

# Transport justice and the travel burden on peripheral low-income communities Cape Town

Roger Behrens, Gail Jennings, Christo Venter

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UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA



**INTALInC Stakeholders Dissemination Event**  
**4<sup>th</sup> May 2018, Oxford**

## **Policy context: Constitution**

- South Africa's Bill of Rights implicitly locates mobility and the right to mobility within the context of human rights and the struggle for a rights-based society.
- Mobility is central to the constitutionally enshrined rights to access economic opportunities, health care, education, food and clean water (Coggin and Pieterse, 2015).
- National transport policy recognizes public transport as a 'basic need', placing public transport on an equal footing with other government priorities such as adequate housing, and water and sanitation (NDoT, 2007).

## State of the Knowledge: main themes

Topics covered in the literature include:

- Acknowledging the spatial nature of mobility-related exclusion (eg Turok, 2011; 2013; Parnell, 2015; Culwick, 2015)
- Concerns with planning models that traditionally overlook the travel modes of the poor (eg Behrens, 2002; 2009; Kane, 2006, 2010)
- The travel behaviour and travel burden of the poor (using data collected by the 2003 National Household Travel Survey and others) (eg Kane, 2006; Walters, 2008; Hitge, 2015)
- Analysis frameworks such as transport justice, social inclusion/exclusion, sustainable livelihoods, and other asset-based frameworks (eg Kane, 2010; Dmitrov, 2011; Lucas, 2012; Jennings, 2015; 2016; Coggin & Pieterse, 2015; Venter et al, 2017)
- Impacts/ evaluations of micro- or mega-interventions such as Bus Rapid Transit (BRT) and bicycle facilities, intended to alleviate poverty and redress spatial inequity (refer individual slides)

## What do we know: quantifying the mobility problem

- That the spatial nature of South Africa's sprawling cities is exclusionary, contributing unviable public transport patterns and long travel times and distances; this is widely acknowledged in the literature.
- That the poor exhibit low levels of mobility, travel for longer distances and for longer times, make more transport changes, and spend a higher percentage of income on travel than do the middle-classes/wealthy.
- That among the lowest income group, cost is the most significant barrier for 27% of respondents.
- Not having access to public transport nearby is a significant problem: about 30% of people reporting no income do not use public transport at all (Venter and Badenhorst, 2014).
- That the poor are more likely to walk or use minibus-taxis as a main mode.

**What do we know:** overlooking the travel modes and needs of the poor

- Overall, for planning to be effectively pro-poor, there is a need to re-asses what planners value, and what they value enough to measure.
- Conventional transport planning models in South Africa focus on motorized commuting trips and pay insufficient attention to equity concerns and non-motorized transport users (walking in particular).
- Planning models introduce a 'routine bias' by excluding non-motorized modes, for non-work purposes and during off-peak periods.

## #YouthEmploymentService



**Firebrand**  @simpliwed... · 7h

“Must have own transport”....  
“Must speak Afrikaans”..... two  
ways people are deliberately  
excluded from jobs

 73

 923

 1 036



# What don't we know?

- Accessibility measures too often suffer from what Venter *et al* (2017) describes as a failure to demonstrate the actual outcomes of enhanced accessibility for households.
- Measures largely consider how easy it is to access transport services, or to access destinations: in other words, how easy it is to access mobility (Jennings, 2016a).
- Goals, for example, aim to provide public transport 'stops' within 800 m of every resident...
- Investigations do not sufficiently answer the question of what the poor 'do' with this access or mobility, and whether they are able to 'do' with it what they really need to do (Venter *et al*, 2017).
- Can the poor actually make use of enhanced access; do they find better or higher-paying jobs, or access better health care, education opportunities, or social networks?'

# What don't we know?

- We also do not know the extent to which marginalized people, living on the periphery, are in fact socially excluded (see for example Pieterse, 2018), and to what extent they live with reduced social capital and wellbeing...
- Transport disadvantage and transport-related social exclusion are not necessarily synonymous with each other – it is possible to be socially excluded but still have good access to transport or to be transport disadvantaged but highly socially included (Lucas, 2012).



# INTEGRATED TRANSPORT IN CAPE TOWN

The TDI provides a rubric through which TDA, the City of Cape Town's Transport and Urban Development Authority, can evaluate the effectiveness of its transport service delivery interventions. Four user groups are identified in the TDI with access priority information per Transport Analysis Zone. It then evolves into a competitive advantage component or mobility index.

## People User Groups



Public  
Transport



Private  
Car



Non-  
Motorised  
Transport

## Goods User Groups



Freight

+ COMPETITIVENESS

# The Need for a Paradigm Shift

We need to rethink how we undertake service delivery to ensure that it is performance oriented and facilitates targeted investment

- Establish a verifiable baseline that service delivery responds to
- Determine the various transport-related user groups
- Determine the access priorities and their related costs within each user group



Public Transport



Private Car



NMT



## People User Groups

Cost of Access:  
(R User Cost/Month)

Cost of Access:  
(% User Cost/Monthly Person Income)

- Total
- Direct
- Priorities

- Total
- Direct
- Priorities

- Citywide weighted average
- Allows interrogation per income group, user group, and Travel Analysis Zone



Freight

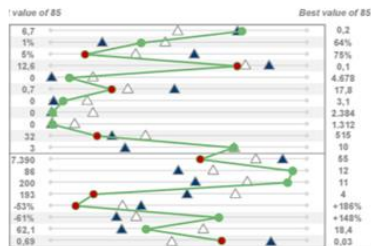


## Goods User Groups

Cost of Access:  
(R Cost/Annum)

- Direct cost to transporters/users
- Cost to the city
- Indirect cost to others

- Citywide assessment
- Rail – Road Comparison

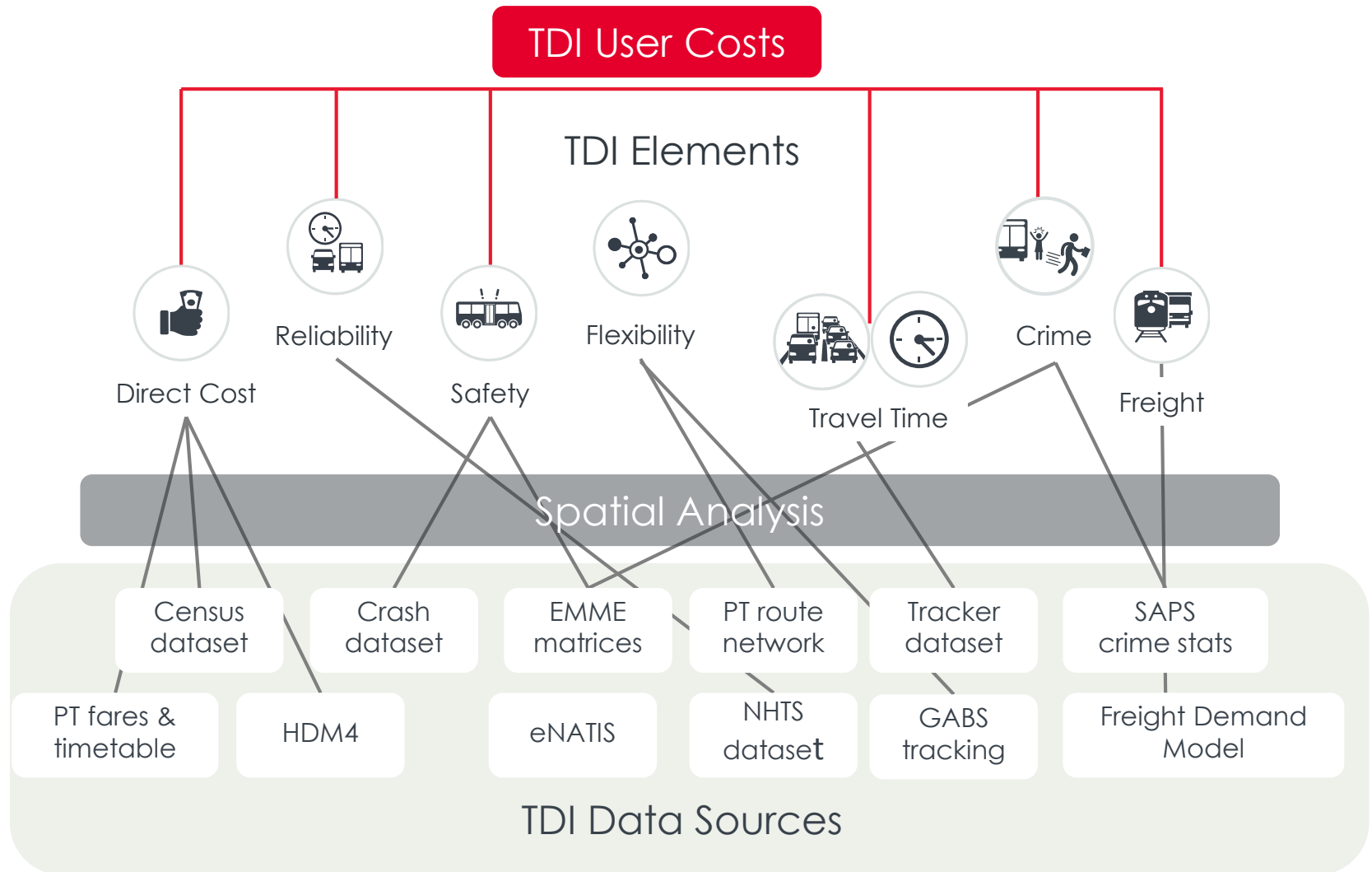


## Competitiveness

Score  
Based on Urban Mobility Index

- Citywide assessment

# TDI DATA LAYERS



# Transport Development Index

## Public Transport: Priorities 1, 2 and 3 Per Income Group

### Safety

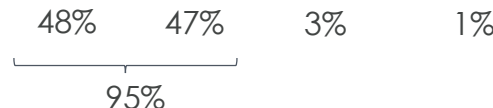
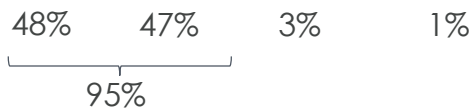
#### First Priority

#### Second Priority

#### Third Priority

TAZ	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4
1 Northern Corridor	Flexibility	Flexibility	Safety		Safety	Safety		Safety			Flexibility	
2 Kraaifontein	Flexibility	Flexibility	Flexibility	Safety	Safety	Safety		Flexibility				
3 Parow/Bellville	Safety	Safety		Safety		Flexibility	Safety		Flexibility		Flexibility	Flexibility
4 Blue Downs	Flexibility	Flexibility		Flexibility		Safety	Safety	Safety				
5 Belgravia	Safety	Safety	Safety	Safety		Flexibility	Flexibility		Flexibility			
6 Grassy Park	Safety	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility	Flexibility				
7 Mitchells Plan/Gugulethu	Flexibility	Safety	Safety		Safety	Flexibility						
8 Khayelitsha						Flexibility		Flexibility	Safety			Safety
9 Somerset West		Flexibility	Flexibility		Safety	Safety			Flexibility			Safety
10 Central Cape Town	Safety	Flexibility	Safety	Flexibility	Flexibility	Safety					Flexibility	
11 Kuilsrivier	Flexibility	Flexibility	Flexibility	Flexibility		Safety	Safety					
12 Durbanville	Safety	Safety	Safety	Safety	Flexibility	Flexibility		Safety				
13 Oostenberg	Flexibility	Flexibility	Flexibility	Flexibility	Safety	Safety		Flexibility			Safety	
14 Langa/Bishop Lavis	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility						
15 Strand	Flexibility	Flexibility	Flexibility	Flexibility		Safety		Safety	Safety			
16 Simonstown	Flexibility	Safety			Safety		Safety	Safety		Flexibility	Flexibility	
17 Wynberg	Safety	Safety		Safety	Flexibility		Safety			Flexibility	Flexibility	Flexibility
18 Sea Point	Safety	Safety	Flexibility	Safety					Flexibility	Flexibility	Safety	

PT User:



# Transport Development Index

## Public Transport: Priorities 1, 2 and 3 Per Income Group

### Cost

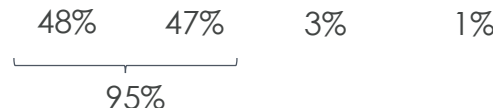
#### First Priority

#### Second Priority

#### Third Priority

TAZ	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4
1 Northern Corridor	Flexibility	Flexibility	Safety		Safety	Safety		Safety		Cost	Flexibility	
2 Kraaifontein	Flexibility	Flexibility	Flexibility	Safety	Safety	Safety		Flexibility	Cost			
3 Parow/Bellville	Safety	Safety		Safety		Flexibility	Safety		Flexibility		Flexibility	Flexibility
4 Blue Downs	Flexibility	Flexibility		Flexibility	Cost	Safety	Safety	Safety		Cost	Cost	Cost
5 Belgravia	Safety	Safety	Safety	Safety		Flexibility	Flexibility		Flexibility			
6 Grassy Park	Safety	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility	Flexibility				
7 Mitchells Plan/Gugulethu	Flexibility	Safety	Safety		Safety	Flexibility	Cost					
8 Khayelitsha	Cost	Cost				Flexibility		Flexibility	Safety			Safety
9 Somerset West		Flexibility	Flexibility		Safety	Safety	Cost		Flexibility			Safety
10 Central Cape Town	Safety	Flexibility	Safety	Flexibility	Flexibility	Safety			Cost	Cost	Flexibility	
11 Kuilsrivier	Flexibility	Flexibility	Flexibility	Flexibility	Cost	Safety	Safety					
12 Durbanville	Safety	Safety	Safety	Safety	Flexibility	Flexibility		Safety				
13 Oostenberg	Flexibility	Flexibility	Flexibility	Flexibility	Safety	Safety		Flexibility			Safety	
14 Langa/Bishop Lavis	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility			Cost			
15 Strand	Flexibility	Flexibility	Flexibility	Flexibility	Cost	Safety		Safety	Safety			
16 Simonstown	Flexibility	Safety			Safety		Safety	Safety		Flexibility	Flexibility	Cost
17 Wynberg	Safety	Safety		Safety	Flexibility		Safety			Flexibility	Flexibility	Flexibility
18 Sea Point	Safety	Safety	Flexibility	Safety					Flexibility	Flexibility	Safety	

PT User:



# Transport Development Index

## Public Transport: Priorities 1, 2 and 3 Per Income Group

### Crime

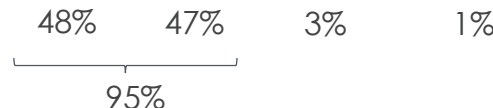
#### First Priority

#### Second Priority

#### Third Priority

TAZ	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4	IG 1	IG 2	IG 3	IG 4
1 Northern Corridor	Flexibility	Flexibility	Safety		Safety	Safety		Safety		Cost	Flexibility	
2 Kraaifontein	Flexibility	Flexibility	Flexibility	Safety	Safety	Safety		Flexibility	Cost	Crime	Crime	Crime
3 Parow/Bellville	Safety	Safety	Crime	Safety	Crime	Flexibility	Safety	Crime	Flexibility	Crime	Flexibility	Flexibility
4 Blue Downs	Flexibility	Flexibility		Flexibility	Cost	Safety	Safety	Safety		Cost	Cost	Cost
5 Belgravia	Safety	Safety	Safety	Safety	Crime	Flexibility	Flexibility		Flexibility	Crime		
6 Grassy Park	Safety	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility	Flexibility	Crime	Crime		
7 Mitchells Plan/Gugulethu	Flexibility	Safety	Safety		Safety	Flexibility	Cost		Crime	Crime	Crime	
8 Khayelitsha	Cost	Cost				Flexibility		Flexibility	Safety			Safety
9 Somerset West	Crime	Flexibility	Flexibility		Safety	Safety	Cost		Flexibility	Crime		Safety
10 Central Cape Town	Safety	Flexibility	Safety	Flexibility	Flexibility	Safety			Cost	Cost	Flexibility	
11 Kuilsrivier	Flexibility	Flexibility	Flexibility	Flexibility	Cost	Safety	Safety	Crime		Crime	Crime	
12 Durbanville	Safety	Safety	Safety	Safety	Flexibility	Flexibility	Crime	Safety				
13 Oostenberg	Flexibility	Flexibility	Flexibility	Flexibility	Safety	Safety		Flexibility			Safety	
14 Langa/Bishop Lavis	Safety	Safety	Safety	Flexibility	Flexibility	Flexibility			Cost	Crime		
15 Strand	Flexibility	Flexibility	Flexibility	Flexibility	Cost	Safety		Safety	Safety	Crime		
16 Simonstown	Flexibility	Safety			Safety		Safety	Safety		Flexibility	Flexibility	Cost
17 Wynberg	Safety	Safety		Safety	Flexibility		Safety			Flexibility	Flexibility	Flexibility
18 Sea Point	Safety	Safety	Flexibility	Safety	Crime				Flexibility	Flexibility	Safety	

PT User:



# USER ACCESS PRIORITIES AND PRIORITY COSTS

Identifies the Access Priorities of each User Group and their related costs.

Priorities may be financial or non-financial and therefore the interventions should be different and targeted towards reducing the identified priority cost.

