From weak signals to mobility scenarios.
A prospective study of France in 2050

Emmanuel Ravalet
Vincent Kaufmann
Laboratory of Urban Sociology
EPFL
Introduction

Proposing renewed prospective analyses
Mobility in France, historical perspectives and recent changes, through the scientific literature

3 new phenomena to be considered:

> The changing role of the car
> The development of polytopic habitats
> The increase of travel time budget
What place of the car in daily life in France?
Polytopic living and intensive mobility
Zahavi 2.0, or the increase in daily travel time budgets
Surveying mobility practices and potential for change

Readyness for intensive mobilities of the French population

- Moving abroad
- Moving in another region
- Commuting daily more than 1 hour (one way)
- Traveling for professional reasons with numerous nights far from home
- Commuting on a weekly basis between the principal home and another accommodation near work
- Nothing
Surveying mobility practices and potential for change

Distribution of the French population depending on modal choice logics

- Exclusive drivers: 16.9%
- Open drivers: 9.9%
- Exclusive alternative mode users: 8.7%
- Thwarted drivers: 8.3%
- Prone to alternative modes users: 4.4%
- Multimodal comparers: 16.6%
- Civic environmentalists: 12.6%
- Locally rooted: 22.6%
Three scenarios for the future

ULTRA-MOBILITY
«Faster and further»

ALTER-MOBILITY
«A different way of traveling»

PROXI-MOBILITY
«The quality of local living»
The ultramobility scenario

Key trends
- Increase in work-related high mobility (long-distance and weekly commuting)
- Growing distance between the home and the workplace
- Development of online shopping/administrative procedures and telecommuting

Impacts on mobility
- Larger travel-time budgets
- Sharp increase in long-distance mobility
- Less travel for services/shopping/work/studies
- Greater use of planes
- Single occupancy vehicle use still prevalent, and increasing in peri-urban and rural areas
The altermobility scenario

Key trends
- Aspirations for less car use in daily life and in public spaces
- Reduced car ownership among urban households
- Greater awareness of the link between physical activity and good health
- Increased openness to alternatives to single occupancy vehicle

Impacts on mobility
- Stable travel time budgets
- Existence of “door to door” altermobility service over the entire territory
- Increase in travel “chaining” and multimodality
- Increased use of active and shared modes
- Modal shift dynamics (see: Germany, Switzerland, the Netherlands, Denmark, etc.)
- Classic car used when no other solution is available
The proximobility scenario

Key trends

- Fatigue due to high mobility/fast-paced daily life
- Aspirations for a better quality of life (desire to slow down)
- Ultra-connected proximity
- Appreciation of proximity and reinvestment in local life: residential relocation versus long commutes
- Geographical densification and renewed appreciation of urban life and habitat

Impacts on mobility

- Smaller travel time budgets
- Decrease in long-distance mobilities: shift from international travel to travel in France
- Sharp decrease in daily commute distances
- Daily: intensive use of active modes (walking, cycling) and moderate car use
- Long distance: use of the TGV because the quality of travel time is essential
Modal shares for the three scenarios
(ultramobility, altermobility and proximobility)
Traffic volumes for the 3 scenarios
(ultramobility, altermobility and proximobility)
Some conclusions

> All predictions of future traffic must consider changing customer behaviors and needs as they evolve rapidly and as technological progress is changing the nature of mobility.

> Highlighting some ways to achieve France’s commitments (to divide Greenhouse gaz emissions by 4) allows a better understanding of the need for a political engagement.

> Finally, we can question the place car will have in the future, without trying to give an answer…
Thank you for your attention

Emmanuel.Ravalet@epfl.ch
Vincent.Kaufmann@epfl.ch