





HVT Africa Urban Mobility Observatory December 2021



Overview

01.

Project stakeholders

04.

Data collection

02.

Research questions

05.

Data visualisation platform

03.

Africa Urban Mobility Observatory ecosystem



Project stakeholders

Introduction

This research is funded by UK Aid, and is part of the 2nd phase of FCDO's High Volume Transport Applied Research Programme (HVT)

Consortium partners











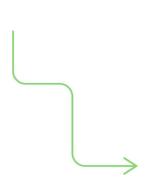


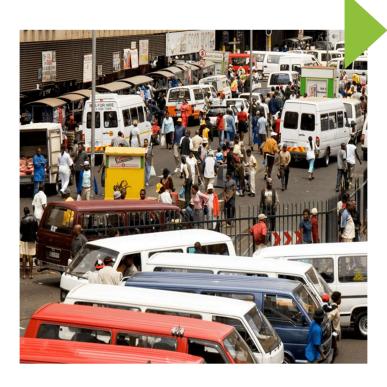






Research questions





Questions:

- **Policy Levers**: What are the main levers for transport mode share and what is the role of data? What cities have achieved high or low transit ridership, cycling, etc, and what factors/policies explain their differences?
- **Big Data Technology:** What are the opportunities and risks of big data applications in Global South cities?
- Informal Paratransit: What is role of informal transport in the global South, and how to enable a transition towards clean, affordable & efficient transport solutions



Indicators:

1) Travel Time

2) Travel Distance

3) Period of Travel

4) Driver Behaviour

5) Vehicle Occupancy

6) PT Vehicle Condition 12) Congestion

7) PT Vehicle Comfort

8) PT Vehicle Reliability 14) Affordability

9) Sexual Harassment

10) Modal Split

11) CO2

13) Fatalities

15) Accessibility

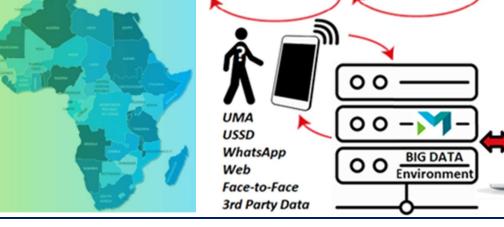
16) Transfers

17) Crime

Locations:

- •Blantyre (Malawi)
- •Gaborone (Botswana)
- ·Kigali (Rwanda)
- ·Kinshasa (DR Congo)
- ·Lagos (Nigeria)
- •Maseru (Lesotho)





Observatory ecosystem



Data Processing





Data Collection: UMA

Methodology:



Update of local apps with GoMetro SDK.



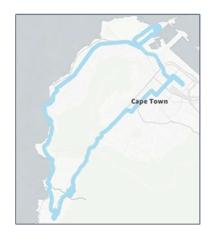
Anonymous and passive location tracking given the user has granted permission: Origin/Destination, Travel times, Trip distances, Lat/Lon, Trips, Journey stages.

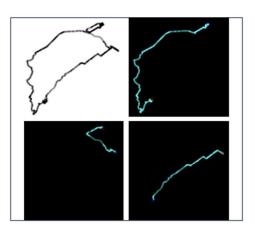


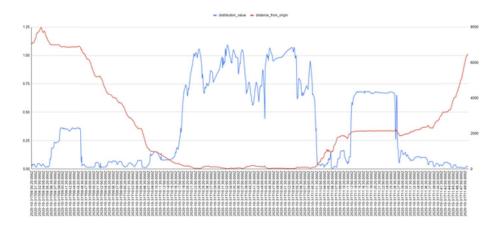
Stratification survey to select a sample that would

reflect Census structure.

Integration with popular regional apps, to generate a representative user-base.









Data Collection: USSD/WhatsApp/Web /Intercept Survey

Methodology:



Market survey to travellers via SMS Campaign.



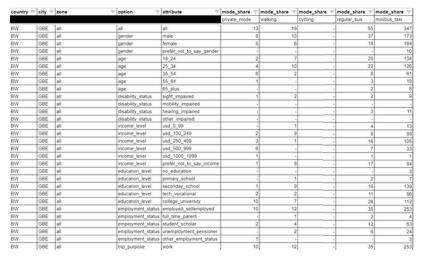
Travellers interact with survey questionnaire through USSD, WhatsApp, web platform, or through face-to-face interview

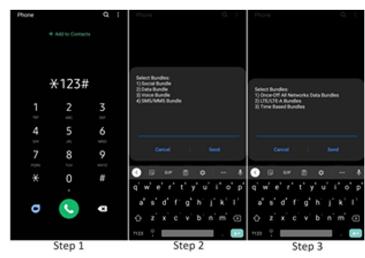


Data collected is anonymised, but aggregated by demographic profile.

Supports:

- Low-end mobile phones
- Feature phones
- Smartphones
- Travellers without cellular devices







Kinshasa

Data Visualisation



All Zones



O BACK UNIVERSAL ACCESS @



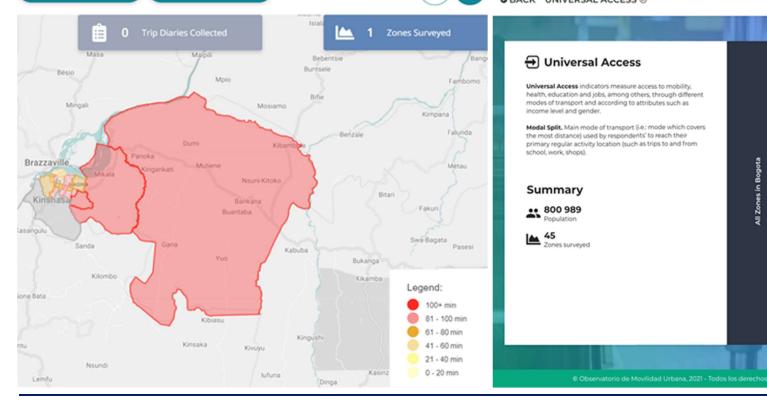




Wuppertal Institut

Charts









Thank you.

Contact Details:
Philip Krause (Project Lead)
philip.krause@goascendal.com