>2014</td>
<td>Cycling Route Audit Tool, Wales (CRAT)</td>
<td>WALES</td>
<td>Welsh Government</td>
<td>Wales</td>
<td>UK</td>
</tr>
</tbody>
</table>

1. Review of criteria used by these tools
Methods

3. Mapping of routes, events (near misses, collisions) and habits (avoidance, deviations)

4. Observation, including 20 field trips conducted by bicycle and bike-train-bike

Source: Author
Findings

Perceived safety from crime was major predictor of route choice; poverty was major predictor of size of trip deviation.
Implications for Cycling Environment Assessment Tools

• All road users – motorists, cyclists, pedestrians – ‘make’ their own rules and infrastructure
• The legal road regime does not engage with this complexity and contingency
• Therefore, a South African CEAT should be informed by contextual studies of user groups’ adherence to the behaviours assumed for them in road design manuals (i.e., observance of posted speed limits).

• Perceived safety along the Corridor depends on human activity close to the road. Informal surveillance from people nominally able to intervene, is key.
• For this reason, cyclists prefer to ride close to traffic; these findings run counter to assumptions in current planning.
• The CEAT that best matched these findings was a South African pedestrian environment assessment tool (Albers, Wright and Oloch, 2010).
Site Photography
Wheels come off cycle lane project

News | 1 June 2017, 02:00am
TAURIQ HASSAN

Has the City of Cape Town finally conceded defeat over its costly cycling lane project? That was the question some were asking after workmen were seen removing the lanes in Woodstock’s Albert Road.

Implications

PPA warns cyclists not to use Paarden Island cycle lane after latest attack

by PedalPower on 30 November 2018 in News

Source: IOL.co.za
Source: RideYourCity
Source: Pedal Power Assoc.