

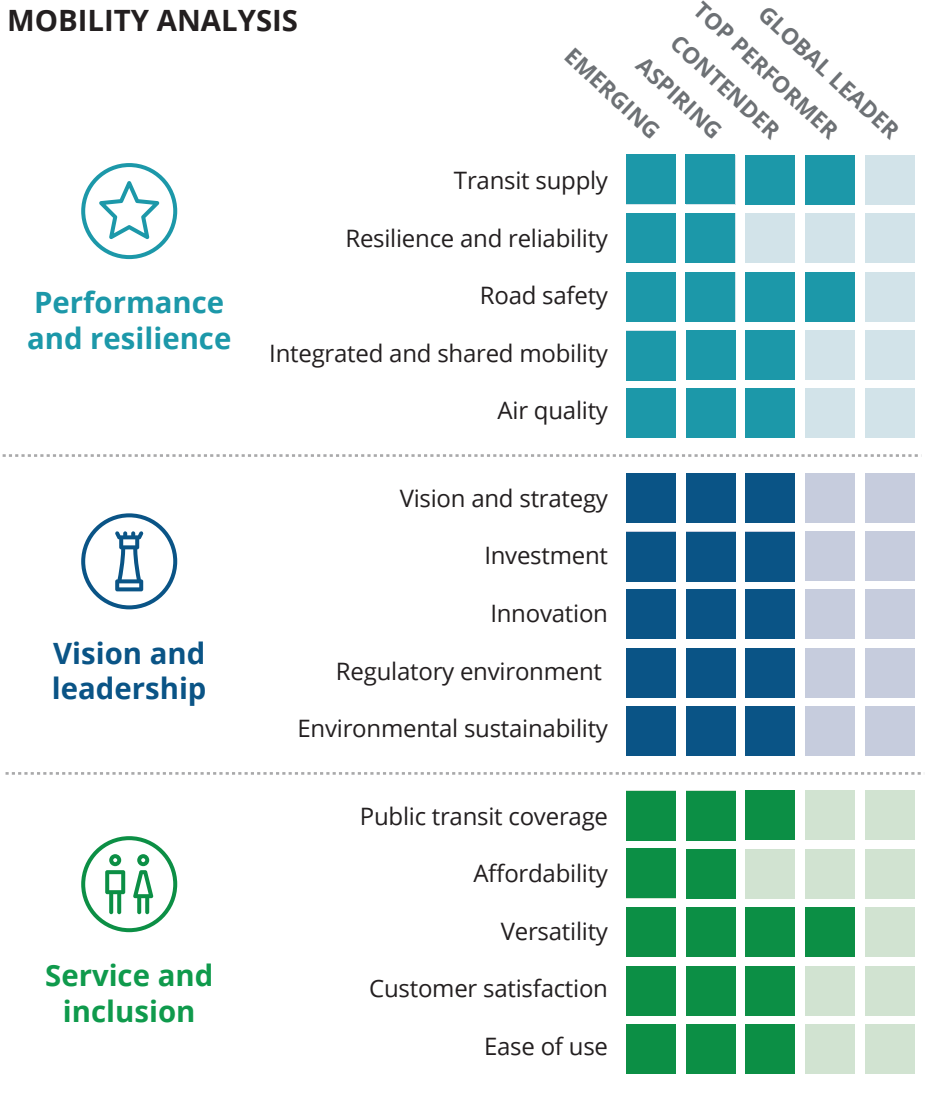


Analysis area

Analysis area: 8,935 km<sup>2</sup> | Population: 18,954,000 (2016) | Population density: 2,121/km<sup>2</sup>

Definition of analysis area: New York (NY-NJ-CT) urbanized area as designated by US Office of Management and Budget (includes city area and surrounding suburban regions)

### MOBILITY ANALYSIS



### KEY MOBILITY STATISTICS

Rapid transit, commuter rail, bus  
Public transit options

89 hours/year

Time spent in congestion

\$211 Average public transit pass/month

\$1,222 billion GDP  
(OECD report, 2013)

Major transit authority

Metropolitan Transportation Authority (MTA)

(includes all service providers and subsidiaries)

(Other transit agencies: NJ Transit, PATH agencies, and CT Transit. The region may also have small county-level service providers and private service providers.)

Note: All dollar amounts are in USD.

### JOURNEY MODAL SPLIT

PRIVATE CAR



55%

PUBLIC TRANSIT



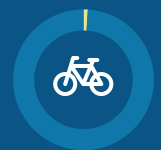
33%

WALKING



6%

BICYCLE



1%

OTHER: 5%

### FUTURE OF MOBILITY ANALYSIS



#### STRENGTHS

- Strong adoption of new mobility models such as ridesharing
- One of the largest public transport networks in the world, with various transit options across the region
- Ambitious, wide-ranging, forward-looking vision and strategies for public transport and other mobility solutions, such as promoting active transportation modes
- Optimistic outlook on creating infrastructure for electric vehicles

#### CHALLENGES

- Low reliability and overcrowding encourage commuters to avoid public transit and use private cars and taxis
- Need to improve coordination between service providers across the ever-growing urbanized region
- Transit authorities' financial instability
- Decrease in public transit passengers and rising operational costs, with relatively low customer satisfaction

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



Invest in capacity planning, digital railway sensors, and analytics solutions to predict performance



Introduce real-time location API for buses and metro to increase reliability



Support autonomous vehicles by adopting less restrictive regulations, incentivizing testers, and partnering with private players

## MOBILITY ANALYSIS FURTHER DETAILS:



### Performance and resilience

Even with a diversity of transit options, New York's transport system is struggling to deal with the existing demand, which is predicted to grow further in the future.

- One of the largest and oldest subway networks: New York City (NYC) has the highest number of metro stations in the world, offering 24-hour service every day of the year. However, the system requires constant repairs and upgrades.
- NYC has the second-highest ranking for congestion, after Los Angeles. Private cars account for 55 percent of modal trips.
- Subway delays: The subway system faces reliability and safety issues. Reduced reliability, combined with reduced spending on maintenance and use of old equipment, has led to a decrease in passengers in 2016, which was not seen since 2009. In addition, overcrowding on platforms and increasing loading time have also led to substantial delays.



### Vision and leadership

The region has actionable plans, and is on track to meet the 80x50 sustainability target (80 percent greenhouse gas reduction by 2050).

- Recent changes to state laws have allowed testing of driverless cars on public highways in 2017, though the regulations are still quite restrictive in and around the city region and will require strong public-private partnership.
- Starting in 2018, as a part of the city administration's target for 20 percent of the motor vehicle registrations in NYC to be electric by 2025, the city will invest \$10 million to develop fast-charging hubs with up to 20 chargers per site.
- Launched in 2017, the Fourth Regional Plan for NY-NJ-CT area includes 61 recommendations for upgrading the bus and subway network. It also advocates for the implementation of congestion charges and tolls to manage traffic.



### Service and inclusion

The region's public transit system offers versatile options with different transport modes that caters to a large population of Manhattan region.

- Highly accessible system: Residents have wide access to different modes of public transport across a large network.
- Distinct socioeconomic cleavages across different modes of travel: Prices are high; bus riders tend to have a lower income than subway passengers.
- Strong focus on security: Security has improved markedly, thanks to an emphasis on passenger whistleblowing and the deployment of smart monitoring systems.

## SUMMARY

With one of the oldest public transit networks in the world, NYC and has seen constant changes to its transit system. To modernize and integrate the transit network across the metropolitan region, this needs to continue. The region also needs increased participation of local county representatives to ensure that vision and strategies are not limited to just NYC's five boroughs.

In addition, the region's transit authorities—the MTA, PATH, and NJ Transit—need to come together to address their financial woes by creating a joint financial management plan. With a focus on innovation, the city can do more to utilize digital and analytics solutions to improve the existing subway system. Overall, the region shows great promise in realizing the future of mobility, and can prove to be one of the success stories in coming years.

## CONTACTS

### Simon Dixon

Global Transportation leader  
Partner  
Deloitte MCS Limited  
Tel: +44 (0) 207 303 8707  
Email: [sidixon@deloitte.co.uk](mailto:sidixon@deloitte.co.uk)

### Haris Irshad

Strategy & Operations  
Senior manager  
Deloitte MCS Limited  
Tel: +44 7879 487623  
Email: [hirshad@deloitte.co.uk](mailto:hirshad@deloitte.co.uk)

### Mark Price

US Public Sector leader  
Vice chairman  
Deloitte Consulting LLP  
Tel: +1 617 585 5984  
Email: [maprice@deloitte.com](mailto:maprice@deloitte.com)

### 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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