



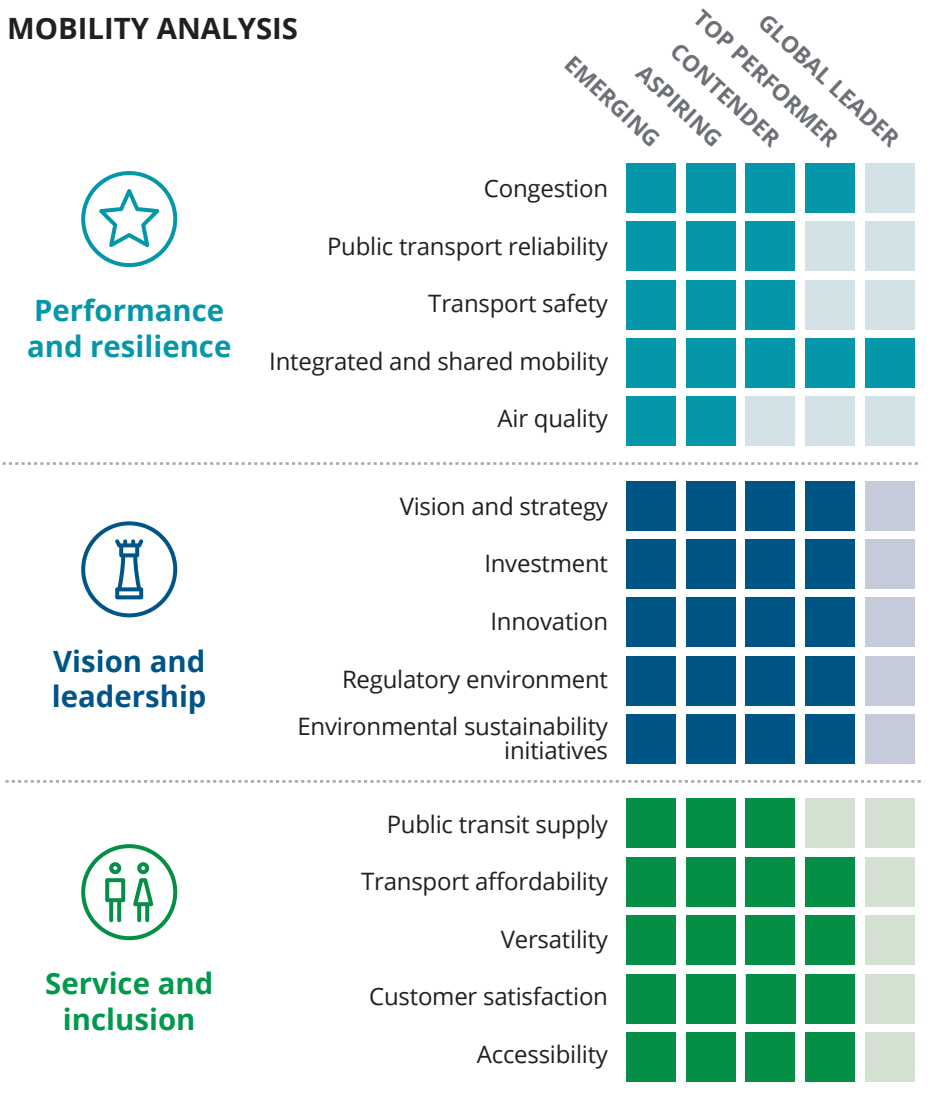
Analysis area

Copenhagen

Analysis area: 3,000 km² | Population: 1,307,000 (2017) | Population density: 436/km²

Definition of analysis area: Copenhagen Metropolitan Area

MOBILITY ANALYSIS



KEY MOBILITY STATISTICS

Public transport options*
Metro, bus, commuter rail

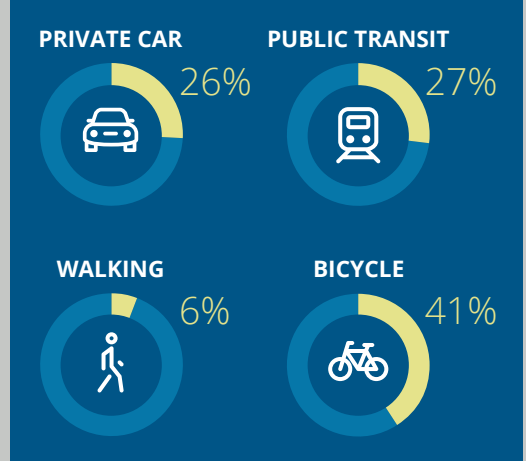
Monthly public transport pass
US\$106

GDP
US\$122 billion (2016)

Principal transport authorities
The Danish Ministry of Transport, Construction and Housing (including Banedanmark, Vejdirektoratet), Metroselskabet, Movia, Copenhagen Municipality

*Regulated, licensed, and monitored by principal transport authorities.

JOURNEY MODAL SPLIT



FUTURE OF MOBILITY CAPABILITY



STRENGTHS

- Copenhagen is one of the world's most bicycle-friendly cities; commuters cycle 1.1 million kilometers daily
- Its extensive public transit system includes an intermodal transfer system and integrated ticketing options
- The city supports open data and promotes digital solutions to tackle traffic, the environment, and urban planning

CHALLENGES

- Air quality remains a challenge with higher levels of nitrogen oxides (NO_x) due to diesel vehicles
- Copenhagen's bike lanes are reaching capacity at peak times, and bike traffic is set to grow 25 percent by 2025
- The city needs to find ways to ensure access for all road traffic while prioritizing cycling

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



Expand bicycle lanes when building new infrastructure to minimize congestion



Establish centralized regional data hubs for smart city data



Redesign public bus routes after the Metro City Circle Line opens

MOBILITY ANALYSIS FURTHER DETAILS:

 **Performance and resilience**

Copenhagen is one of the least congested Nordic cities thanks to commuters' preference for cycling and the city's extensive and well-integrated public transport. But air pollution remains a problem.

- Nitrogen dioxide levels are above EU emission standards despite the city's reputation as a green leader. Proposals to ban new diesel cars are not universally supported.
- Copenhagen has embarked on several strategic intelligent traffic solutions in the last three years to further reduce congestion.
- Bicycle parking facilities are available near all public transport stations, which has resulted in decreased private car use.

 **Vision and leadership**

Copenhagen's vision for sustainable mobility, coupled with its push for innovation, make it a green leader.

- Through the CPH 2025 Climate Plan, the city aims to be the world's first carbon-neutral capital. It is investing in 25 urban development, green transportation, and innovation initiatives.
- The city has improved last-mile transport connectivity by integrating electric carsharing schemes with existing public transport infrastructure.
- In 2017, 85 percent of municipal vehicles were electric, hydrogen, or hybrid-powered. The city also plans to trial driverless cars in 2018. By 2020, the city plans to have 500 electric charging points and four hydrogen filling stations.

 **Service and inclusion**

Reliability, accessibility, and affordability are the key success factors behind public transportation's high customer satisfaction levels.

- Known for service availability and customer satisfaction, the Copenhagen Metro is one of the first 24/7 driverless metros.
- All metro stations are easily accessible and step-free. All buses are equipped with manual wheelchair ramps. All taxis are mandated to accept collapsible wheelchairs for free.
- Copenhagen's affordable public transport system offers versatile travel options with varied ticketing schemes. The city pass gives unlimited access to buses, trains, and the metro from the city center to the airport.

SUMMARY

Copenhagen is a compact city, with most commuters preferring active modes of transportation such as walking and cycling. With 454 kilometers of cycling lanes, more than 36,000 cyclists commute 1,230,000 kilometers every day. Challenged with high levels of NO_x pollution, the city has begun to implement green mobility initiatives to switch city-owned vehicles to electric (EV), hydrogen, and hybrid vehicles and expand public transport infrastructure. Its goal is to become the world's first carbon-neutral capital by 2025.

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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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