Lagos   Photo: GIZ

Bridging the gender data divide in African cities

Leveraging the power of data to ensure women's mobility needs are centre stage

Gender, Africa, Access, Data, Urban Mobility, Inclusion

Urbanisation in Africa is rapidly increasing. Mobility needs are mainly catered for by poorly regulated informal transport services. While these services are essential especially for the urban poor, there is an urgent need to collect and analyze data on all transport users to understand their needs and barriers to using public transport and moving around safely in public spaces. The data gap is particularly severe in the analysis of women's mobility. The Transformative Urban Mobility Initiative (TUMI) is working on closing the gender data gap in urban mobility in selected pilot cities in Africa.

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Africa is urbanizing rapidly. Much of this growth (70 to 100%) is catered for by informal or 'para-transit' services. Paratransit provides high coverage, high frequency services at a low cost. They are often the only services available to informal neighbourhoods and offer relatively low walking distances from origin to destination. Despite the necessity of these services, paratransit being out of government control has little to no regulation, contributing to shifting prices, lax safety and environment regulations and overly centralized and congested routes.

Like formal transport services, paratransit mostly covers the most profitable routes, often not catering for the complex mobility needs of caregivers, vulnerable groups, and minorities as they are not as economically rewarding. Harnessing the potential of digital technologies can support cities address this blind spot and adapt and plan their mobility services so that they do not exclude women.

Digital technologies are leveraged by transit agencies through General Transit Feed Specification (GTFS), which is provided to developers. GTFS provides a standardised and open format for organising transit data. GTFS is needed to improve transit performance, analyse gaps in transit accessibility and project future demand. A growing number of developing cities are collecting and opening their GTFS data to developers. For instance, in Mexico City, GTFS data covers all public operated modes

(Metro, RTP buses, STE, Metrobus, Tren Suburbano). However, GTFS data on informal minibuses, the bulk of public transit trips in Mexico City, is unaccounted for. Nairobi is one of the only cities to document and upload informal transit data. Digital Matatus collected data from Nairobi's extensive Matatu network (a system of privately owned minivans) through participatory digital mapping using smartphones to collect GPS data. Despite more and more African cities collecting transit data, there is little to no standardised approaches to ensure inclusivity.

Informal transit data needs to go beyond mapping and open data. Analysis of data is crucial for city officials and planners to optimise routes, plan integrated systems and impose equitable policies. Ridership and service levels need to be studied to address inequality and ensure transit is affordable, accessible and safe for everyone.

The urgent need to leverage data to better address vulnerable groups

Transportation planning and policy is often blind to women and vulnerable groups (children, elderly, disabled etc.). Their diverse mobility needs which go beyond those of an able-bodied middle- to upper-class man, are overlooked. This is because decision-making has been male dominated for decades, shaping transport policy and developments. For instance, work commutes on public transport are not appropriate to cater for trip-chaining, a typical characteristic of women's mobility. Furthermore, safety and security for public transport users are often not addressed comprehensively enough, as travel time and waiting time at stops, for example, is not included in the assessment of the user experiences.

Fundamental data on the diversity of mobility by various population groups is missing. Inclusive data is fundamental to ensure that all people and their needs are visible, and thus serve as a basis for informed, evidence-based transportation planning and policy. As can be seen through the efforts to map paratransit and collect data in many cities, policymakers have recognized the need of informed and evidence-based decisions. However, it is often not sufficiently understood how essential the type and methodology of data collection are; and how significantly survey results can be influenced by them. Furthermore, even willing decision-makers often lack the necessary approaches and tools to process the existing data and analyse it with new, inclusive parameters. In African cities, there is a particularly large data gap and capacities to close the data gap are lacking . Thus, there is an urgent need to improve the overall understanding of gender-sensitivity in transportation planning and to strengthen institutional capacities in high, medium and low-income regions in inclusive data collection and analysis.

One example of the systematic discrimination of women in mobility data collection is the design of mobility surveys, which have long focused almost exclusively on work trips and single-purpose trips (this is still often the case today). Thus, women in particular were and are systematically discriminated against in mobility surveys due to conservative role distributions and patriarchal power differentials in work and family.

To ensure that women are not excluded, survey methodologies and tools need to be urgently adapted as well as the selection of survey participants. Besides considering gender balance, the representation of marginalised and vulnerable groups, people of different ages, different physicalities and socio-economic class are indispensable to create an accurate reflection of mobility needs in the population.

What TUMI is doing to bridge the data divide

The Transformative Urban Mobility Initiative (TUMI) is addressing the challenge of Gender Data Gaps in Urban Mobility. TUMI will start work on this topic, through collaboration with experienced data collection organizations with expertise in the field of mobility and development data. This collaboration will develop approaches that will be applied in selected pilot cities. The focus will be on cities in Sub-Saharan Africa, where the overall data gap is particularly severe, and thus also the gender data gap. Moreover, there is enormous potential to shape the future of mobility for rapidly growing populations in a gender-sensitive and inclusive manner. Participatory data collection is envisioned so that people of different genders, incomes, ages, marital statuses, and places of residence in a city are included and their needs are made visible by defining inclusive parameters. The dimensions to be considered include, but are not limited to, accessibility of transportation services, comfort, safety, socio-economic dimensions, trip purpose and mobility types, distances, destinations, behaviour patterns and travel time, mobility choices, intermodality, and transportation expenditures. In addition, it is particularly critical to include non-users of transportation services in the surveys to understand the basis of their decisions.

TUMI will analyse the collected data to support national and local authorities as well as related services adapt and plan their mobility systems to provide accessible, affordable and gender-sensitive services. A comprehensive and replicable methodology is intended to be developed and demonstrated on the ground. This data will support future interventions such as adapting transportation services, improving or constructing infrastructure, adjusting service routes and/or developing and implementing awareness-raising and education efforts. This project would sensitize other cities and decision-makers of the high relevance of gender data and gender-sensitive planning and encourage them to conduct their own data collection to close the gender data gap in urban mobility. ∎

Please get in contact with TUMI if you would like to hear more or get involved in this project: info@transformative-mobility.org.

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