



The Weekly

PLANNER'S PALETTE



The Student Planners Association of Kenya SPAKE



SUSTAINABLE URBAN MOBILITY

TRANSFORMING TRANSPORT SYSTEMS IN DEVELOPING WORLD

Introduction

Urban mobility is the movement of people and goods within urban areas, encompassing all forms of transportation, infrastructure and systems that enable efficient and accessible travel. Its importance lies in its ability to enhance economic productivity, improve quality of life, reduce environmental impact and promote social inclusion in cities (Pojani, D., & Stead, D. (2015).

Rapid urbanization worldwide has led to significant decline in urban mobility and accessibility (Gakenheimer, R., 1999). In developing countries in particular, cities have experienced a rapid growth in transport-related challenges, including pollution, congestion, accidents, public transport decline, environmental degradation, climate change, energy depletion, visual intrusion and lack of accessibility for the urban poor (Pojani, D. and Stead, D., 2015). Addressing these challenges is essential for creating livable, efficient and environmentally friendly cities. Globally, in the large cities of the developing world, travel



times are generally high and increasing and destinations accessible within limited time are decreasing (Gakenheimer, R., 1999). Urban transport systems in many parts of the world are characterized by inefficiency and inequity where commuters spend hours daily in traffic, leading to lost productivity, time wastage and increased stress.

The Status of Urban Mobility in Kenya

Urban mobility in Kenyan cities like Nairobi, Mombasa, Kisumu, Nakuru and other urban areas is characterized by a mix of formal and informal transport systems that struggle to keep pace with rapid urbanization, climate change and population growth. Public transport in Kenya is dominated by matatus (privately-owned minibuses), which, while flexible and accessible, are often poorly regulated, leading to safety concerns, inefficiency and congestion. In cities like Nairobi and Mombasa, the reliance on private vehicles increases traffic jams, air pollution and greenhouse gas emissions.



Non-motorized transport modes, such as walking and cycling, are widely used, especially by low-income residents, yet infrastructure to support these modes remains limited, unsafe, and poorly maintained. Efforts to improve urban mobility include initiatives like the development of Bus Rapid Transit (BRT) systems in Nairobi and the promotion of non-motorized transport infrastructure, but challenges such as inadequate funding, weak enforcement of urban transport policies and fragmented planning continue to hinder progress. These dynamics underscore the urgent need for integrated, sustainable and inclusive transport systems to enhance mobility in Kenya's urban areas.

Sustainable urban mobility: A pathway forward

Sustainable urban mobility prioritizes accessibility, efficiency, resilience and environmental responsibility. Transitioning to sustainable transport systems can improve the quality of life for urban residents, reduce emissions and support economic growth.

1. Developing Efficient Public Transit Systems

An efficient public transportation system is the backbone of sustainable urban mobility. Cities should invest in mass transit systems such as Bus Rapid Transit (BRT) and commuter rail networks. For example, Nairobi's ongoing development of a BRT system illustrates how such systems can reduce congestion and emissions when properly implemented and integrated with other transport modes. Enhancing the quality and reliability of public transport can attract more users, reducing the reliance on private vehicles.



2. Promoting Non-Motorized Transport (NMT)

Walking and cycling are cost-effective and environmentally friendly modes of transport. This should prioritize the development of pedestrian-friendly infrastructure, including sidewalks, crosswalks and dedicated cycling lanes.



3. Embracing Smart Mobility Solutions

Technological innovations can revolutionize urban transport. Smart mobility solutions, such as ride-hailing apps, e-mobility and real-time traffic management systems, enhance efficiency and convenience. Electric vehicles (EVs) and e-bikes offer opportunities for reducing carbon emissions and dependence on fossil fuels. Incentivizing the adoption of EVs through subsidies and charging infrastructure development is crucial for scaling up this technology.

An example is the Kigali bike sharing program which introduced dockless electric bikes and pedal bikes designed to enhance accessibility and reduce dependence on motorized transport. Stations are strategically placed in key areas of the city to encourage cycling as an affordable and environmentally friendly alternative for short-distance travel (GuraRide Rwanda. (2021)

4. Enhancing Land Use and Transport Integration

Urban planning must align land use with transport systems to minimize travel distances and improve accessibility. Mixed-use developments that integrate residential, commercial and recreational spaces reduce the need for long commutes. Transit-oriented development (TOD) near mass transit hubs can encourage the use of public transport reduce urban sprawl. TOD also promotes compact, well-connected cities that are better equipped to manage climate risks and ensure mobility during crises.

5. Strengthening Policy and Governance

Effective policies and governance frameworks are essential for implementing sustainable mobility initiatives. This includes enforcing traffic regulations, improving road safety and incentivizing the use of public and non-motorized transport. Collaboration between governments, private sector players and civil society organizations is critical for the success of mobility projects.

Environmental and Social Benefits

Adopting sustainable urban mobility strategies offers numerous benefits. Reduced traffic congestion and air pollution contribute to healthier urban environments. Improved public transport and NMT infrastructure promote social equity by providing affordable and accessible mobility options for all residents. These measures can help cities meet their commitments under the Paris Agreement and Sustainable Development Goals (SDGs), particularly Goal 11 on sustainable cities and communities.

Call to action

Transforming global transport systems is essential for achieving sustainable urban development. Let us foster fruitful collaboration among stakeholders to drive this transition, ensuring that cities around the world become not only hubs of growth but also models of sustainability.

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