**Deloitte City Mobility Index**

**Shanghai**

**Analysis area:** 6,341 km²  |  **Population:** 24,100,000 (2017)  |  **Population density:** 3,814/km²

**Definition of analysis area:** Shanghai municipality, consisting of all 16 districts

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**MOBILITY ANALYSIS**

**Performance and resilience**

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<th><strong>TOP PERFORMER</strong></th>
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**Vision and leadership**

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<td>Vision and strategy</td>
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<td>Investment</td>
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**Service and inclusion**

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**KEY MOBILITY STATISTICS**

**Public transport options**
Metro, bus, commuter train, Maglev, ferry, tram, taxi

**Monthly public transport pass**
US$33

**GDP**
US$463 billion (2017)

**Principal transport authority**
Shanghai Municipal Transportation Commission

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

**STRENGTHS**

- Advanced communications systems in place to ensure fast resolution of transportation breakdowns
- Transport infrastructure expansion plans include integrating the metro with other regions such as Kunshan and Suzhou
- Developed an underground pedestrian network in the central business district to take pedestrians off the busy roads and improve safety

**CHALLENGES**

- Lacks real-time traffic information and data-sharing among various transport modes
- Needs more long-term financing channels, such as public-private partnerships, for the construction and operation of the metro system
- Illegal bikesharing schemes and blockage of walkways due to bicycles reduce usability for pedestrians

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**JOURNEY MODAL SPLIT**

- **PRIVATE CAR** 19%
- **PUBLIC TRANSIT** 32%
- **WALKING** 25%
- **BICYCLE** 16%
- **OTHER:** 8%

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**FUTURE OF MOBILITY CAPABILITY**

**Shanghai**

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

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**FoM global leader**
Key focus areas to improve city mobility and realize the Future of Mobility:

**Continue to expand the metro network to cover suburbs and adjacent cities**

**Roll out new technologies in the metro to avoid long security queues**

**Promote the use of electric vehicles (EVs) more widely**

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**MOBILITY ANALYSIS FURTHER DETAILS:**

### Performance and resilience

Shanghai has an efficient and reliable transportation network that caters to the different travel needs of commuters. However, air quality and congestion remain matters of serious concern.

- The city scores high on “Integration and shared mobility” because it has started to bring shared mobility services into the public transport system to fulfill personalized and point-to-point travel requirements.
- The government has imposed strict security controls at passenger checkpoints with 5,000 security staff and 30,000 CCTV cameras, reflected in the high transportation safety score. It is also harnessing big data and AI solutions to improve traffic law enforcement.
- To reduce traffic pollution and improve air quality, Shanghai is currently upgrading the electric bus fleet using super capacitor technologies that can charge a bus in 10 seconds for a 5-km distance.

### Vision and leadership

The city has a clear long-term vision, backed by investment plans with greater emphasis on the adoption of new technologies.

- Shanghai has increased its modal shares for public transport by placing restrictions on car license auctions and removing more than 160,000 cars that do not meet emission standards.
- The city plans to extend its existing subway network to 800 km by 2020. The goal is to build a one-hour commuting circle, which would cover Zhejiang and Jiangsu provinces.
- The city authority has also provided licenses and issued regulations to conduct road tests of self-driving cars in designated areas.

### Service and inclusion

Shanghai’s transportation system scores highly in terms of versatility, yet customer satisfaction and affordability remain key areas to improve.

- The city has an extensive range of transportation options, including buses, metro, commuter rail, Maglev, trams, and a large bikesharing network, making it one of the most versatile transport systems.
- While affordability is an area of concern for private car owners, overcrowding of the public transportation system has made it difficult for these individuals to shift their transportation modes. Further, overall customer satisfaction levels are low.
- Almost all the metro stations have installed wheelchair ramps, sidewalks for the blind, barrier-free elevators, barrier-free toilets, broad passageways, signboards, and logos. However, only 10 percent of buses are completely accessible, decreasing the overall accessibility scores.

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**SUMMARY**

Shanghai is recognized across the globe for its metro system, the longest, busiest, safest, and one of the most punctual on the planet. The city also has massive expansion plans for its transportation infrastructure, and has seen huge investments in infrastructure projects over the last five years. It is visible in the expansion of the Shanghai metro, where each kilometer of metro line costs between RMB 500 million (USD 78 million) and RMB 1.3 billion (USD 204 million). In addition, the city has developed a strong pedigree of sustainable transport with a robust underground pedestrian network in the central business district. However, as with other Chinese cities, congestion levels are high and air quality has been low, despite government efforts, and this may require further stringent measures to bolster the already restrictive license plate system.

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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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