Child Road Injuries: eThekwini Status Quo

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Background

• Why focus on children\(^1\)?
  1) It is disturbing that children are not safe on our roads

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Source: Amend and FIA (2016)
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Source: Peden et al. (2013)
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Source: Vanderschuren and Zuideest (2017)
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¹ Data Source: RTMC, 2016
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  5) Road fatalities have high financial implications on individual and country. Pedestrian ZAR 78 800 and passenger ZAR 82 700
Demographics and Travel Statistics

Population

- Child Population (approximately 3,87 million children)

Data Source: NHTS, 2013
Demographics and Travel Statistics

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Time taken to access education
- Majority take longer than 15 minutes (67%), crossing high-speed arterials – create safer roads, differential speed (Pretoria)?

Data Source: NHTS, 2013
Preliminary Findings

1) RTMC
   - Children constitute 9% of road fatalities in South Africa and 12% of road fatalities in KZN. It's important to look at fatality rate and absolute numbers.

Source: RTMC, 2015-2017
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- Cars, Minibus taxis (VKTs?) and Light duty vehicles placing road users at risk

![Mode Involved in Fatalities](chart)

Source: RTMC, 2015-2017
Preliminary Findings

2) eThekwini
   • Top 10 Child Injuries (Passengers and Pedestrians)

Source: eThekwini Municipality, 2015
2) eThekwini

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- TAZs – Indanda, Chatsworth, Umbulu (2 spots) and Outer West, Inner West, Umlazi, Umgeni South (1 spot)

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- Roads – Curnick Ndlovu, Ithendele, Old Main, Milky, Higginson, Griffiths Msenge, A641 and P152

Source: eThekwini Municipality, 2015
Implications

- Considering the fact that road fatalities impacting children did not necessarily decrease during the three years analysed, the KZN roads are not becoming safer for children.
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• Further analysis is required on geocoded data that is available, especially from eThekwini Municipality
  - Geocoded data can provide us information as to locations that are dangerous for children. Are these locations closer to home or to school?
Way Forward

- Road Safety Interventions – The difficult conversation
  1) Low Road Safety budget, therefore, we need to prioritise
  2) Prioritise child pedestrian and passenger children
  3) How? Determine cause of these injuries and recommend localised interventions based on the five pillars of road safety – ‘walk in the direction of traffic’
  4) Lets engage to curbing the fatality problem – DOT and DOE.
  5) Conducting a review of current policies and finding gaps.

- Data required yet – Let’s share all data
  1) Mortuary data that provides cause of road fatalities – gap in deaths caused by alcohol
  2) National geocoded data
  3) Data that divides child injuries by age group

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<tr>
<th>Name of Scenarios</th>
<th>Capital/20 years</th>
<th>Operational/year</th>
<th>Conservative</th>
<th>Optimistic</th>
<th>Conservative</th>
<th>Optimistic</th>
<th>Lives saved/20 years</th>
<th>Overall BC Ratio/20 years</th>
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<tbody>
<tr>
<td>Infrastructure based scenarios</td>
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<td>Rumble strips in Grabouw</td>
<td>0.784</td>
<td>0.014</td>
<td>286.8</td>
<td>371.8</td>
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<td>Lighting at the intersection of Rawsonville</td>
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<td>Education based scenarios</td>
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<td>Improved ambulance services</td>
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</tbody>
</table>

Data Source: Red Cross War Memorial Hospital, 1991-2016

All costings are based on base year values. No inflation on costs or benefits have been included
‘Lollipop’ Intervention

Source: Amend and FIA, 2016
Quick video