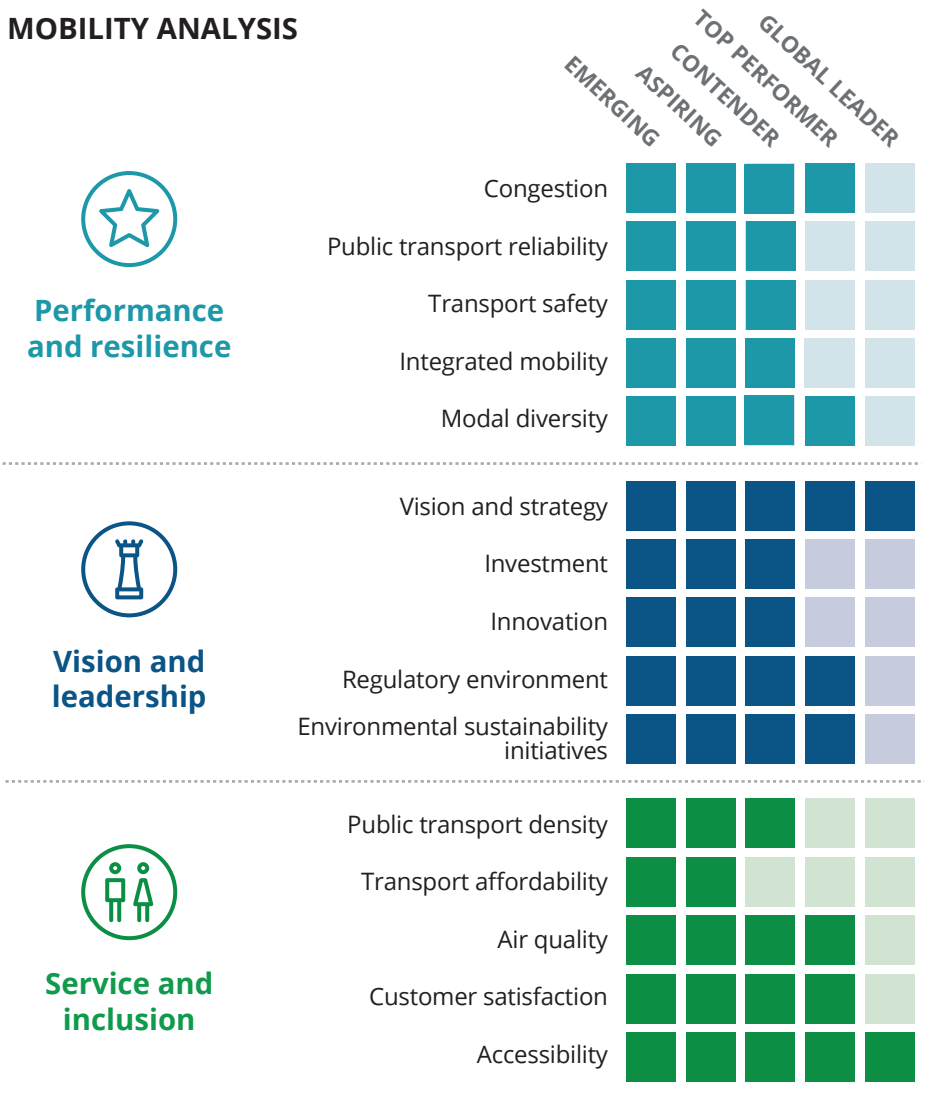


Analysis area: 636 km² | Population: 3,239,337 (2020) | Population density: 5,093/km²

Definition of analysis area: Barcelona Metropolitan Area (AMB)

MOBILITY ANALYSIS



KEY MOBILITY STATISTICS

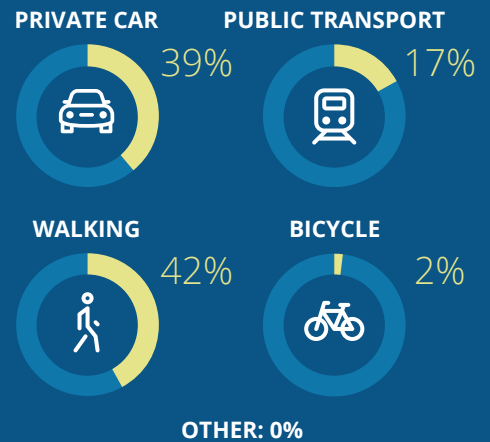
Public transport options*
 Bus, commuter rail, light rail including metro and tram, bike

Monthly public transport pass
 US\$56

GDP per capita
 US\$41,935 (€38,244) (2018)

Principal transport authorities
 Autoritat del Transport Metropolità (ATM),
 Government of Catalonia (Generalitat de Catalunya)

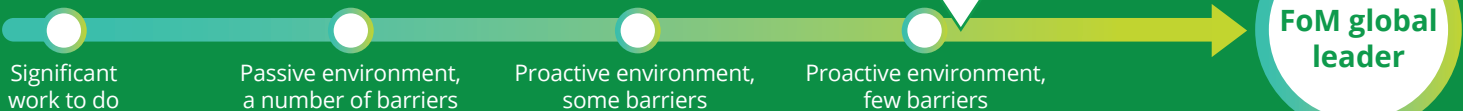
JOURNEY MODAL SPLIT



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

FUTURE OF MOBILITY CAPABILITY

Barcelona



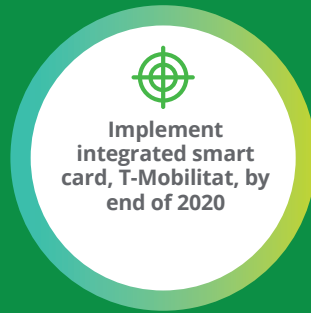
STRENGTHS

- Committed and creative approaches to reducing the number of cars on the road and CO2 emissions
- Expansion of the public transport over time means that 76 per cent of the population is within one kilometre of a transit stop
- City's forward-looking open data policies have made an increasing amount of real-time data publicly available

CHALLENGES

- Air pollution levels consistently exceed EU limits; city must take more aggressive measure to meet Paris Agreement targets
- Integrated smart card project has seen changes in the model, a project rethink and work stoppages, causing a delay of more than three years
- City transport networks are expanding but still under strain from large number of tourist visitors (over 30 million annually)

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



MOBILITY ANALYSIS FURTHER DETAILS:



Performance and resilience

Measures introduced to address congestion have not been as effective as planned, so the city is stepping up its efforts to reduce the number of private vehicles, move more people on to public transport and ensure that all vehicles are lowemission.

- The city introduced a 95 km² lowemission zone in January 2020 that should remove 50,000 vehicles – about 7 per cent of the total in circulation – from streets between 7.00 and 20.00 on weekdays.
- The T-Mobilitat integrated contactless smart card should roll out finally in late 2020. The card will create a unified distance-based pricing model, with integration across payment cards and transport modes, eventually covering all of Catalonia.
- In a continuing upgrade to the metro system the transport authorities will acquire 42 high-capacity trains. This will reduce wait times by a minute and increase the throughput of passengers.



Vision and leadership

Urban plans seek to improve air quality and reduce noise pollution through the provision of more cycle lanes, an expansion of public transport and the creation of more car-restricted zones in the city centre.

- The Urban Mobility Plan (PMU 2019-2024) aims to reduce modal share of private vehicles to 20 per cent, through an increase in public transport, improvements in network efficiency and tariff standardisation.
- The main operator TMB has been implementing a programme to replace older diesel buses with cleaner models. Between 2019 and 2021, the city will add 254 buses: 75 compressed natural gas, 116 electric and 63 hybrid.
- Stricter rules for ride-hailing were introduced in 2019, conforming more closely to those for taxis, such as a 15-minute waiting time and a prohibition on sharing real-time geolocation with users prior to booking.



Service and inclusion

The authorities have incentivised use of public transport modes by streamlining fares, increasing capacity and reorganising routes to improve coverage. The result has been an appreciable increase in passenger numbers.

- In January 2019, the ATM and AMB approved a single tariff for all areas, reducing ticket prices for the 18 outer municipalities by 49 per cent. The aim is to boost the use of public transport by a further 10 per cent.
- Accessibility across all modes of transport is high: 91 per cent of railway stations and 100 per cent of buses are adapted for people with reduced mobility. The city is running pilots to improve access further, such as for those using mobility scooters.
- The success of the 6 Superblocks has led to plans to introduce 12 more by 2023. The cleaner air, reduced noise levels, and increased space for walking, cycling or play has been popular with residents.

SUMMARY

Barcelona's extensive public transport network reflects a conscious policy choice to reduce private car use, increase green spaces, expand active modes of transport and improve air quality. Recent investments to modernise the public transport fleet have led to noticeable improvements in coverage, accessibility and quality. 2020 has seen the introduction of a low-emission zone that should cut the number of cars on the streets; and vehicles in circulation will increasingly be electric, hybrid or newer compressed natural gas models. Although plagued by delays, the implementation of T-Mobilitat is expected to give a boost to the use of real-time transport data, and improve the understanding of passenger use patterns and planning across the various transport modes.

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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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