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Insights

Deloitte City Mobility Index 2020

Tokyo

Analysis area: 2,194 km² | **Population:** 13,982,622 (2020) | **Population density:** 6,373/km²

Definition of analysis area: Tokyo Metropolis comprising metropolitan prefecture and administrative entities of special wards and municipalities

MOBILITY ANALYSIS

EMERGING | ASPIRING | CONTENDER | TOP PERFORMER | GLOBAL LEADER

Performance and resilience

- Congestion
- Public transport reliability
- Transport safety
- Integrated mobility
- Modal diversity

Vision and leadership

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

Service and inclusion

- Public transport density
- Transport affordability
- Air quality
- Customer satisfaction
- Accessibility

KEY MOBILITY STATISTICS

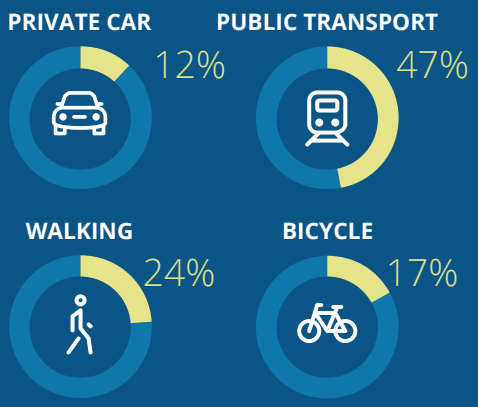
Public transport options*
Commuter rail, light rail including metro and tram, bus

Monthly public transport pass
US$93

GDP per capita
US$70,758 (¥7,597,874) (2017)

Principal transport authorities
Tokyo Metropolitan Bureau of Transportation; Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

JOURNEY MODAL SPLIT



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

FUTURE OF MOBILITY CAPABILITY

Tokyo

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

STRENGTHS

- Extensive and consistently reliable rail network comprising more than 100 rail lines
- Consistently high levels of investment in transport, resulting in a modern and expanding transport network
- One of the most advanced payment environments globally, with a range of card and contactless options available and widely used

CHALLENGES

- The public transport network is extremely crowded, with peak-hour congestion exceeding 180 per cent on some lines
- Environmental benefits from adoption of zero-emission vehicles are offset by increased use of coal-powered electricity
- Innovative mobility providers face difficulties in penetrating the Tokyo market, due to restrictive regulations and the presence of large incumbents

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

- Continue dynamic pricing of expressway tolls after Olympics to reduce congestion
- Increase train frequency during peak periods to ease overcrowding
- Improve bicycle infrastructure to promote usage and last-mile connectivity

MOBILITY ANALYSIS FURTHER DETAILS:

Performance and resilience

Tokyo has expanded its road network and built transport hubs that enable seamless transit between rail, water, road and active modes.

- Tokyo has the busiest rail network in the world, with more than 30 million people commuting daily into the city. Overcrowding problems could be eased by increasing the frequency of trains, currently one every 120 seconds at best, to levels seen in London and Moscow (every 100 seconds and 92 seconds respectively).
- Construction of three intermodal hubs, at Yaesu (next to Tokyo station), Toranomon and Hamamatsucho, began in 2018. These will consolidate several smaller terminals and improve multi-modal connectivity and efficiency.
- The city's first Bus Rapid Transit route will be launched in 2020, connecting the Rinkai waterfront areas, site of many of the Olympic venues, with a mainline transport hub in Toranomon. The route will be expanded in three phases through 2022.

Vision and leadership

Tokyo's transport network has been getting a makeover in preparation for its hosting of the Olympic games, with increasing investment in new modes, new hubs and better pedestrian-friendly infrastructure.

- The city is upgrading three expressways – the Metropolitan Inter-City Expressway, the Outer Ring Road and the Central Circular Route – to overcome persistent congestion and cut travel times into and around the metropolis.
- Adoption of alternative-fuelled vehicles (AFVs) has slowed since 2018, owing to high vehicle taxes and insufficient public charging infrastructure. The current market share, around 1.13 per cent in 2018, is lower than in France, China and the US.
- The government has plans to create 264 km of bike lanes on roads, expanding routes in seven districts, including areas around Olympic game sites, and to integrate regional bike-sharing systems between cities.

Service and inclusion

The Tokyo metropolis has extensive public transport coverage. To reduce its carbon footprint, in April 2019 the government announced more stringent fuel economy requirements for car manufacturers.

- For the first time since 2014, some train fares were raised (by about 2 per cent) following the consumption tax increase in October 2019. Those using IC cards saw the largest rise, although the price is still below the cost of tickets bought at machines.
- As part of the infrastructure upgrades for the Olympic games, the city authorities are making train and bus stations more accessible, with better signage, improved access for disabled passengers and more real-time information at stations and on apps.
- Tokyo has reduced its GHG emissions in the transport sector by 36 per cent in recent years, due to the overall decrease in road transport, the shift to rail and the adoption of eco-driving initiatives.

SUMMARY

Tokyo views the Olympics and Paralympics Games as an opportunity to showcase fuel cell, automated driving and connected mobility technologies. Tokyo's public transport system, the busiest in the world with 3.5 billion passenger journeys annually, is reliable albeit overburdened. Improving infrastructure for bicycle users, creating innovative solutions to tackle peak-hour congestion, and introducing new micro-mobility alternatives can help ease the problem. Despite having two of the leading manufacturers, uptake of EVs has declined due to the high cost of owning a car in the city and the limited provision of public charging infrastructure – a must in a city where 60 per cent of residents live in multi-occupancy buildings.

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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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