

# Nairobi's Public Transport System through the Lens of Socially Just Public Transport

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## Abstract

*Cities in the global south are growing at exponential rates. Africa currently has the highest rate of urbanisation globally and it is believed that by 2050, African cities will have doubled in population (Muggah, R. and Hill, K. 2018). Big Cities are growing into their adjacent regions forming metropolitan areas while intermediate cities are also experiencing an influx of population. Amidst all this, problems of urban inequalities continue to be on the rise.*

*Urban mobility continues to be one of the crucial aspects of urban life. According to Souza (2019), while urban space continues to reproduce, amplify and consolidate inequalities; mobility is one of the most brutal indicators of these differences primarily through the painful and difficult methods of transportation that the majority of the population have to go through. This is not an exception in Nairobi, which stands out for its large walking population, perennial traffic jams and actively dominant paratransit system, known as matatus. Government officials, researchers and development partners have conducted several studies looking into obtaining sustainable mobility solutions for the city and its environs. Proposals such as bus rapid transit, commuter rail systems and highway expansion (like the Nairobi Expressway) have been put forward and are getting implemented. However, these only serve a small faction of the population of over 5 million people who travel within and through Nairobi daily.*

*This study took a look into the existing paratransit sector, consisting of privately owned buses and minibuses and used by 30% of the population (JICA, 2014). The study analysed the sector through a social justice lens, using the pillars of the socially just public transport system as a guiding framework. The pillars were developed by multi-stakeholder groups include: Available, Inclusive, Sustainable, Accessible and. Affordable, Human Rights and Equity.*

*The methodology used for the study included key informant interviews with members from the public transport sector, public authorities and users of these vehicles. Meetings were also held with members of the advocacy groups that represent marginalised groups like women and persons with disability. Field visits were made to various public transport termini and records were taken from observations, using photography and note taking. Secondary data was also obtained from existing city plans, mobility proposals and academic work done within the sector.*

*The results bring out the emergent social justice gaps in the public transport sector. These exist not only at a policy perspective but also existing cultures and pressures that stem from the ownership structures, user expectations and worker rights. With the target based system solidly in place, immediate return of*

*investment is highly prioritised over meeting needs of marginalised groups, some of whom have emerged to be known as the 'urban invisibles.' It is without doubt, however, that the work of advocacy groups continues to slowly give a voice to these people.*

*It proposes a wide approach while making plans regarding urban mobility that gives emphasis to the pillars of socially just public transport. These not only cover infrastructural provisions at termini and within vehicles that can enhance access and inclusivity; but also require a review of demand and supply factors such as ownership models, routing, vehicle standards and worker rights.*

## Keywords

*Public Transport, Socially Just, Paratransit, Cities*

## 1. Introduction

### 1.1. Urban Growth

Urban growth in Africa is occurring at an unprecedented rate. Even though the levels of urbanisation relative to other parts of the world are still quite low, the rate at which this is changing is very high (Goodfellow, 2013). The past few decades have seen African cities, especially in sub saharan Africa, undergo the highest rates of urbanisation in the world (Bughin, Chironga and Desvaux, et al 2016). This growth has come with mixed results: some of prosperity, innovation and success and others of poverty, misery and deprivation (AfDB, 2011). The words 'Africa rising' were until recently highlighted in many circles globally, showcasing developments in technology, financial inclusion and talk of a 'growing middle class.' While that was discussed in publications, conferences and seminars, evidence of spatial divisions, inequality and human rights abuses like displacement have continued to exist (Kingombe, 2014).

Many of these urban areas, especially those in Commonwealth nations, were initially designed and planned along the principles of the 1947 British Town and Country Planning Act (Corkindale, n.d.). In countries like Kenya and Zimbabwe that had a strong settler population, colonial segregation policies also applied which resulted in urban areas that were highly controlled and divided based on race, to the benefit of the European and Asian middle classes over the indigenous Africans (K'Akumu and Olima, 2007). These cities were opened to all after independence but many of the bylaws and policies were retained and this had a negative impact on the growing urban poor and informal sectors. Urbanisation has thus come with increased levels of poverty (Owuor and Mbatia, 2008).

### 1.2. Post Independence Urban Areas in Africa

After independence, African countries experienced an upsurge in their urban population through rural-urban migration (Doan and Oduro, 2011). A major cause of this was the growing rural poverty that many associate with land ownership inequalities, poor tenure systems and biased land redistribution policies after independence (Mlambo, 2018). This continues to force many to search for better prospects in urban areas.

Urban areas have also grown at astronomical rates while physical and economic planning has been unable to keep up with this (Ehwi, Morrison and Tyler, 2019). A good example of inequality and social division is evident in Nairobi, where the neighbourhoods of Mathare, Muthaiga and Highridge that all lie a few hundred metres from each other, separated by highways. Mathare, an informal settlement, has a

population density of 1,200 persons per Ha in contrast with Muthaiga of 5 persons per Ha and the 70 persons per Ha of the middle income Highridge (Cap, 2019). Such social divisions dominate the African urban scene and are a cause for concern on where the continent will find itself in the next few decades.



Highridge, Muthaiga and Mathare are located in close proximity but showcase a very different spatial density. *Source: Google Earth*

Urban planning, especially land use and mobility in many African cities tends to be highly 'de-linked' from the realities that the citizens face on a day to day basis (Klopp, 2018). The existing inequalities are not helped by the presence of corruption and land grabbing and poor governance (Kabui, Rwiza and Bedijo, 2021). Most urban residents in Africa can only afford to walk to work or use paratransit (Agbibo, 2018). In Nairobi, for example, 45% walk as their primary means of transport, 30-35% use the existing dominant paratransit and less than 20% use personal vehicles (JICA, 2014). Unfortunately, however, prioritising infrastructure for the minority wealthy has tended to dominate the urban scene other than the majority (Mutiiria, Ju and Dumor, 2020). A recent peak hour non-motorized transit count in a middle-income neighbourhood in Nairobi counted over 6000 pedestrians passing through a busy crossing within a two hour period against 210 cyclists and 800 vehicles (Cap, 2021). The survey also highlighted the disparity in existing infrastructure at the location giving an example of how along the signalised junctions pedestrians were expected to wait for up to 70 seconds to cross the road, in addition to most of the existing infrastructure dedicated to them being colonised by traders and parking space. Another example of this in Nairobi is the case where the government (in partnership with a Chinese company) recently completed an exclusive toll based double decker highway called the Nairobi Expressway to ease traffic congestion (Mosoku, 2018). The 500 million dollar project was prioritised over an already existing bus rapid transit plan (Cairato, 2022).

Without any paradigm shift that will enable authorities to prioritise policies based on how they can solve these inequalities through proactive futuristic policies that meet the realities of their people, African

cities will continue to be challenging places for the poor, who struggle to access basic services like water, housing, transport, public space and a clean environment to live and work in.

## 2. Urban Mobility

### 2.1. Urban Mobility and the Transport Sector

Transportation on the African continent is going through an interesting phase that includes growing influence and visibility of external influence and global capital (JICA Research Institute, 2013). In many cities, it is also evident that there is an increase in the number of vehicles on the road (Black, Makundi and Mclennan, 2017) and bilateral agreements through grants and loans have also seen increased road kilometres through construction of by-passes, expanded roads and highways (Amuhaya and Degterev, 2019). There have also been concerns over the intention of counties that intend to export second hand vehicles to Africa (BBC World Service - Newsday, China eyes Africa as a market for its second-hand cars, 2019). Private enterprises have not been left out and are constantly coming up with different innovative applications to try to improve mobility services. Examples include Durban's Moja Cruise, Nairobi's Digital Matatu and Cape Town's Wallacedene TaxiRank (Klopp, 2018).

### 2.2. The Evolution of Mobility and development of Mobility Injustices

Like many cities in the Commonwealth, Nairobi once had a functional intra-city bus service that was partly privately owned and partly owned by the city council. This partnership allowed the then Kenya Bus Services to have a monopoly on cross city routes and make cyclic journeys to peri urban routes. These worked with fixed schedules and fares as well as proper labour structures for the workers in the sector (Kamau, 2020). Failure within institutional structures, lack of political goodwill and mismanagement led to the collapse of this system and it was slowly swallowed up by the paratransit system (Agutu, 2015). Today, the matatu sector dominates the transport industry both within the city and in other urban areas transporting both people and goods on a daily basis with flexible stops, no fixed schedules, changing fares and routes (Klopp and Cavoli, 2019).

Surprisingly, however, in spite of the key role that the informal sector plays in city transport, it is not comprehensively covered within the Nairobi Integrated Urban Development plan. The plan highlights the introduction of a bus rapid transit system, expansion of the commuter rail and proposed road expansion and construction of viaducts for vehicle passageways (JICA, 2014). A separate document, *The Project on Detailed Planning of Integrated Transport System and Loopline in the Nairobi Urban Core* highlights the necessity of the development of a metro in detail while mentioning the need to reorganise but and matatu transport without offering any inclusive strategy on how to go about this (JICA, 2018).

Similar 'injustices' have been seen in Addis Ababa, Ethiopia, who failed to consider integration of existing transport systems, routes and schedules in their Light Rail System as well as in South Africa, whose BRT still operates on subsidies, a benefit not enjoyed by the much larger minibus taxi community (Klopp, 2018).



### 2.3. Different actions and attempts at handling the sector

There have been several attempts at reforming the paratransit sector, to a large extent with the aim of improving standards of service (Aruho et al., 2021). Of the many actions taken towards streamlining the paratransit sector, most tend towards the supply factors: drivers/crew, vehicles and owners. Little emphasis is put on the demand factors like routing, fares, scheduling and termini location (Cap, 2019). Examples include ministerial directives streamlining routes to be run by savings and credit cooperative societies, phasing out of smaller 14 seater matatus and attempts at introduction of cashless payment systems (Aruho et al., 2021). Most of these attempts have either been short lived or failed completely. There are different reasons for this including the non-inclusive approaches that are used by policy makers and the lack of adequate involvement of all stakeholders. There is a gap that exists where both the government and all the necessary stakeholders are to come to the same table and agree on the way forward (Mitullah and Onsante, 2013).

A recent attempt at relocating matatus in Nairobi outside the CBD to ewntermini at the fringes was met with a lot of hostility (Omullo, 2020). The 'Nairobi Metropolitan Services' (NMS), the authority that had temporarily taken over some of the key functions of the Nairobi City County government (Njeru, 2020), developed new termini on the outskirts of the greater CBD as part of their 'decongestion programme.' Coincidentally, as per a continuation of existing injustices, the first 'victims' of this 'decongestion' programme were not private cars but operators and uses of public transport vehicles.

### 2.4. Bus Rapid Transit (BRT) as an alternative to public transport

There is an increased view towards a shift to BRT and erasure of the paratransit sector as the standard paradigm for transport reform in urban Africa (Behrens, McCormick and Mfinanga, 2015). BRTs tend to be very attractive but the paratransit sector has shown hesitation towards reforms, this is mainly seen by some to be due to poor engagement by authorities (Cap, 2019b).

Dr. Dayo Mobereola, the initiator of the Lagos BRT, offers interesting insights into how BRTs should be modelled in Africa. Although they were the builders of the infrastructure in Lagos, the Lagos Metropolitan Transport Authority (LAMATA) deliberately involved mini-bus operators on those routes. The sector started by registering a cooperative among the operators which bought 100 buses through a financing deal negotiated by LAMATA. The financiers were paid back through the fares that were collected. These loans were paid within 18 months and this was seen as an indicator of the success of the system. Unfortunately, LAMATA had not made any arrangements for maintenance and development leading to the deterioration of the quality of service (Cap, 2019b)

We must acknowledge, however, that there is need for reform in many African Urban Transport systems. Africa's rapidly growing cities and metro regions will need to improve public transport in part by building mass transit systems (Klopp, Harber and Quarshie, 2019). It is equally important to create locally derived forms of metropolitan-scale governance and improved public regulation of transport and land-use.

African cities can also learn lessons as they move towards implementing upcoming BRT projects. Some key lessons include:

1. Do not compromise standards by overlooking land use (lesson from India and Curitiba Brazil),
2. BRT is not an ultimate solution or a replacement (South African lesson)

3. Users have different interests and needs such as negotiated pricing systems (Dar es Salaam lesson). (Cap, 2018)

### 3. Socially Just Public Transport

#### 3.1 The pillars of Socially Just Public Transport

The term social justice tends towards a concept of fairness as it manifests in the society (Soken-Huberty, 2020) or view that everyone deserves equal economic, political and social rights and opportunities (The San Diego Foundation, 2016). It has gained popularity within urban planning space in recent times through the concept of the 'Just City,' a good city where people's rights and responsibilities are recognized and citizens are able to participate in the shaping of this city through the principles of dignity, equity and diversity, democracy, rights and responsibilities (Omenya, 2020).

To understand how the public transport sector lies within the context of a just city, the pillars of socially just public transport (Kamau and Manga, 2020) provide a good starting point. These can allow for discussion and assessment on how 'socially just' the public transport is in Nairobi and what recommendations ought to be made if need be. The pillars are:

- Pillar 1: Availability
- Pillar 2: Accessibility & Affordability
- Pillar 3: Inclusivity
- Pillar 4: Human Rights & Equity
- Pillar 5: Sustainability

The pillars are portrayed in the infographic below.

These pillars of Socially Just Public Transport were designed by the Socially Just Public Transport Working Group based in Nairobi. The intersectoral group advocates for a more equitable and level playing field in the public transport sector and comprises of members from different organisations including Naipolitans, C40 Cities, The Kenya Alliance of Residents Association (KARA), Transport Workers Union of Kenya (TAWU), ITDP, Flone Initiative, The Institute for Development Studies (IDS), UN Habitat, University of Nairobi, Wow Mum, Jomo Kenyatta University of Science and Technology and Nairobi City County.



Source: Socially Just Public Transport Working Group

### 3. 2. Understanding Socially Justice in Nairobi's Public Transport

The working group has engaged Nairobi Metropolitan Services (NMS) and the Nairobi Metropolitan Transport Authorities (NAMATA) in various discussions and public dialogues on how to shift the public transport in Nairobi to be more socially just. Through engaging NMS, significant progress has been made at both Desai and Park Road Termini and the proposed Green Park Terminus. These are proposed new termini to be used by the paratransit sector.

The recent changes made include:

- A wide and user-friendly pedestrian lane along Park Road, which will allow passengers to access the vehicles once the project is complete.
- Existing trees along Park Road have been preserved and included in the project's design as opposed to cutting them. This is of great benefit since people were found to regularly converse while standing under the trees as protection from the sun.
- The bus terminus has provided refuge islands that improve pedestrian safety.
- Street lights have been installed along Park Road and Desai Road, hence making them well-lit at night and improving security.
- Several public toilets have also been built in the area.

However, a couple of urban challenges are experienced at the site. This includes congestion due to unregulated use of space by boda-boda's (motorcycle taxis), informal vendors, hawkers, private vehicles and mechanics. Park Road and Desai Road termini were developed without special boarding facilities and seats for passengers with special needs, a challenge for people with physical disabilities that NMS has attempted to solve at the Green Park terminus. Other issues noted at Desai Road and Park Road included lack of demarcated crossing points, poor sanitation, unregulated fare charges as well as air and noise pollution. These are common challenges around most public transport termini and raise direct questions with regards to how much the termini meet the threshold of providing a socially just service to the public.

### 3. 3. Towards Socially Just Public Transport in Nairobi

Various key actors and stakeholders were approached to discuss and decipher ways in which we can have a more socially just public transport system in the city.

One leader from a residents association mentioned that the need to give priority to non motorised transport infrastructure so as to serve a large extent of the population which relies on this as their primary means. It is also critical to regularly maintain such infrastructure and have them in good user-friendly conditions after several years. The NMT infrastructure ought to also be inclusive, especially for people with disabilities and should be a commonplace and priority within neighbourhoods.

Another key stakeholder, from the planning sector also highlighted the importance of integrating informality as we try to achieve a Socially Just Public Transport. One such way is to provide (temporary) areas of operation for hawkers, scheduling their hours of operation as well as categorising the hawkers in



terms of what and where they sell. This can go a long way into integrating informal vendors into the street design. It is also important to balance out this integration on the street to ensure that formal businesses which are already established along such streets still have access and visibility to potential buyers.



*Priority seating area at the upcoming Green Park Terminus. Source: Field Study*

As mentioned earlier, some of the glaring gaps in the sector are faced by public transport workers. These include the lack of integration of public transport facilities with other modes of transport as well as lack of resting places for workers. It is important to involve public transport workers in the planning process; a factor that tends to be ignored and leads to disagreements and lack of consensus when it comes to project implementation. There are also several grey areas when it comes to the day-to-day management of public transport facilities; a factor which enables lack of accountability. Among the victims of this also tend to be women workers, who, for example, sexual exploitation, including requests for favors in exchange for some of the few jobs available have also been experienced (Heinrich Böll Stiftung, 2020).

The sector also suffers from structural challenges within it including allegations of ownership and licensing of routes by cartels, target systems that crew have to work with, peak hour preference of certain routes and vehicular capacity regulations (in Kenya standing is prohibited in public transport).

The aspect of inclusion is also one of concern. Aside from the central railway station, most public transport facilities and vehicles are not designed well for people with disabilities. A recent report on disability and public transport by Flone initiative states that accessibility for PWDs remains a mirage for those who are using public transport (Flone Initiative, 2021).

#### 4. Recommendations and Conclusions

Governments in the global south have tended to shy away from participation in the public transport sector, however, it is slowly emerging that a participatory approach with the sector is critical for any reforms or improvement. Citizens in cities need seamless mobility options that are safe, reliable and dignifying. Access for the elderly and persons with disability needs to be on the priority list of all public transport initiatives.

To achieve this, the pillars of socially just public transport, as well as other guidelines like the 'avoid-Shift-Improve' paradigm offer a good starting point beyond hard infrastructure. Along with such initiatives, the installation and maintenance of sanitation and hygiene facilities within the transport ecosystem should not be forgotten. Lighting and urban greenery are also important features for healthier environments.

Job security and labour rights for transport workers is also important to achieve an overall socially just public transport system.

In Nairobi, the onus will be on both the County Government and the Nairobi Metropolitan Transport Authority to ensure that these principles are adhered to in all transport reforms. The city will also need to review its land use management as this has a direct impact on mobility.

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