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Regulating Automation for Vehicles& Mobility Services

The Case for Data-led Approaches

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OECD

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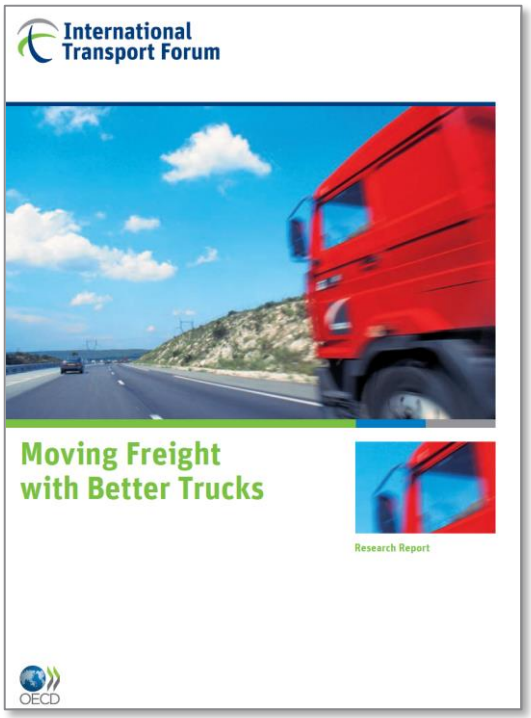
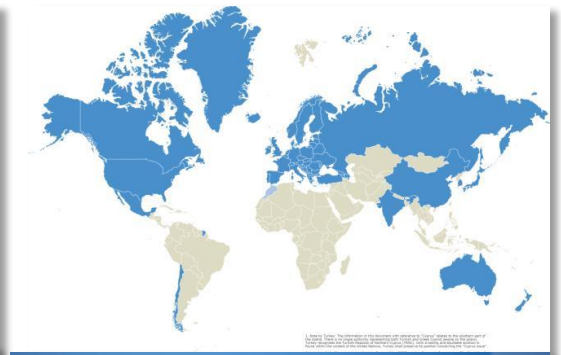
The International Transport Forum at the OECD

Think Tank	Annual **Summit**	Intergovernmental **Organisation**





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Background

- Vehicle automation a clear trend
- But varying experts opinions on:
  - Projected time scales
  - Technology options
  - Use cases/ services
- Necessary for policy makers to prepare their responses to this development

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Positive View

- Many potential benefits of vehicle automation are being quoted:
  - Improved road safety levels
  - Decreased emissions
  - Increased network capacity
- Emergence of related mobility services also holds the promise for even larger benefits:
  - For society as a whole
  - On the city level

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Negative View

- But at the same time some negative effects could also be envisaged:
  - Network capacity gains leading to induced traffic,
  - Ability of using travel time more productively leading to longer trips as people move further away from centres
  - Potentially huge fleets of empty vehicles running errands and generating much larger congestion levels

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Government and Industry Context

- Governments investing in R&D & demonstration of near market-ready systems, showcasing their ambitions for leadership in this space
- Emerging companies with much stronger IT focus in technical background and leadership mentality aggressively pushing into the market
- Vehicle automation thus part of the concepts of:
  - Sharing economy
  - Disrupting technologies

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Views on Regulation

- Policy makers to manage the transition period
- Key tools are legal and regulatory frameworks
- Often seen as a barrier to wider implementation
- Technology-led discussion overly optimistic
- Technology mature for many types of use cases
- Leadership from policy makers is essential

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Regulating Vehicles

- Discussion about regulation in the context of AV typically centres on the vehicles
- Work is on-going on many levels here nationally and internationally:
  - Updates to the texts of the agreements under WP.29
  - Concepts of "driving tests" for automated vehicles
  - Test tracks simulating various real-life scenarios
  - Governments amending their legal frameworks in order to allow testing on public roads

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Regulating Services

- Regulating the automotive aspect of automated vehicles of course is key
- But likely implementation of this technology as enabler for shared mobility concepts
- Therefore regulation of mobility services needs to be considered in parallel
- Direct competition with legacy transport services, which are often heavily regulated and protected

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Current Issues

- Disrupting effects of technologies and services are already very visible
  - In the case of Transportation Network Companies such as Uber, Lyft, Didi, BlaBlaCar, etc.
  - But also with functionalities of automated vehicles on public roads, e.g. the Tesla Autopilot
- This is because of increasing time gap between innovation and the related regulatory responses

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A Way Forward

- Policy makers under increasing pressure to strike a balance between administrative oversights and enabling innovation
- The advent of big data and its application to the transport sector can solve this dilemma through flexible data-led regulatory approaches
- Key policy objectives to cover here include:
  - Vehicle/ traffic safety
  - Personal security (driver)
  - Minimum mobility levels

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Related ITF Work

- The ITF has carried out and is continuing to a large body of work in these areas through its Corporate Partnership Board, including
  - Scoping study on "Automated and Autonomous Driving - Regulation under uncertainty" in 2015,
  - On-going work stream on modelling the impacts of shared mobility concepts in urban areas,
  - Recent publications on "Data-Driven Transport Policy" and "App-Based Ride and Taxi Services: Principles for Regulation"
- Also a new JTRC Working Group on Big Data and Open Data in Transport

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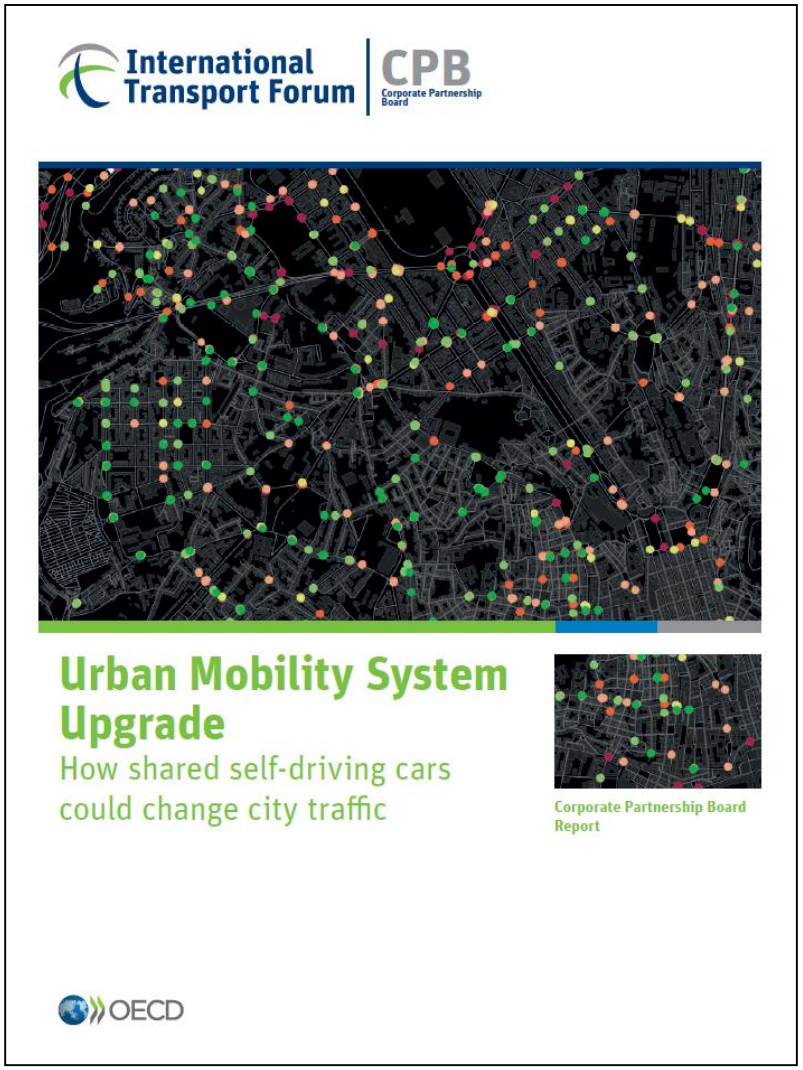
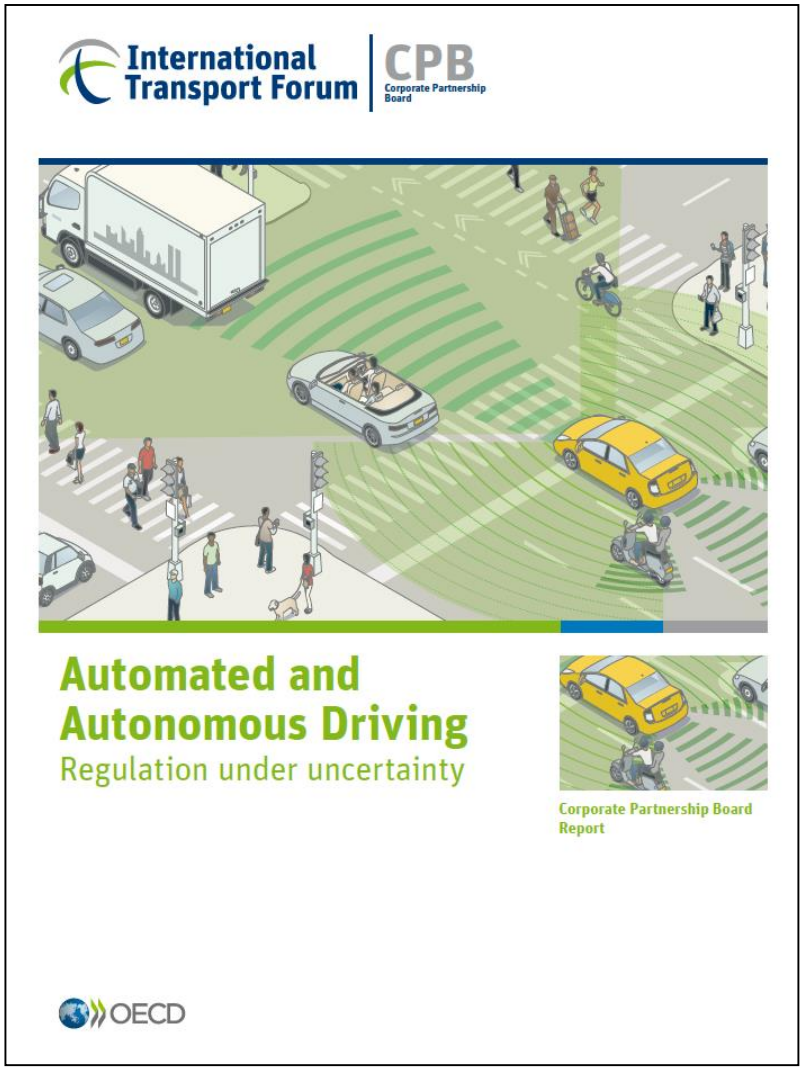
ITF Reports on Vehicle Automation





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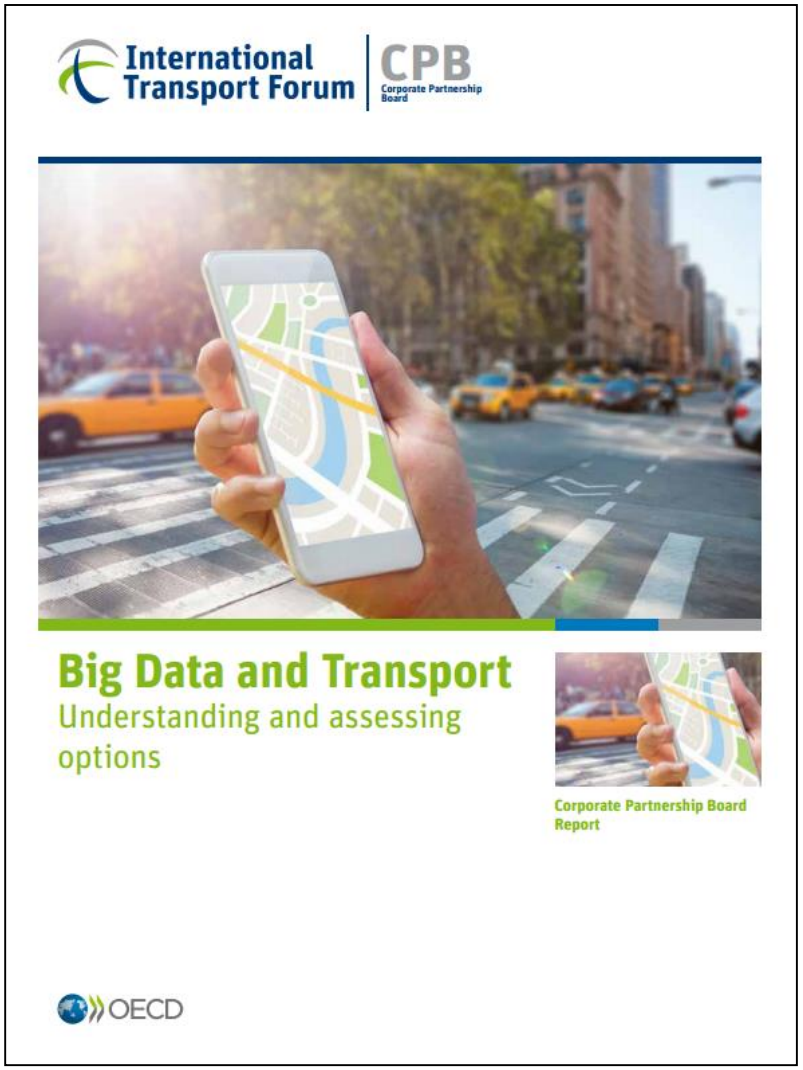
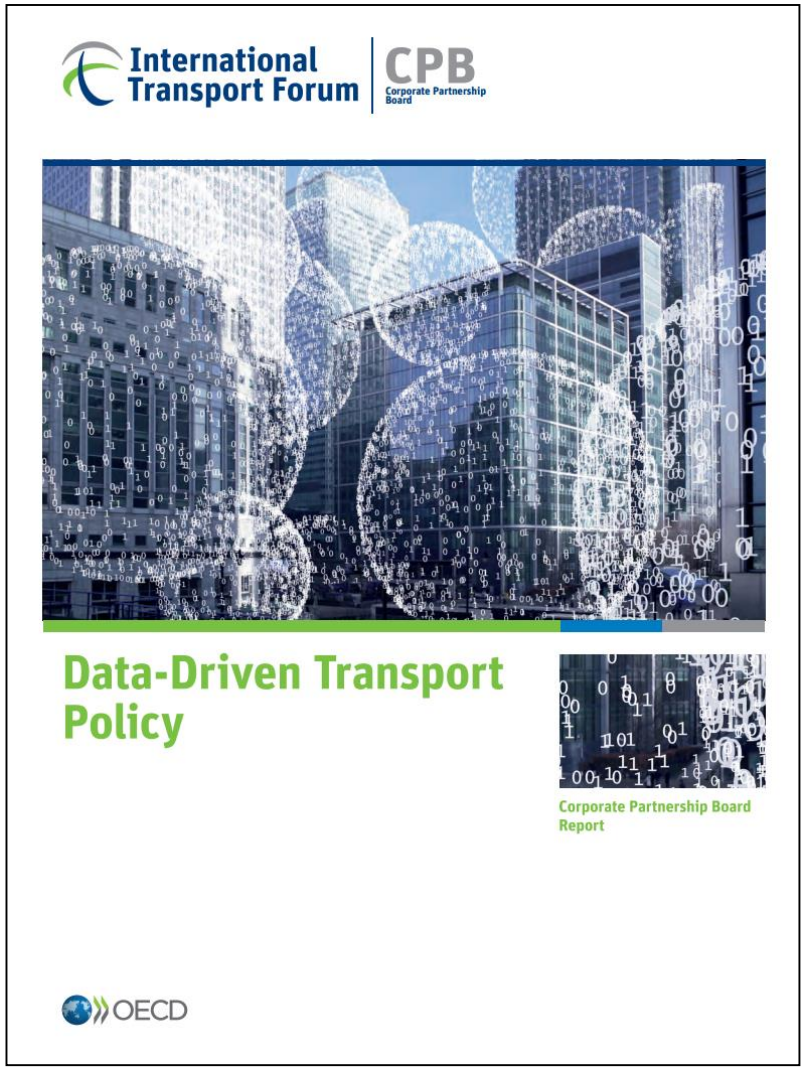
ITF Reports on Big Data for Transport





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Thank you for your attention!

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