

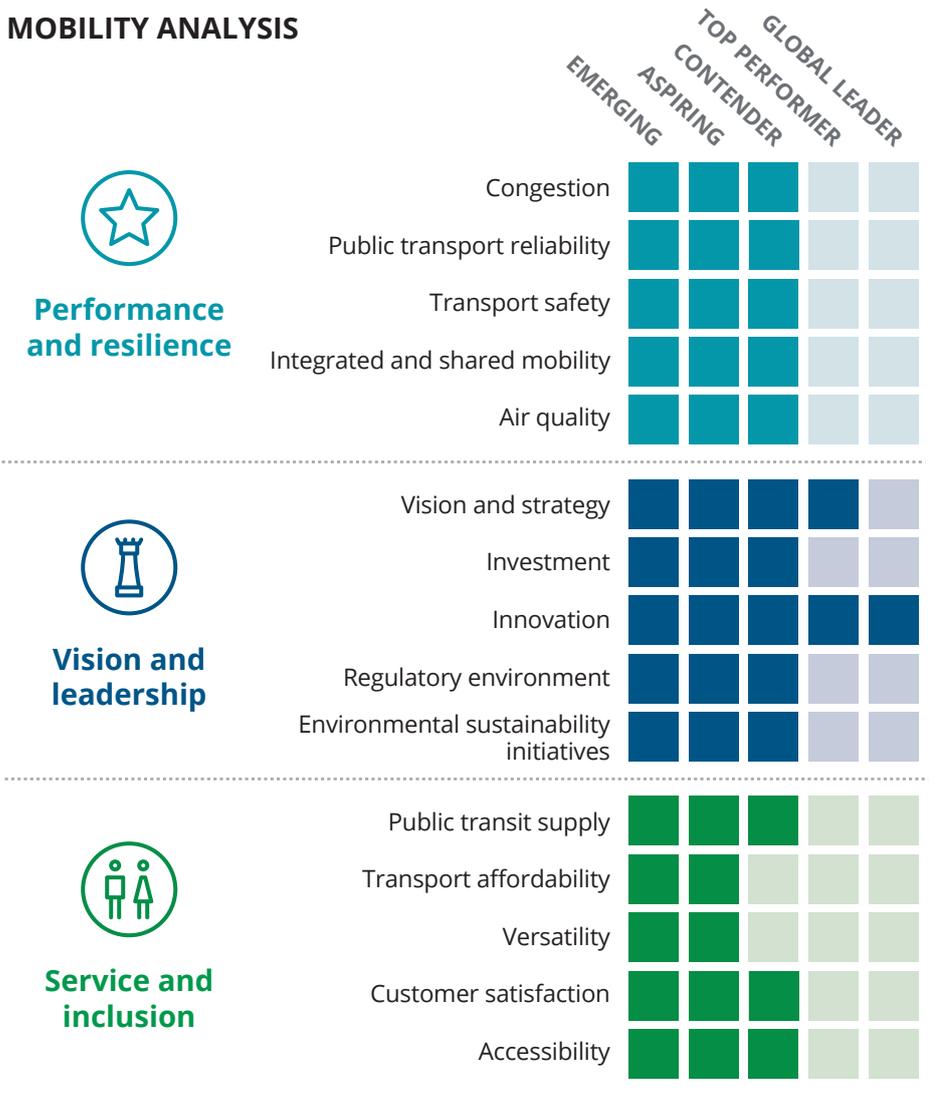
Analysis area

### 📍 Detroit | Ann Arbor | Windsor

Analysis area: 4,896 km<sup>2</sup> | Population: 4,393,090 (2016) | Population density: 897/km<sup>2</sup>

Definition of analysis area: Detroit, MI urbanized area; Ann Arbor, MI urbanized area; Windsor CMA area

#### MOBILITY ANALYSIS



#### KEY MOBILITY STATISTICS

**Public transport options\***  
Bus, light rail, commuter train, trams (streetcar)

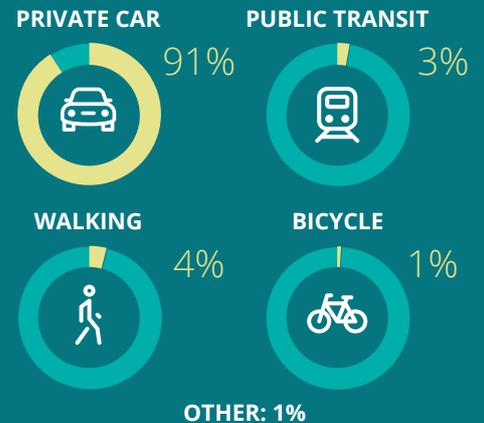
**Monthly average public transport pass\*\***  
US\$50

**GDP**  
US\$294 billion (2016, total)

**Principal transport authorities**  
Detroit Department of Transportation, Detroit Transportation Corporation, Suburban Mobility Authority for Regional Transportation (SMART), Ann Arbor Area Transportation Authority (TheRide), Transit Windsor

\*Regulated, licensed, and monitored by principal transport authorities.  
\*\*Average of monthly transport options in Detroit, Ann Arbor, and Windsor.

#### JOURNEY MODAL SPLIT



#### FUTURE OF MOBILITY CAPABILITY

Detroit | Ann Arbor | Windsor



##### STRENGTHS

- Home to some of the largest smart corridor roadways, and all major mobility players have established technology facilities
- Michigan and Ontario have a number of collaborative cross-border initiatives, such as automated vehicle testing
- Strong open data program to support data-based transportation policies and private sector innovation across the three cities

##### CHALLENGES

- Uneven participation by suburban municipal and town authorities in building consensus for regional transport plans
- Data management, sharing, reporting, and privacy standards across the border could be improved
- Building and scaling sustainability initiatives across the region, such as cycling lanes and electric vehicle (EV) infrastructure

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



**Seek innovative revenue sources to expand affordable transport in low-income areas**



**Develop integrated payment methods across modes and cities**



**Increase regional connectivity through projects such as light rail**

**MOBILITY ANALYSIS FURTHER DETAILS:**

 **Performance and resilience**

Improvements in regional integrated transport payments, congestion, and air quality need to go further.

- The high use of private cars (91 percent), dispersed job opportunities across the region, and frequent road repairs and closures still cause congestion on major arterial roads.
- In 2017, the Detroit-Ann Arbor area ranked 14th highest out of 187 US regions for annual particulate pollution. Windsor, on the other hand, has improved its air quality parameters in the last two years, lifting the overall scores of the region.
- The regional authorities (DDOT, SMART) have taken steps to simplify travel by eliminating transfer fares, streamlining transport passes from 25 to six, and introducing a new mobile payment app. Yet the larger integration with all transport modes and with Transit Windsor remains in the planning stage.

 **Vision and leadership**

A large stakeholder ecosystem enables the region to adopt new mobility solutions and develop a more sustainable transport network.

- Ann Arbor and Detroit lead Michigan's connected and autonomous vehicle (AV) ridesharing and smart transport projects. Windsor has been selected by the Canadian Urban Transit Research & Innovation Consortium to launch low-speed, electrified AV shuttles for public use by 2020.
- Bicycles are not popular among citizens, occupying only 1 percent of trips in the region—despite over 356 km of paths.
- As befits the home of the US automotive industry, the business community and others have created centers for next-generation developments: Detroit has the Techstars Mobility hub and Detroit Mobility Lab. The University of Michigan at Ann Arbor's "mCity" is a center of AV research. It is also home to the American Center for Mobility (ACM), a nonprofit testing and product development facility.

 **Service and inclusion**

The region's public transportation system is accessible, but is relatively expensive and needs to expand to suburban regions.

- With nearly three-quarters of workers living in suburban areas, public transport options need to increase. This can be addressed through an expansion of streetcars, new bus routes, and regional rail networks.
- The costs of fuel and parking are low in the region, yet the high cost of insurance makes private mobility relatively expensive. The Detroit urban area has one of the highest poverty rates among midsize cities, meaning transport affordability is an issue.
- Overall accessibility for disabled people is adequate, with all major bus operators having 100 percent disabled-friendly buses. And all three cities run programs to support door-to-door transport.

**SUMMARY**

The Detroit-Ann Arbor-Windsor region is a leader in automotive innovation, providing new mobility solutions and championing cross-border projects such as AV testing and the world's longest smart corridor. Pilot efforts are testing both new forms of transit and novel partnerships with employers. The region needs to address issues such as high private vehicle use and would benefit from increased collaboration between suburban and city authorities. The Detroit-Windsor corridor is an important economic engine for both countries. With US\$1 million in trade happening every minute, the corridor represents about 25 percent of US-Canada bilateral trade.

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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.

This integrated region analysis applies a similar methodology as that used in the Deloitte City Mobility Index to an international region; however, there are important differences between assessing a single city and an international region, and the results of an integrated analysis should not be compared with other Deloitte City Mobility Index findings.

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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