Deloitte City Mobility Index

Seoul

Analysis area: 11,704 km² | Population: 25,600,000 (2016) | Population density: 2,187/km²
Definition of analysis area: Seoul Metropolitan Area (including Seoul, Incheon, and Kyunggi-province)

MOBILITY ANALYSIS

Performance and resilience
- Congestion
- Public transport reliability
- Transport safety
- Integrated and shared mobility
- Air quality

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

Service and inclusion
- Public transit supply
- Transport affordability
- Versatility
- Customer satisfaction
- Accessibility

JOURNEY MODAL SPLIT

PRIVATE CAR: 29% | PUBLIC TRANSIT: 29%
WALKING: 35% | BICYCLE: 1% | OTHER: 6%

KEY MOBILITY STATISTICS

Public transport options*
Metro, bus, light rail, BRT (bus rapid transit), commuter train, taxi, bikesharing

Monthly public transport pass
US$64

GDP
US$779.3 billion (2015)

Principal transport authorities
Seoul Metropolitan Government; Incheon Metropolitan Government; and Ministry of Land, Infrastructure, and Transport

FUTURE OF MOBILITY CAPABILITY

STRENGTHS
- Has supportive business environment with global technology leaders to oversee self-driving vehicle testing
- Uses data-centric platforms effectively to manage traffic congestion and provide real-time information
- Offers integrated smart card ticketing for daily commuters across transportation modes

CHALLENGES
- Reducing initial skepticism and lack of awareness of new ridesharing models
- Increasing bicycle infrastructure in the Seoul metropolitan region, starting with the Seoul Central Business District (CBD)
- Shifting the preference for using private cars as the main mode of transportation between the satellite cities and Seoul

*Regulated, licensed, subsidized, and monitored by principal transport authorities.
Seoul makes use of data analytics to keep a check on road congestion. It also has an advanced integrated payment system.

- Seoul has battled traffic congestion for some time, and has used traffic forecasting based on big data analytics. The integrated system collects data from more than 300 toll gates and 5,760 cameras that record the type of car and time of passage through each gate.
- The region has an integrated ticket system, which not only works on all public transportation modes, but also is valid in other cities such as Incheon, Busan, and Gwangju. The geographical integration of the card is a unique feature.
- While bikesharing and carsharing have grown, ridesharing has not; this is due to public transportation options, established on-demand taxi services, and regulatory concerns.

Seoul is pursuing its long-term strategy toward electric vehicle (EV) adoption and self-driving cars by building new infrastructure for both. The city is also looking to increase walking and cycling trips.

- The national government is investing KRW 37 billion in the Smart Highway Network 2020, designed with driverless and electric cars in mind. The project is a public-private partnership, and is expected to attract an additional KRW 35 billion through private sector investment. A new KRW 11 million site, “K-City,” has been built in the region for testing self-driving technology.
- Seoul has introduced unique initiatives, such as transforming old flyovers into elevated gardens and pathways for walking and cycling. The elevated park Seullo 7017, for example, opened in 2017.

SUMMARY

Seoul has always experimented with unique ideas to solve its transportation problems. Well-known for its extensive use of big data, Seoul is now building new infrastructure such as smart highways and test cities to become ready for a future of EVs and self-driving vehicles. It is also developing distinctive solutions, such as making use of obsolete infrastructure to develop green spaces for walking and cycling. Some immediate challenges include low accessibility for disabled passengers in the bus network and long intercity commutes. With forward thinking and clear mobility plans, Seoul can explore issues such as monetization of roads based on use.

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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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