



Transitions to Sustainable Urban Mobility in Sub-Saharan Africa: Impact Summary & Reflection

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Reflecting on T-SUM's key findings and impact

Transitions to Sustainable Urban Mobility in Sub-Saharan Africa (T-SUM) is an interdisciplinary and cross-sector collaborative project that aims to identify the conditions under which pathways to sustainable and inclusive transport and land-use development can be accelerated in growing cities in the Global South. T-SUM is grounded in the observation that, in the context of still-low-but-rising levels of motorisation, economic growth, and increasing social and spatial inequalities, the formulation and implementation of policies, practices, and partnerships that can support an accelerated implementation of sustainable mobility structures is an urgent concern for rapidly developing cities.

In this brief, we summarise T-SUM's key findings in our two case study cities, Maputo, Mozambique and Freetown, Sierra Leone, and highlight the project's impact over the last five years.

T-SUM's critical findings in Maputo and Freetown:

Maputo and Freetown are at a turning point. Both cities have an opportunity to learn from the mistakes and successes of cities across the world. If the right policies are put in place now, these rapidly growing cities can avoid a costly transitional car-oriented urban development phase and directly embrace development pathways which can lead to sustainability, inclusivity, and prosperity. T-SUM's research over the last five years has led to significant findings outlined in our [publications and other outputs](#). Below, we summarise the key opportunities and challenges for these cities wishing to leapfrog to a more sustainable, socially just, and inclusive transport system.

Challenges	Opportunities
Lack of adequate alternatives to car use, especially public/collective transport and active travel.	Current modal share – most residents either walk or use collective transport. Walking is ubiquitous, which can be further promoted by enhancing active travel infrastructure.
	Strong potential for addressing transit issues through technological development, in particular mobile technology such as mobile ticketing.
Challenging topography and increasing intensity and frequency of climate disasters make long-term transport planning and interventions difficult.	
Limited institutional and technical capacity.	
Limited financial and revenue generation opportunities.	The international context is favourable for funding as urban mobility issues are crucial to achieving the sustainable development goals (SDGs) and addressing climate adaptation and mitigation.
Lack of clear governance structure at the metropolitan level in Maputo; lack of decentralisation of government functions and services in Freetown.	
Lack of integration between land-use and transport policy and planning.	
Urban population growth is taking place along the main transport corridors.	
The demand for passenger transport is high and the offer is limited.	
Cultural context incentivises car use.	
Opportunities and services remain concentrated in the central business district/city centre, making accessibility an issue, particularly in areas with high levels of social and transport disadvantage.	
Inadequate road infrastructure in key urban areas in both cities makes access by collective/public transport and active travel challenging.	

Table 1. Challenges and opportunities to accelerate sustainable urban mobility transitions in Maputo and Freetown

T-SUM's Impact

Summary of T-SUM's Impact

- Increased understanding of sustainable urban transitions in Maputo and Freetown - two rapidly growing cities in Sub-Saharan Africa.
- Awareness and recognition of negative externalities associated with car-oriented planning and policy.
- Awareness and recognition that rapidly growing cities have an opportunity to avoid car-oriented urban development and follow alternative development pathways, which can lead to sustainability, inclusivity, and prosperity.
- Increased visibility of semi-formal transport and active travel issues in Maputo, Freetown, and Sub-Saharan African cities.

Academic Achievements

The peer-reviewed articles, documents, and project reports that have been, and are being, published drawing on T-SUM are [advancing the state of knowledge of under-researched mobility topics in Sub-Saharan Africa](#). The project has, and is, contributing to filling a significant data gap in both case study cities. The Maputo and Freetown City Profiles are two of the most important written outputs. These documents provide a comprehensive overview of the base conditions relating to mobility, accessibility, and land-use. In addition to the written outputs, T-SUM has organised and contributed to major academic events and numerous international conferences, workshops and other events involving academics, policymakers and practitioners, such as the World Urban Forum in 2019 and the Urban Transitions 2022 Conference.

New Projects

New international research projects, collaborations and partnerships have been established, which build on the T-SUM working relationships created through its research and policy activities. Examples include the [Walking Cities Lab](#), the [VREF Walkability project](#), the [One the Way to School project](#), and the [Transitions project](#). The team is also establishing a new sustainable urban mobility transition lab (please get in touch with the team for further information). In addition, new consortia have been established from among the T-SUM partners, with a view to applying for additional funding to explore broader issues related to mobility, accessibility, and land-use in Maputo and Freetown.

Teaching

T-SUM findings and concepts have been incorporated into several educational programmes. They now form a core part of UCL's MSc Transport Policy module. Findings were also incorporated into a Massive Online Open Course (MOOC), "[Achieving Transitions to Zero Carbon Emissions and Sustainable Urban Mobility](#)," launched in October 2022. This course received funding from EIT Urban Mobility and relies on a partnership with [ICLEI](#) and [GIZ/TUMI](#).

Furthermore, a range of postgraduate students from the UCL Civil, Environmental and Geomatic Engineering (CEGE) and from The Bartlett Development Planning Unit (DPU) have used T-SUM data and collaborated with T-SUM partners as part of their dissertation project. For more information, please see the [student section](#) on our website.

In Freetown, T-SUM's findings were incorporated into Fourah Bay College's undergraduate and Master's programmes. Njala University proposed a Master's programme on development and planning in African cities, including relevant T-SUM findings. In Maputo, the transport and logistics course at the Joaquim Chissano Technical University utilised findings from the programme in its coursework. These initiatives have contributed to inspiring and training new generations of experts, leaders, and thinkers in the field of sustainable development and urban mobility.



Figure 1. Inception workshop, London, March 2019 (Source: T-SUM)

Training Junior Staff

There is a shortage of qualified professionals in the field of urban planning and urban mobility in sub-Saharan African cities. Through the work of T-SUM partners WAZA/GoteoMoz in Maputo, and the Sierra Leone Urban Research Centre (SLURC) in Freetown, their junior staff have benefited from specialised training. Research assistants based at UCL have also been trained. These processes contributed to training a new generation of experts in the field.

Policy Impact

Sharing T-SUM data and findings with relevant stakeholders and institutions, in particular governments and international donors, is critical to ensure that relevant findings can inform policies, projects and programmes in our case study cities and beyond. For this reason, throughout the project's lifetime, the T-SUM team has engaged with governments and international donor organisations. At the national level, some of the most significant achievements of the T-SUM project are the participatory policy workshops organised in Freetown and Maputo. The Freetown workshops drew together 55 key national and international stakeholders across sectors, including representatives of local communities. Similar processes were undertaken in Maputo. In both cities, these events saw significant media attention.

In Maputo

In Maputo, one of the project's most significant policy impacts has been its influence on the newly established Maputo Metropolitan Transport Agency (MTA), which is tasked with reorganising public transport in the Maputo Metropolitan Area (AMM). T-SUM also contributed to the establishment of the Mozambique Observatory of Mobility and Transport (OMT), which aims to generate evidence related to mobility in the AMM. Furthermore, a collaboration with the Agence Française de Développement (AFD) Group was set up to support the development of the Sustainable Urban Mobility Plan (SUMP) in Maputo. T-SUM partners acted as facilitators between the AFD Group and the MTA, and as a coordinator to ensure that the SUMP draws on the project's findings and core concepts. Finally, the Ministry of Transport and Communications used T-SUM's COVID-19 briefing note to inform its transport policy.



Figure 2. Multi-stakeholder workshop, Maputo, June 2021 (top) and November 2021 (bottom) (Source: T-SUM)

More recently, T-SUM findings were also presented to Mozambique's Vice Minister for Transport and Communications, who is responsible for developing policies for urban mobility. Finally, T-SUM has supported three years of Sustainable Urban Mobility Week of the AMM, which showcases the latest developments in the sector and provides an opportunity for different actors to engage with each other.



Figure 3. Presentation of T-SUM findings to Amilton Florêncio Alissone, Mozambique's Vice-Minister for Transport and Communications, Maputo, March 2023 (Source: T-SUM)



Figure 4. Sustainable Mobility Week of the AMM, Maputo, October 2022 (Source: T-SUM)

In Freetown

As a result of the T-SUM workshops, a direct collaboration between the Ministry of Transport and Aviation and Freetown City Council (FCC) was set up to plan the establishment of a cable car system in addition to other transport-related projects. In addition, members of the steering committee brought together by the T-SUM project are also members of the World Bank-funded [Integrated Resilience Urban Mobility Project \(IRUMP\)](#) steering committee, demonstrating continuity in research and policy collaboration.

Furthermore, the Ministry of Transport and Aviation and other steering committee members reported that the documents produced as part of the workshops now serve as reference documents in Freetown and other cities across Sierra Leone. Finally, the [Climate Action Strategy](#) recently released by FCC also cites T-SUM's findings, demonstrating the project's impact beyond the transport sector.



Figure 5. Multi-stakeholder workshop, Freetown, December 2019 (top) and strategic meeting with representatives from the Sierra Leone Ministry of Transport and Aviation, March 2023 (bottom) (Source: T-SUM)

Local Communities

Dissemination events were organised, targeting local communities in Maputo and Freetown. Key project findings were shared with over 30 residents in each city who participated in the research. These dissemination events represented an opportunity for residents to see the results of the contributions they had made to the research findings (through focus groups) and how they have been used beyond the project. It was also an opportunity for the T-SUM team to thank them for contributing to the research processes.



Figure 6. Community event organised by colleagues at SLURC in Cline Town, Freetown, March 2022 (Source: T-SUM)

Acknowledgements

The success of the *Transitions to Sustainable Urban Mobility in Sub-Saharan Africa* (T-SUM) project is thanks to the many partners and collaborators who have joined us on the journey over the last five years. We want to thank all the project partners, the funders, the external advisory board, the local communities, the research staff at University College London (UCL), the local teams in Maputo and Freetown who have supported the research process and outreach and policy engagement activities, as well as the students who have developed their research alongside the T-SUM project.

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