Deloitte City Mobility Index

**Nairobi**

**Analysis area:** 696 km²  |  **Population:** 5,234,229 (2017 estimated)  |  **Population density:** 7,517/km²

**Definition of analysis area:** Nairobi City County

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### MOBILITY ANALYSIS

**Performance and resilience**

- **Congestion**
- **Public transport reliability**
- **Transport safety**
- **Integrated and shared mobility**
- **Air quality**

**Vision and leadership**

- **Vision and strategy**
- **Investment**
- **Innovation**
- **Regulatory environment**
- **Environmental sustainability initiatives**

**Service and inclusion**

- **Public transit supply**
- **Transport affordability**
- **Versatility**
- **Customer satisfaction**
- **Accessibility**

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### KEY MOBILITY STATISTICS

**Public transport options**

- **Bus, taxi**

**Monthly public transport pass**

US$37

**GDP**

US$66 billion (2015 estimated)

**Principal transport authority**

Transport: National Transport and Safety Authority (NTSA), Nairobi Metropolitan Area Transport Authority (NaMATA)

Infrastructure: Kenya National Highways Authority (KeNHA), Kenya Urban Roads Authority (KURA)

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**JOURNEY MODAL SPLIT**

- **PRIVATE CAR** 13%
- **PUBLIC TRANSIT** 46%
- **WALKING** 39%
- **BICYCLE** 1%
- **OTHER** 1%

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### FUTURE OF MOBILITY CAPABILITY

**Nairobi**

- **Significant work to do**
- **Passive environment, a number of barriers**
- **Proactive environment, some barriers**
- **Proactive environment, few barriers**

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### STRENGTHS

- Recently established a single transport authority to oversee development of future integrated public transport system
- Focused on developing a mass rapid transport system, which will include bus rapid transit (BRT) and light rail projects
- Currently deploying an integrated traffic management system to reduce road accidents and control congestion

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### CHALLENGES

- Developing secure infrastructure for pedestrians and cycling, such as separate lanes; pedestrians accounted for 70 percent of road deaths in 2014
- Inadequate integration of urban planning and transport planning, especially in regions outside the CBD
- Absence of affordable and well-planned public transport to cater to various income groups in the area

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*Monitored by principal transport authorities.*
Key focus areas to improve city mobility and realize the Future of Mobility:

**Performance and resilience**
Nairobi lacks integrated public transport, leading to high congestion levels despite only 13 percent of trips being made by cars. The new transport authority is looking into solutions such as intelligent transport systems.

- With 70 percent of the population dependent on buses, the closest resemblance to public transport in the region are the Matatu buses, operated by private players. Previously known for unreliability, the system is slowly becoming more organized.
- Traffic congestion costs the city economy US$570,000 (2015) every day. Traffic management is mainly manual, and where traffic signals are operational, they are often overridden by traffic police with varying degrees of efficiency.
- In the absence of integrated public transportation and payment methods, Nairobi has proven to be a greenfield market for all the major ride-hailing and carpooling firms that are piloting quick-trip options.

**Vision and leadership**
Nairobi is moving toward a formal public transport system, thanks to new investments. With the help of international development organizations, the county has also started to develop nonmotorized transport policies.

- The master plan for the county includes US$1 billion of investment to introduce BRT and a light rail system. The first phase of this plan will be rolled out between 2018 and 2030.
- Collaborations with international universities have also led to innovative programs such as Digital Matatu, which addressed the challenge of making complex bus routes available on map-based applications.
- With the help of development organizations, the city government and NaMATA are adopting policies that encourage pedestrian-friendly infrastructure such as footbridges. The target is to transform Nairobi into an active-mode friendly city by 2027.

**Service and inclusion**
With affordability hindering public transport adoption, the new transport authority should make the bus system more regular and improve transport accessibility. But transport is costly compared to income levels in the region.

- Efforts are being made to provide affordable options; for example, the National Youth Service has planned to introduce 50 buses, which will operate at fares as low as 20 cents per trip.
- Although Kenya's 2009 Persons with Disabilities Act mandates disabled-friendly public transport, only 3 percent of Matatu operators have policies to support disabled groups.
- Ride-hailing and carsharing have emerged as popular alternatives to buses. In recent years, the high growth of the Boda Bodas (motorcycle taxi) to address transport challenges offers flexible and faster public transport compared to other motorized systems.

**SUMMARY**
Nairobi has transport problems similar to other developing cities. The lack of an integrated public transport system has led to high congestion, a lot of road accidents, and low air quality. The government recognizes these challenges, and the recently constituted transportation agency NaMATA is looking into solutions such as integrated transport management. In addition, the region will get a new mass transport system starting in 2019, which will increase commuters' transport choices. The challenges can also be looked upon as opportunities to introduce new mobility models and technological advancements, as proven by the booming ride-hailing market and innovative initiatives such as Digital Matatu.

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**About the Deloitte City Mobility Index**
The Deloitte City Mobility Index reviews major cities on key aspects of mobility and the resulting relationship to economic performance. Drawing on publicly available data, client conversations, and bespoke Deloitte analyses, we assess each city’s ability to transport its citizens both now and in the future and therefore its potential to bring prosperity to the city.

As we receive feedback, we will update and expand the analysis, which may mean the results shown in this document may change.

For the full interactive index, visit the Deloitte City Mobility Index at deloitte.com/insights/mobility-index.
For Deloitte’s insights on the Future of Mobility, visit deloitte.com/insights/future-of-mobility.

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