#### Quo Vadis Europe? Mobility trends, future perspectives & implications for urban transit in Spain

Knowledge for Tomorrow

¿Dónde vas Europa? Tendencias de futuro y sus implicaciones en la movilidad urbana en España

**Tobias Kuhnimhof** 



#### This talk is about the long term structural development, not about short term cyclical changes.

Automobile Travel Demand per Person in Spain



Overall, Spain's mobility patterns develop along a relatively typical European path.

Therefore, developments in other countries help understand developments in Spain.

But travel demand in metropolitan areas in Spain is likely to turn out lower and more transit oriented than in other European metro areas.



## Compared to other industrialized countries, car ownership in Spain is moderate.



Source: ifmo 2014, BITRE 2012, Spain statistical yearbook 2014

## But if corrected for income, car ownership development in Spain is on a typical European path.



Source: ifmo 2014, BITRE 2012, Spain statistical yearbook 2014

#### Spanish mode shares are not far from the European average.



Source: COST Action Shanti 2013

#### On average, the Spanish travel less than other Europeans in the context of everyday activities.



Source: COST Action Shanti 2013

High densities may explain low travel demand & suggest that Spanish cities develop transit & walk oriented.



Source: Kenworthy, Laube (Millennium Cities Database) 2000

There will be growth of total travel in some metropolitan areas due to population growth.

But overall, everyday travel of Europeans shows signs of saturation.

The group of captive transit riders will continue to decrease in the future.





Economically well-off metro areas continue to grow, the population in other areas decreases.



#### Change in population 2010 to 2030 in %

- to under -20 -20 to under -10 -10 to under -3 -3 to under 3 3 to under 10
  - 10 and more



## "Peak Travel": On a per capita basis, travel in the context of everyday activities doesn't grow anymore.



Source: author's analysis on the basis of national travel surveys

## Europe is aging. Germany is spearheading this development – with substantial consequences for travel.



Source: US Census Bureau, international data base, 2014

About 1 hour per person per day: relatively stable travel time budgets may also help explain "peak travel".



In the future, urban travel will be more multimodal, more diverse and increasingly shaped by non-routine travel.

If urban transit adapts to this situation, there will be substantial opportunities.

Young drivers have become much more multimodal in the recent years.

Share of young car owners (Age 20-29), who drive every day:





Source: ifmo 2012

## As a result car travel has recently decreased for young adults while it increased for seniors.



Source: author's analysis on the basis of the German Mobility Panel



#### Moreover, there is a rebound of cycling, specifically in urban areas. \_\_\_\_\_ mode share 2.5 ( 350 300 Travellers entering London in the Weekday morning peak 250 200 \_\_\_\_\_ Index 1979 = 100 ...by bicycle 150 mode share 81.8 ...by public transport 100 ...by car 50 mode share 7.7% 0 1979 1984 1989 1994 1999 2004 2009

Source: Hansen 2013 on the basis of data from Transport for London

# As opposed to everyday travel, tourism and long distance travel grow substantially.



Source: author's representation on the basis of data from Verkehr in Zahlen 2014 and Destatis 2014



Population growth in urban areas

Aging populations

Fewer captive transit riders

Increasingly automobile seniors

#### Thank you for your attention

Young people are less car oriented

Saturation of every day travel

Rebound of cycling

More multimodality

More non-routine travel

More tourists and transients

