Are new shared mobility services going to re-define the urban landscape?

Wanda DEBAUCHE
Head of the Mobility-Safety-Road Management Division
Belgian Road Research Centre (BRRC)
FIRST LESSONS: good substitute for private car

CAR SHARING =

- A credible substitute for private car ownership
- More rational car use
- Reduction in the numbers of kilometres travelled

Source: Survey by GT-Bureau de recherche
FIRST LESSONS: gain of parking

- CAR SHARING DECREASES PARKING PRESSURE
  
  • SAVED PARKING SPACE COULD BE REASSIGNED

One shared vehicle replaces about 6 private cars → 5 parking spaces saved within a radius of 500 to 800 m

One on-street parking space = 10 m²

= Brussels Capital Region: + 800 car sharing vehicles → potential gain of 40,000 m² = 200 tennis courts
FIRST LESSONS : saving in time

- In France, 70 million hours are lost each year in seeking a parking space, representing an annual financial loss of 600 million euros.

- In the city of Paris, the mere elimination of cruising for a parking space would allow a traffic reduction of 5 %, or even more.

- Failure to comply with parking regulations results in non-productive immobilization of an asset, representing a cost of 8 billion euros.

→ Shared vehicles allow substantial savings on time for seeking a parking space.

Source: LA RECHERCHE D'UNE PLACE DE STATIONNEMENT : STRATEGIES, NUISANCES ASSOCIEES, ENJEUX POUR LA GESTION DU STATIONNEMENT EN FRANCE
Amélie LEFAUCONNIER et Eric GANTELET, SARECO
FIRST LESSONS: new urban requirements

- Re-design stations and associated parking/access facilities
- Improvements in drop-off and pick-up zones especially at railway or metro stations, on interchange platforms and at final destinations
- Managing more vehicles on access links to terminals
- Additional capacity for metro and rail to cope with higher numbers of users
FIRST LESSONS: save in energy consumption and pollutant emissions

- 15% of the total energy consumption over the full life cycle of a car occurs during production. Producing fewer cars has, therefore, a direct beneficial effect on energy consumption.

- As for the reduction of pollutant emissions, according to the Swiss energy agency, an active user of car sharing produces an average 290 kg less CO₂/year.

- The intensive use of vehicles in car sharing schemes implies accelerated fleet replacement and thus, potentially, quicker penetration of newer, cleaner technologies (OECD).
FIRST LESSONS: elegal parking

- Bike sharing firms face challenges to errant and elegal parking
- The bicycle companies would have to closely collaborate with malls and town councils to ensure that there are adequate parking areas for cyclists especially at neighbourhoods estates.
FIRST LESSONS: safety problems

- Everywhere, without helmet, several on the same engine...
- Electric scooter injuries are piling up
FIRST LESSONS: economic model?

- Not self-supporting even in urban area (large demand), a lot of bankrupt →

should the public authorities provide them financial subsidies or should the price for these services be increased?
CONCLUSIONS

- Transport and mobility authorities NEED TO HAVE A CRITICAL MIND:
  - Authorities / mobility strategy
  - Viable?
  - Legal?
  - Sustainable mobility?
  - Regulate? Facilitate? Or support?

- Development of autonomous shared vehicles?