

SIS89 DISCUSSING THE IMPACT OF AUTOMATED DRIVING: A SERIOUS GAME

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WHAT WOULD HAPPEN IN MY COUNTRY/REGION IF:

1. Automated transport is mainly shared mobility (both ride and vehicle sharing)
2. Automated transport is mostly by privately owned or leased vehicles
3. Governments are playing a strong steering role (by legislation and providing infrastructure and investments)

In the following 2 impact areas

1. **socio-economic impacts**
2. **infrastructure and land use**

(choose from safety, vehicle operations, personal mobility, energy/emissions, network efficiency, travel behaviour, public health, socio-economic impacts, infrastructure and land use)

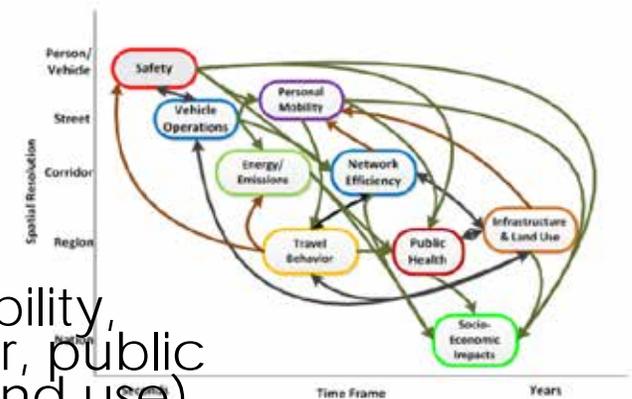


Figure 1. Impact Areas (Smith, 2016)

MAINLY SHARED MOBILITY

- **Socio-economic impacts :**

- Decrease of the final demand for car.
- A tremendous impact on national industrial structure.
- Consumers are no longer major customer of automobile industry and superseded by business firms.
- Traffic congestion at intersections and merging sections get worse.

- **Infrastructure and land use :**

- People would like to move to areas around city centers to reduce the waiting time of ride-share service. Cities become more compact.
- Probable modal shift from rail to road

MAINLY PRIVATELY OWNED VEHICLES

- **Socio-economic impacts :**
 - Big difference of life style between people owing automated cars and the others.
 - The opportunity cost of travel is decreased in accordance with the increase of LV4 automated driving available area. People owing automated cars transform their commute time into their working time.
 - Probable modal shift from rail to road.
- **Infrastructure and land use :**
 - People owing automated cars move to suburbs thanks to decrease of the opportunity cost of travel time.

GOVERNMENT IN STEERING ROLE

- **Socio-economic impacts :**
 - Policies to reduce economic instability from structural change of national economy are necessary if automated transport is mainly shared mobility.
 - Mandatory regulations and/or economic incentives should be introduced in order for a fleet to be replaced by xEV rapidly.
- **Infrastructure and land use :**
 - Tax reform is necessary in order for people not to move to suburbs

ONE-LINER

- The most important impact of automated road transport will be: **decrease of opportunity cost of travel time.**