

## The Road Ahead: Public Transport Transformation in Nairobi

Herman Kwoba (TUMI), Frederic Tesfay (TUMI), Ariadne Baskin (TUMI) and Winnie Chore (NAMATA)

Matatus are ubiquitous to the roads of Nairobi. They provide high coverage and high frequency services at a low cost. They are synonymous with mobility in Nairobi city. Despite the neccessity of these informal transport services, matatus contribute to lax safety, labor, environmental degeneration and congested routes. This article examines Nairobi's public transport trajectory and the increasing involvement of government of Kenya in the sector particularly with the establishment of the Nairobi Metropolitan AreaTransport Authority (NAMATA).

## Introduction

In 1992, Nairobi's first government-owned public transport service collapsed 1. This situation, plus a host of other factors, led to the exponential rise of the present day 'informal' public transport operations in the city. The model of operations is characterised by the near absence of contractual obligations between service providers and city authorities, particularly over the level of service offered. The space is dominated by privately owned paratransit services popularly known as Matatus (14 – 25 seater minibuses) and boda-bodas (motorbikes).



Figure 1. Typical 14-seater matatus in Nairobi (Photo credits: GIZ)

www.ebus.transformative-mobility.org

 $<sup>^{1}\,\</sup>underline{\text{https://www.ssatp.org/sites/ssatp/files/publications/Presentations/KenyaBusService.pdf}}$ 

While matatus have been critical in making sure Nairobi keeps moving, there are a host of challenges that commuters face in this 'Green City in the Sun'<sup>2</sup>. These challenges include a lack of readily available information on the matatu route or bus route number to take for respective destinations; a lack of clear information on the fare to be charged, long waiting times before commencement of trips, heavy congestion particularly during peak hours<sup>3</sup>, as well as unpredictable travel time as the bus/matatu services do not operate using a time schedule and will have irregular stopping points to pick and drop passengers.

Apart from inspection and monitoring of safety related provisions in the Traffic Act, enforcement parameters associated with the level of service in public transport in Nairobi is still at a minimum which leads to poor service quality. This leaves the public at the mercy of target chasing operaters who have to meet a daily revenue target set by vehicle owners. The role of city authorities currently entails approval of public transport routes, determination of the number of buses and matatus per routes, registration of companies that operate public transport services; and designation and provision of parking bays and picking and dropping areas.

"The ability of public transit to provide fast, dependable and comfortable transportation service depends on the ability to effectively evaluate that service and determine where improvements should be made."

There is however renewed efforts to see more government involvement in public transport operations in the city. One such example is the establishment of the Nairobi Metropolitan Area Transport Authority (NAMATA); established through Legal Notice No.18 of 17th February 2017 with a key mandate of overseeing the establishment of an integrated, efficient, effective and sustainable public transport system within the Nairobi Metropolitan Area. An integrated Bus Rapid Transit System, non-motorised transport facilities and commuter rail system are the priority

<sup>&</sup>lt;sup>2</sup> https://edition.cnn.com/travel/article/nairobi-fastest-city-africa/index.html

<sup>3</sup> https://africa.itdp.org/wp-content/uploads/2021/04/Service-plan-for-Nairobi-BRT-Line-2-191030.pdf

<sup>&</sup>lt;sup>4</sup> https://static.tti.tamu.edu/tti.tamu.edu/documents/1067-1F.pdf



projects for NAMATA. These efforts provide a strong positive signal of the city's interest to create an effective and inclusive public transport system for Nairobi.



Figure 2. A typical 28-seater minibus in Nairobi (Photo credits: GIZ)

At the moment, public transport utilisation for official trips in Nairobi is at over 40%; this percentage could be higher if the entire population could afford the current unpredictable fare structures. Walking accounts for 40%, while other means constitute the remaining 20%. A study conducted by TUMI shows that there are just over 21,000 public transport vehicles in the entire Nairobi Metropolitan region operated by 236 companies. The study further indicates the average trip distance in the city is 25.8 km from a total of 146 functional routes. Vehicles range from 14 seaters to 51 seaters in size. The majority of the public transport vehicles are 14 – seater (59%) vans, followed by 33–seater (28%) and 31–seater (4.8%) mini-buses, while the rest constitute 8.2%.



Figure 3. BRT corridors and commuter rail corridors for Nairobi<sup>5</sup>

The city authorities in Nairobi have recognised that the best functioning public transport systems are public goods that need direct government intervention and invovement. There is also a recognition of the tremendous role that matatus have played in ensuring residents get access to healthcare, job opportunities, education and overall opportunities. In this regard, the current operators have to be included in the transition. With NAMATA in place and Nairobi city having been selected as a deep dive city under the <u>TUMI E-Bus Mission</u>, a partnership was formed. A key objective of the collaboration was promoting the transition to a sustainable mobility with a primary focus was on capacity development.

<sup>&</sup>lt;sup>5</sup> https://www.namata.go.ke/brt\_corridor





## The TUMI E-Bus Mission

The TUMI E-Bus Mission is funded by the German Ministry for Economic cooperation and Development (BMZ) and works through a core group of organizations such as C40 Cities, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), The International Council on Clean Transportation (ICCT), The Institute for Transportation and Development Policy (ITDP), ICLEI – Local Governments for Sustainability, The International Association of Public Transport (UITP) and World Resource Institute (WRI). The initiative's goal is to accelerate the transition to electric buses in the Global South. Activities under the TUMI E-Bus Mission cover a wide array of technical capacity support to city officials and key players in the industry. Capacity development opportunities (such as an e-bus training course), stakeholder engagement, ecosystem support as well as development of an electric mobility roadmap for Nairobi, were amongst the broad array of activities offered. As the TUMI E-Bus Mission has concluded its initial phase of activities in the city of Nairobi, the number of electric buses have risen from a mere 2 to 20 and this number is rising rapidly.

As part of its priority activities, TUMI engaged matatu owners in an exposure tour to companies offering electric buses in Kenya. It was very clear that incentives, particularly on vehicle acquisition will be key to guarantee uptake. Overall, the matatu sector is ready for the gradual transition and to add their weight in the advocacy efforts for incentives in public transport. In addition, the E-Bus Mission supported a forum hosted by the Cabinet Secretary (Minister) for the Ministry of Roads and Transport. The minister emphasised on ongoing efforts to set up a functional public transport in the city that will include electric buses. The TUMI E-Bus Mission also organised a study tour for city officials to India because of the immense learning opportunities particularly from their innovative procurement approach that focused on demand aggregation to boost uptake.

## Vision

With all these activities, e-bus adoption is not a distant option anymore. It is becoming one important pillar of public transport in Nairobi. This fits well with Nairobi's ongoing investments in its vibrant start up ecosystem which extends into the Electric vehicle industry. It has been estimated that Kenya has raised over USD 53 million for the over 35 e-mobility startups<sup>6</sup> in the country for the few years they have been in operation (time frame not mentioned). In comparison, Uganda raked in just over \$5 million and a little over \$1 million for Tanzania Error! Bookmark not defined. The current estimates of electric vehicles registered in Kenya is around the 2,000 mark which includes about 20 electric buses.

"We are rolling out an electric vehicle public transport system which will bring down the cost of transport significantly" - H.E Dr. William Ruto, President of the Republic of Kenya

Further, the government of Kenya and the European Union have signed a <u>declaration of intention</u> to finance for a clean BRT "Nairobi Core Bus Rapid Transit Line 3" (BRT 3) for a total amount of €347.6 million, including €45 million in grants from the EU budget. This means in the very near future, a significant number of electric buses are anticipated in the city. This is on top of the already existing electric buses offered to operators by Basi-go.

Plans are further in an advanced stage to develop an electric mobility policy for the country and advance incentives and regulatory elements for the sector. For instance, the financial bill of 2023 has seen supply of electric buses zero rated which is a key boost for the sector.

Innovative contracting models, extensive government support and a vibrant ecosystem, are essential not only for success of the transition to electric mobility, but as well for supporting an effective public transport system. Setting national milestones and targets on E-buses, as well as availability of technical expertise, were other issues that have shown great potential to make the transition possible. One low hanging fruit for the East African region would be an attempt at demand aggregation through regional bodies to boost scale and buying power.

Urban transportation that is effective and well-organized is essential for social and economic development. Nairobi needs to have a mass rapid transit system (MRTS). The main objective is to transform the current matatu and bus sector while incorporating Bus Rapid Transit (BRT) and

www.ebus.transformative-mobility.org

<sup>&</sup>lt;sup>6</sup> https://aemda.org/wp-content/uploads/2023/03/TZEVBarrierReport.pdf





commuter train services. Furthermore, there are a number of existing policies that are yet to be implemented and enforced many years after they were adopted by policymakers. There are needs to have clear guidelines for implementation and enforcement right from the drafting stage to enforcing these policies. Enforcement agencies need to be empowered in level of service.

Thank you to our TUMI E-Bus Mission Partners:















