

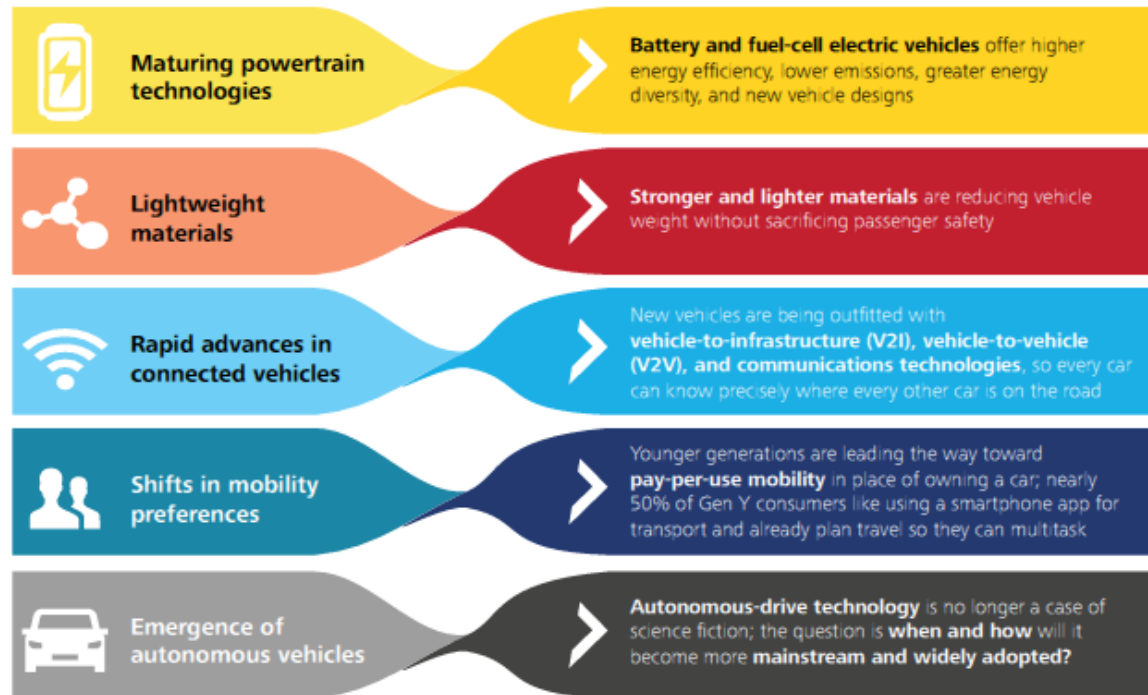


The future of mobility: transportation technology and social trends - and questions to solve for pro-active authorities

Stockholm, September 16th

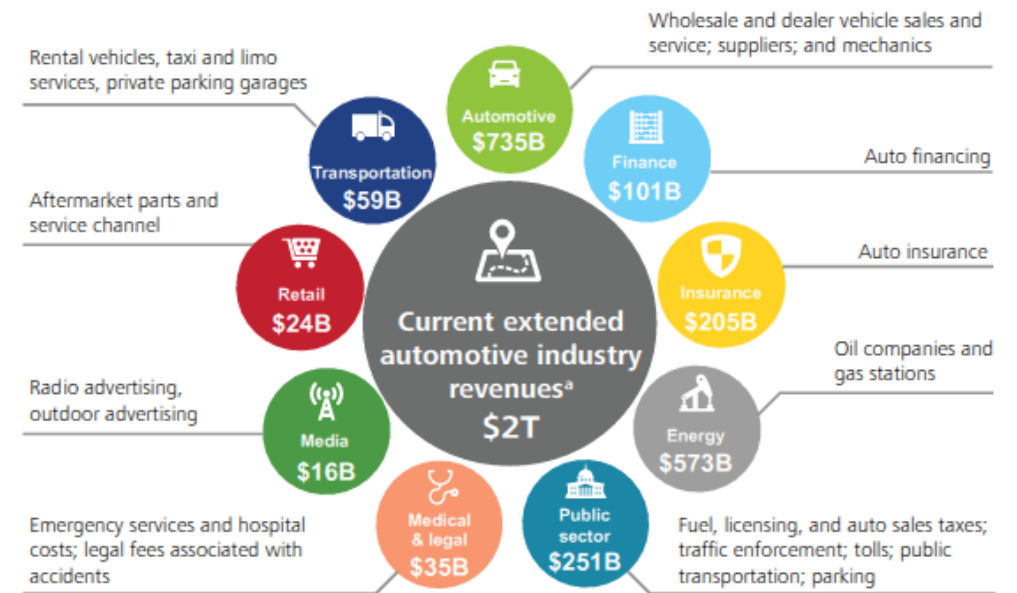
Big business and technology disruption at the same time

Figure 1. Converging forces transforming the future evolution of automotive transportation and mobility



Graphic: Deloitte University Press | DUPress.com

Figure 2. 2014 extended automotive industry revenue



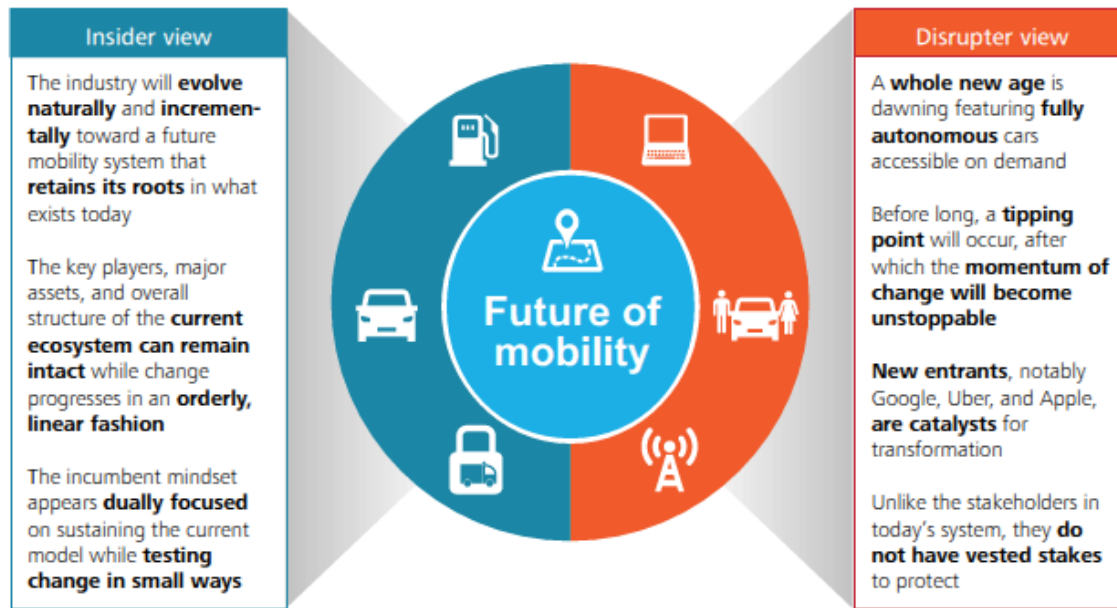
Source: Deloitte analysis based on IBISWorld Industry Reports, IHS, DOT, US Census, EIA, Auto News, TechCrunch. Current revenue represents 2014 figures (or earlier if 2014 data not available) in the United States.

^aTotal revenue is \$1.99T.

Graphic: Deloitte University Press | DUPress.com

How dramatically will things change?

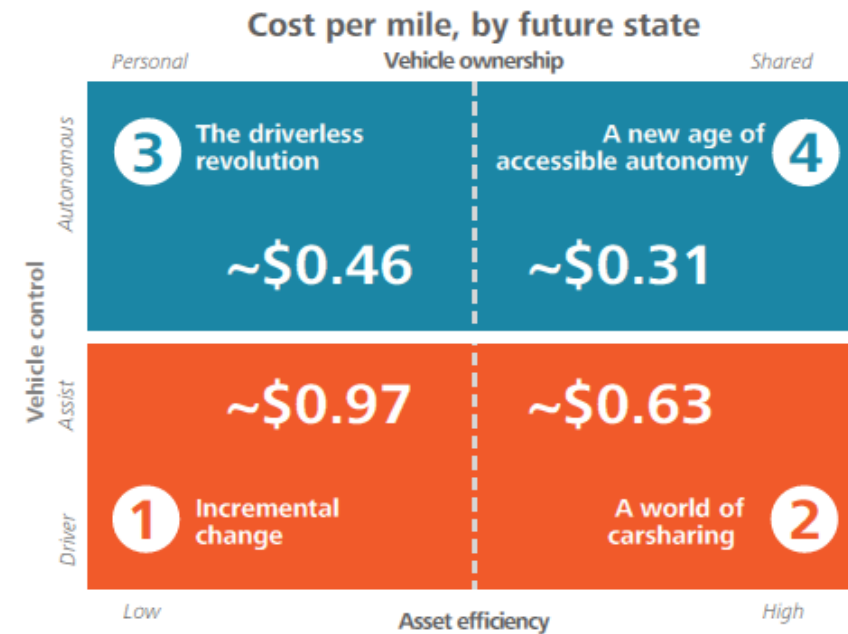
Figure 3. "Insider" and "disrupter" views of the future of mobility



Source: Deloitte analysis, based on publicly available information and company websites.

Graphic: Deloitte University Press | DUPress.com


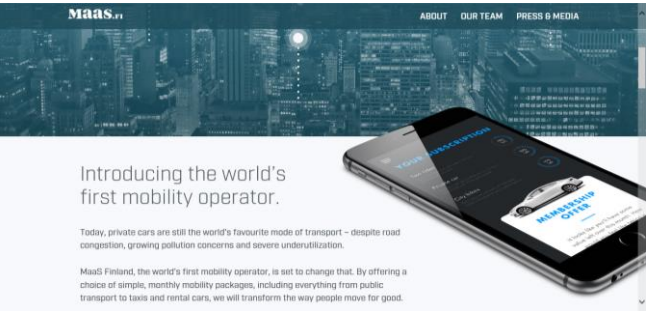

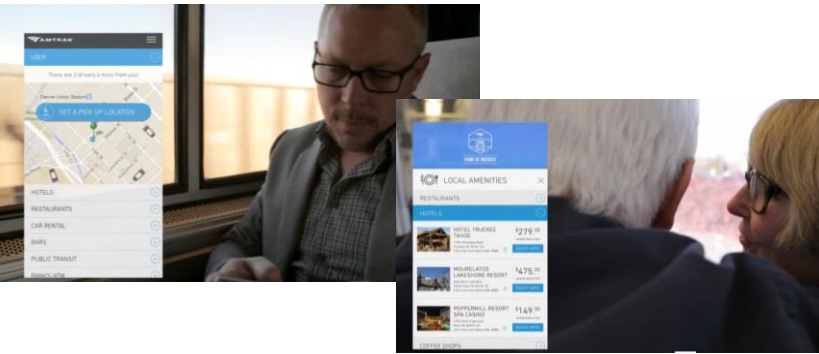
Figure 5. Per-mile summary cost calculations for each future state



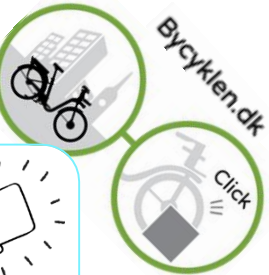

Source: Deloitte analysis, based on publicly available information (US DOT, AAA, etc.).
 Note: Fully autonomous drive means that the vehicle's central processing unit has full responsibility for controlling its operation and is inherently different from the most advanced form of driver assist. It is demarcated in the figure above with a clear dividing line (an "equator").

Graphic: Deloitte University Press | DUPress.com

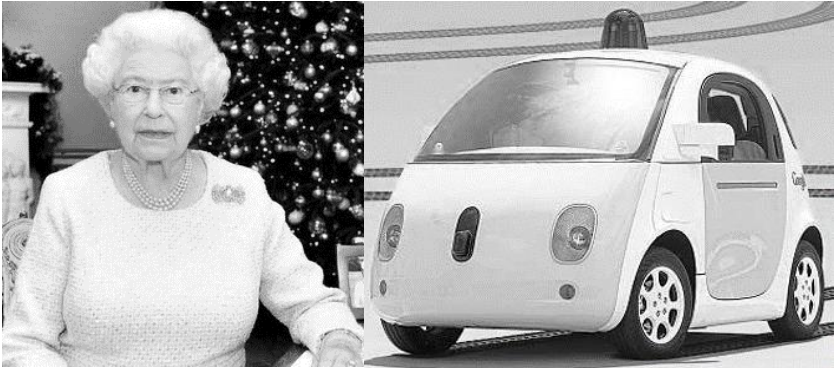
Examples of different initiatives that are at the forefront

DENMARK

ENGLAND



A U.S. state is rolling out a series of pilot projects as a first step in becoming a leader in the new mobility ecosystem

Background

A U.S. state aims to become the leading demonstrator site and research center for autonomous vehicle and sustainable urban transportation solutions. In recent months, the state has secured multibillion dollar investments from a range of leading mobility players.

● Goal Definition

Defined long-term objectives the State

- *Lead as a "State of the Future"*
- *Attract investment and innovation*
- *Increased tourism and brand*

● Pilot Project Selection

Identified pilot projects

- *Tourist transportation to/from airport*
- *Transportation to/from entertainment events*
- *Employee commuting across the city*

● Partner Engagement

Hosted a summit with potential partners from the private sector, academia and non-profits

● Consortium Creation

Crafting a sustainable operating model that shares project risks and rewards between partners to execute "live" pilots and transform the state to the leading mobility State in the U.S.



Becoming a leader in the new mobility ecosystem will increase the economic productivity of the State's businesses and improve the quality of life for the State's citizens

Questions to solve for pro-active authorities



Vision and strategy

1. What is the vision for customers' and citizens' experience in future mobility?
2. Which effects do we as a society wish from the development of future mobility (mobility, climate, job creation, etc.) – and do we plan to be a front runner?
3. What does SMART Mobility og Mobility as a Service for our investments?
 - Less physical infrastructure
 - More IT and data infrastructure



Accelerators

1. What regulation needs modernisation?
2. How to secure sufficient investments?
3. How to include a mobility focus in large investments?
4. How to create incentives for sharing economy (ex. ride sharing)?



Organising

1. What role are the public authorities and organisations to play? And how?
2. Who is responsible for securing multimodal solutions?
3. How do we handle that mobility solutions are delivered from both public and private providers?
4. Who owns data (about public transport customers and transport time tabelle)?



Practical stuff

1. How do we give permissions to new technologies?
2. How do we interact with the globale providers (Google, car makers, Uber, etc.)?
3. How will we include the need for public service mobility in the ride sharing economy?