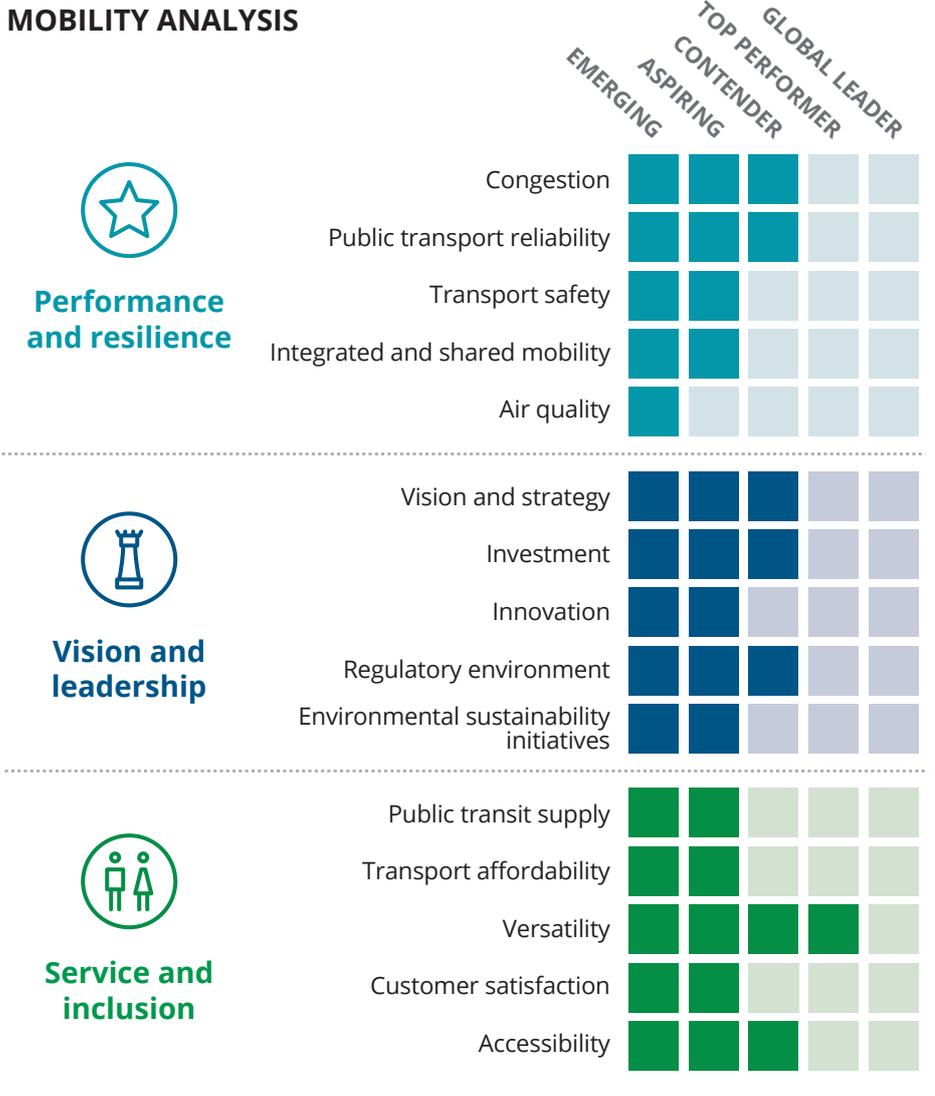


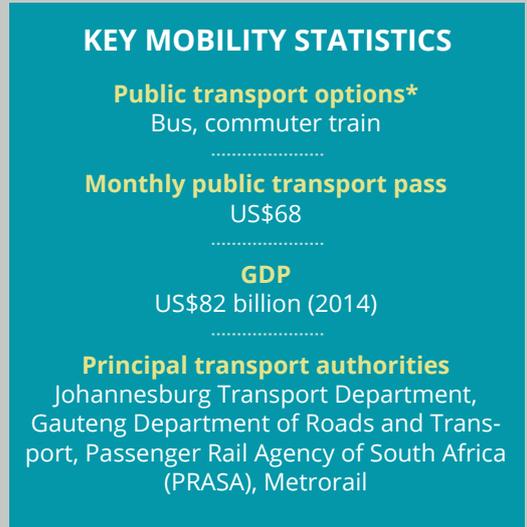


Analysis area

### MOBILITY ANALYSIS

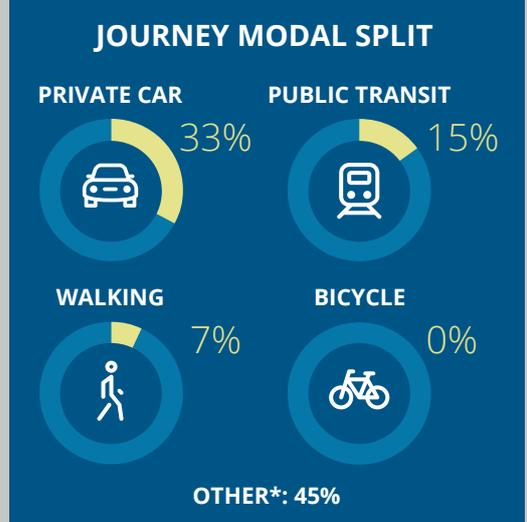


### KEY MOBILITY STATISTICS



\*Planned, regulated, licensed, subsidized, and monitored by principal transport authorities.

### JOURNEY MODAL SPLIT



\*Includes minivans and private two-wheelers.

### FUTURE OF MOBILITY CAPABILITY

Johannesburg



#### STRENGTHS

- The bus rapid transport (BRT) system is being extended to increase accessibility in historically segregated areas
- Development policies support Joburg 2040's aim to enable suburban residents to travel to job opportunities
- Use of innovative financing mechanisms, such as green bonds, to fund green infrastructure projects

#### CHALLENGES

- Public transport is expensive; some commuters spend more than 20 percent of their earnings on transportation
- Due to sprawling low-density areas without viable public transport systems, the average work commute is 52 minutes
- Issues with transport safety, such as vandalism, result in train cancellations and delays

Key focus areas to improve city mobility and realize the Future of Mobility:



**MOBILITY ANALYSIS FURTHER DETAILS:**

 **Performance and resilience**

Congestion is a major issue for the city, and infrastructure improvement projects are underway to deal with both that issue and the resulting air pollution. Aging traffic flow control systems contribute to congestion; a large number of traffic lights in Johannesburg do not work.

- New pedestrian and cycle bridges are being built to promote bicycle use, but few are using them due to theft, affordability issues, and the social stigma associated with using a bicycle.
- Various road resurfacing projects are underway to cope with increased traffic caused by commuters from Pretoria and surrounding areas.
- To reduce air pollution, the city has introduced eco-friendly bus fleets, which are expected to save 1.6 million tons of carbon dioxide emissions by 2020. It could also consider restricting vehicles older than seven years from entering city centers.

 **Vision and leadership**

Johannesburg seeks to fulfill its vision for 2040 through a range of new approaches, making public and nonmotorized transport increasingly attractive and viable through strategic public transport infrastructure development and investment initiatives.

- The city is creating well-planned “Corridors of Freedom” with accessible public transport options and safe neighborhoods to promote walking and cycling.
- Johannesburg is one of the first municipalities in South Africa to issue a green bond (US\$110 million) for environmental and social sustainability projects, such as the procurement of 150 hybrid-fuel buses.
- Sandton’s Gautrain station is a test site for public autonomous vehicle trials in 2018. Electric vehicle (EV) infrastructure projects will begin soon as South Africa seeks to become an innovation hub in Africa, testing mobility solutions in emerging markets.

 **Service and inclusion**

The accessibility and affordability of public transport for disabled and low-income groups are challenges. Many people use private transportation to avoid vandalism and the theft of train cables, both of which are prevalent on trains.

- Minibus taxis help with first- and last-mile transport problems in Johannesburg but are largely unregulated, poorly maintained, and overcrowded. The government plans to replace old fleets and integrate them with the existing BRT system.
- The Gautrain, Metrobus, and Rea-Vaya BRT systems need work to improve stations and expand services for disabled people.
- Recent fare hikes averaging 6 percent on BRT buses and Metrobus exacerbate affordability issues for low-income commuters. Local authorities should consider approaches such as distance-based pricing.

**SUMMARY**

The City of Johannesburg has embarked upon its Spatial Development Framework 2040 to accommodate a population estimated to reach 7 million by 2040. Its goal is to build a compact, polycentric city with an urban core linked through efficient “Corridors of Freedom.” Due to a lack of reliable public transport, commuters now prefer unregulated minibus taxis, which handle last-mile connectivity but increase congestion.

To tackle its challenges, the City of Johannesburg is expanding its BRT system, is improving its roads, and is taking steps to promote active modes of transportation. Ridesharing services could be promoted digitally to save costs.

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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](http://deloitte.com/insights/mobility-index).

For Deloitte’s insights on the Future of Mobility, visit [deloitte.com/insights/future-of-mobility](http://deloitte.com/insights/future-of-mobility).

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