THE IMPACT OF CRIME AND NEIGHBOURHOOD ENCLOSURES ON THE TRAVEL BEHAVIOUR OF RESIDENTS AND TRANSPORT PATTERNS IN SOUTH AFRICA

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Safety in transit environments

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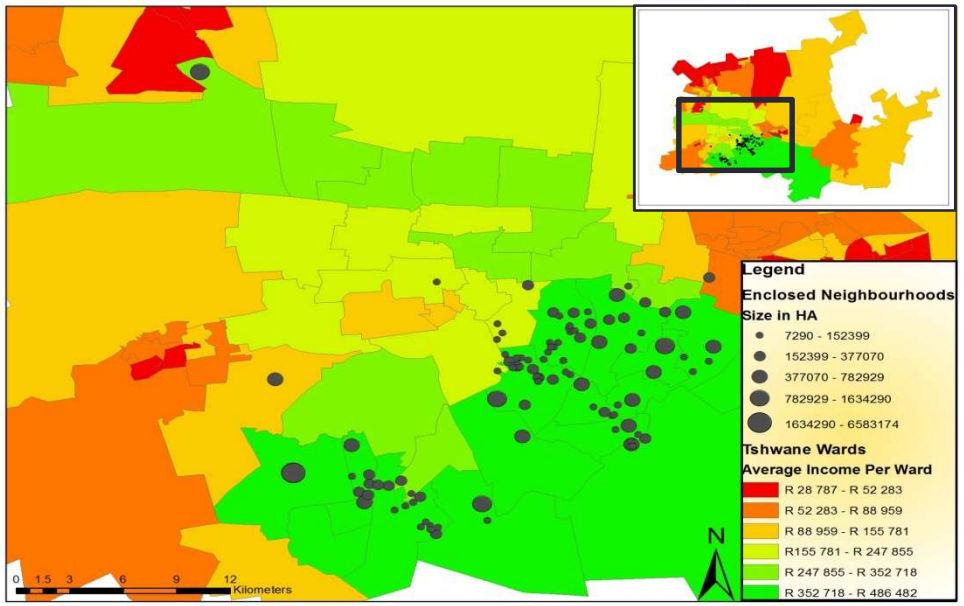

Location of enclosed neighbourhoods in Tshwane

Introduction

- This paper does not focus on transport nodes per se, but rather how certain responses to crime and fear of crime, such as enclosed neighbourhoods, limit the use of public transport on the one hand, leading to a complete dependence on private transport, and make it more difficult for other who are dependant on public transport, to access it.
- High crime rates and especially high levels of fear of crime in South Africa
  - Lead to a reduction in the use of public transport for those who can afford it or have other options
  - Lead to changes in the built environment, e.g. closing-off existing neighbourhoods where possible

Theory

- Reconsidering safety in transit environments requires a holistic approach which includes the entire journey
- “Whole-journey approach” – to look at crime problems during any or entire part of the journey
- Yet tendency in discussions to focus on the relation between crime and public transport
- Also need to consider theory in relation to private transport and impact of crime reduction measures on the use of both public and private transport (all modes of transport)
- “Whole-journey approach” often linked to right to be mobile
- Yet questions about this right if crime reduction measures influence
  - Patterns of congestion (impact on private car users)
  - Access to employment opportunities in enclosed neighbourhoods (due to a dependence on public transport, cycling and walking)

Method

- Selected two enclosed neighbourhoods with potential high impact on transport patterns
  - Due to size and urban layout
  - Due to number and location of streets open during peak hours
  - Lynwood Glen Eldoreign X18

- Methods: travel survey and traffic simulations

Key findings

- Safety and security – main reason for enclosure
- Yet neighbourhood closure implications for:
  - Residents inside:
    - Approximately 9 trips a day – most do not mind extra distance to be travelled as they use private transport or increased waiting at gates
    - Very few walk or cycle – thus limited impact on residents inside
  - Residents outside (using cars):
    - Added to travel time (significant in terms of South African expectations)
    - Fuel consumption increased with 3%
    - Carbon emissions rose by 7%
  - Pedestrians and cyclists outside:
    - Public transport users dropped-off in main route and have to walk to access gates and places of employment inside (71% & 91% of surveyed households indicated they have a worker/workers in their employment)
    - Extra travel time and discomfort for workers

Conclusion

- Crime and fear of crime lead to changes in urban form and function through neighbourhood enclosures
- Impact of these enclosures not equally distributed:
  - Impact on residents inside minimal
  - Certain financial and time cost for road users outside
  - Also general environmental costs (carbon emissions)
  - Biggest impact on pedestrians, cyclists and those dependant on public transport
    - Inconvenience and greater security risks due to congestion in open roads, as well as prolonged journey
    - Mobility influenced significantly by closures
- Thus inconsistency between practice of street closure and promotion of public transport, as well as promotion of greater integration and accessibility in South Africa
- This raises questions about the responsibility to ensure a safe journey in terms of the role of the state
  - State important role to ensure safety of those using public transport and the broader transit environment
  - Yet how to manage this if parts of the journey is affected by neighbourhood closures?