

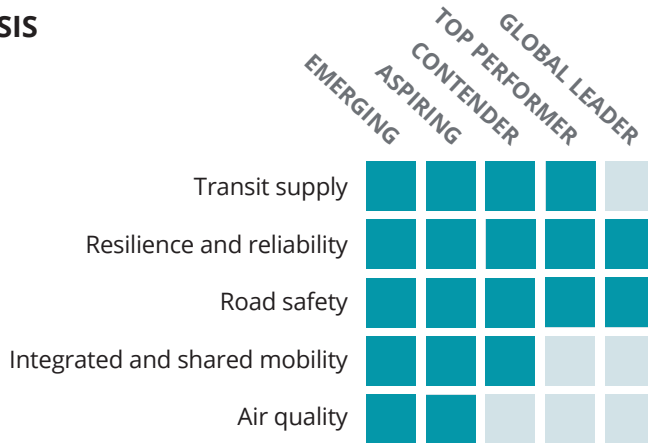


Analysis area

#### MOBILITY ANALYSIS



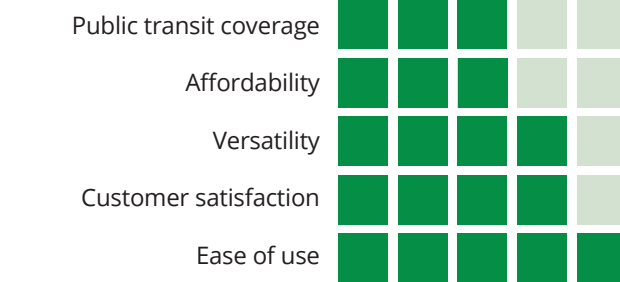
##### Performance and resilience



##### Vision and leadership



##### Service and inclusion



#### KEY MOBILITY STATISTICS

Metro, tram, bus  
Public transit options

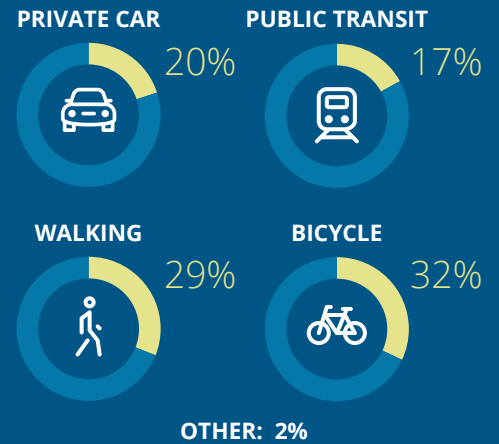
26.5 hours/year  
Time spent in congestion

\$107 Average public transit pass/month  
\$120.67 billion GDP (OECD report, 2013)

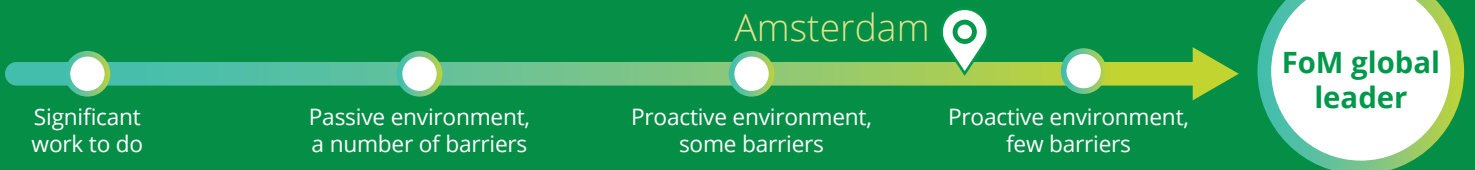
Major transit authority  
Gemeentelijk Vervoerbedrijf (GVB)

Note: All dollar amounts are in USD.

#### JOURNEY MODAL SPLIT



#### FUTURE OF MOBILITY ANALYSIS



##### STRENGTHS

- Award-winning open data program for transportation
- Large number of EV charging points, and initiatives to reduce vehicle emissions to zero and promote autonomous vehicles
- Many transportation options operating within a relatively small space promotes multiple transit options

##### CHALLENGES

- Rules around planning that guarantee access to all modes of transport that can lead to bottlenecks and inefficiencies
- Accessibility to major transport hubs often neglected and expensive
- Poor air quality despite highest modal share of active transportation

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



Address parking issues for private vehicles (cars and bicycles)



Conduct further provision of real-time data analytics to help speed up travel times



Focus on 'end-to-end travel' when designing mobility solutions

## MOBILITY ANALYSIS FURTHER DETAILS:



### Performance and resilience

A global leader, Amsterdam's effective and integrated transportation system demonstrates how urban mobility can thrive without heavy reliance on private cars.

- Unique modal split: A leader in cycling infrastructure, Amsterdam has the highest modal share for active transportation and a low modal share for car travel. Walking and cycling account for 61 percent of journeys.
- Low congestion levels: Despite being a major capital city with a sizeable population, there is limited use of private transportation and incentives to use alternatives.
- Excellent safety and reliability: Low traffic fatality rates can be attributed to the low modal share of cars. Amsterdam also has a punctual, reliable, and integrated public transportation network



### Vision and leadership

While many cities have goals of becoming a *smart city*, Amsterdam already has several projects and pilots underway.

- Amsterdam Smart City: A platform that enables collaboration between city government, the private sector, and residents to develop innovative solutions to city problems, e.g., Vehicle2Grid (car battery as energy storage), Toogether (smart carpooling), and Felyx (e-scooter sharing).
- Highest scores on sustainability: Its goal is to be the first emission-free city in Europe, mainly through adoption of electric vehicles. Progress includes having the highest density of charging stations in the world, a fully electric taxi fleet to serve the airport, and fully electric car share programs.
- Autonomous vehicles: The city plans to launch autonomous boats on its canals in 2019.



### Service and inclusion

Amsterdam's public transportation system is highly secure and accessible; however, travel by public transportation is relatively expensive.

- High safety standards: High provision of safety and security measures on public transportation include a large public transportation police force.
- Expensive public transportation: Affordability scores are high due to the prevalence of cycling and walking. For commuters relying primarily on public transportation, high fares pose a burden, particularly when ranked against cities with much higher average and minimum incomes.
- A wide-ranging and accessible transportation network: There are more than 500 km of bicycle lanes and 84 percent of people live within 1 km of a transit service area.

## SUMMARY

Amsterdam is a global leader. Its commitment to sustainability and citizen-focused modes of travel is well represented by its unique modal split of transportation, with more than 60 percent of journeys attributed to active mode of transport. Amsterdam is striding toward providing equitable opportunity to connect people across the city with its highly accessible and secure public transportation network.

Amsterdam seeks to become a *smart city* and has an ambition to become Europe's first emission-free city by 2025. This makes it a good testing ground for smart mobility infrastructure such as autonomous vehicles, electric vehicles and related infrastructure, and new modes of shared transport. This will turn it into a city that others can learn from, even if it enjoys significant starting advantages around geography and size.

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

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

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