

Introducing urban transport innovation in European cities and regions

European City Regions facing today's challenges

Committee of the Regions, 28 November 2017 Karen Vancluysen, Polis Secretary General

What is Polis?

Exchange of experiences Network European research 70 European cities & regions Innovation **European Institutions** Sustainable urban mobility environment mobility safety economic & health & traffic efficiency & security & social aspects TRANSVERSAL **POLIS GLOBAL** SMART CITIES - SUMP - URBAN FREIGHT **PLATFORM** TOPICS

Urban mobility – key challenges & policies

Congestion

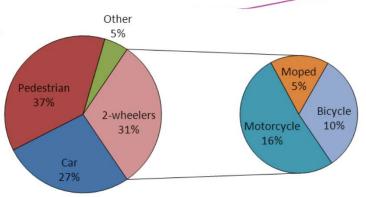
- Costs Europe about 1% of Gross Domestic Product (GDP) every year
- Journey time reliability (all modes)
- Road safety
 - In urban areas, 68% road fatalities are VRUs (2011/12)
- Air pollution and climate change
 - 70% of pollutant emissions caused by urban traffic
- Physical inactivity



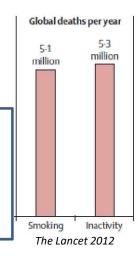
Around 600.000 EU citizens die prematurely every year, hundreds of thousands of other people suffer from illness due to preventable causes, such as pollution from exhausts of diesel vehicles, and nitrogen dioxide (WHO 2015)

Physical inactivity was responsible for twice as many deaths in Europe (676 000) than obesity (337 000) in 2008 (according to medical research project EPIC)

The Guardian, 16/1/15



In urban areas, 68% road fatalities are vulnerable road users (VRUs)
(2011/12) - EC Road Safety Vademecum





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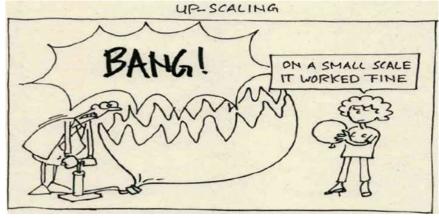
Reducing the risk of starting something new

- Many cities want to be innovative, but not all want to be pioneers
- Various risks
 - Financial: can we afford the measure?
 - Political: will it be accepted? Effectiveness: will the measure solve the problems?
 - Implementation: will we be able to introduce the measure smoothly?

How to shorten the innovation cycle?







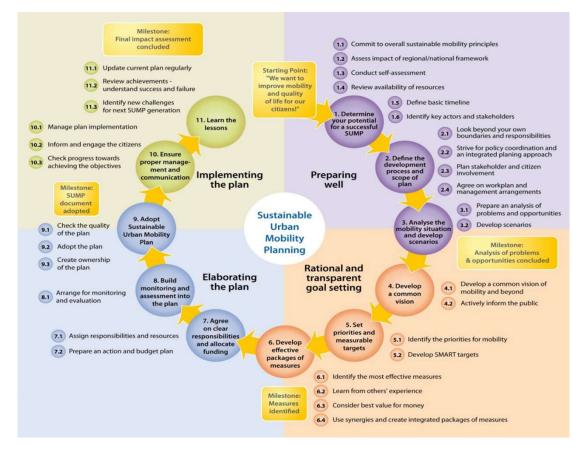


Integrated planning framework for innovation

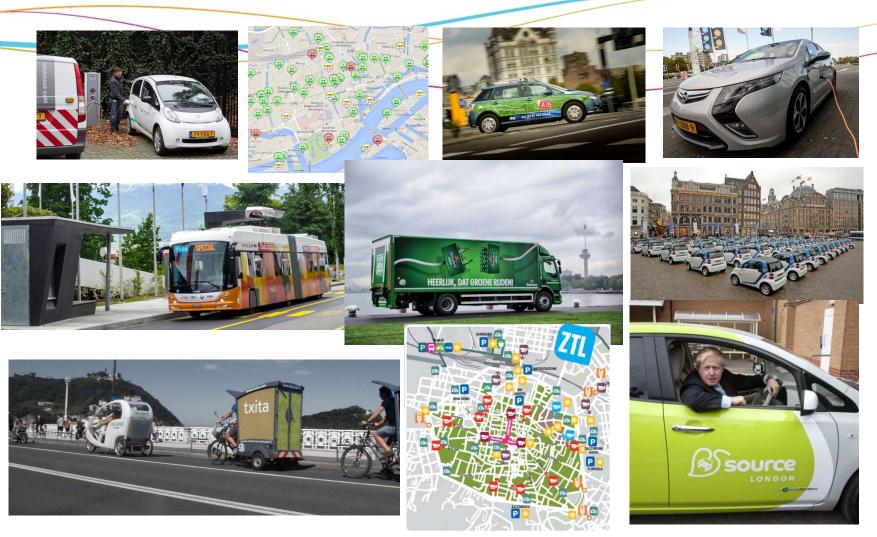
Sustainable Urban Mobility Plans

From megaregions to neighbourhood level...





Electromobility: Multi-faceted transition





Towards evidence-based decision making

HEAT tool

- Quantifying the economic health benefits of active travel
- Addressing multiple societal challenges in one go: air quality, congestion, physical inactivity, obesity
- Unlock investment in active travel across policy domains

SITTING ... IS THE NEW SMOKING .. THIS IS A NON - SITTING



EUROPEAN CITIES AND REGIONS NETWORKING FOR INNOVATIVE TRANSPORT SOLUTIONS

FLOW project

MEASURE:

LOCATION:

Putting walking and cycling on an equal footing with motorised modes as a solution to tackle urban congestion, through enhanced traffic modelling



New bike lanes shorten automobile travel times by

TRACE project

Using tracking apps to promote sustainable travel behaviour and inform active travel policies and plans





Download FLOW's "15 Quick Facts for Cities" in 7 languages!









Mobility as a Service?

Positive where MaaS can support sustainable transport practice

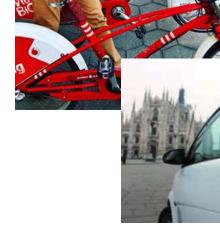
- Promoting sustainable travel, especially giving up the car
- Improving efficiency of existing transport services and public resources
- Leveraging personalized approach to develop inclusive systems

Risks of a purely commercial approach

- Dis-incentivising sustainable trips
- Higher costs for the user or transport provider and unequal services
- Creating a disconnect between the user, transport provider and transport authority









Automated vehicles: Hype or Holy Grail?

Travel behaviour

- Worst case: projected increase in kms travelled
- Best case: removal of private cars in favour of shared mobility + public transport, combined with walking & cycling

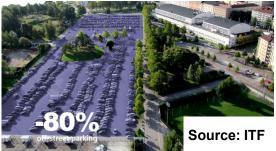
Spatial

- Some off and on-street parking could become redundant
- Urban sprawl and longer commuting trips

Social

- Enhance accessibility to persons with limited transport access
- Risk of increased social division and inequality if market-driven





Road safety

- Reduction of driver distraction
- Technology infallibility?
- Interaction with non-automated road users, especially VRU
- Ethical issues

Traffic efficiency

- Richer data for traffic and asset management
- Road space management "More pain than gain" in short-medium term due to co-existence and higher safety margins

Infrastructure

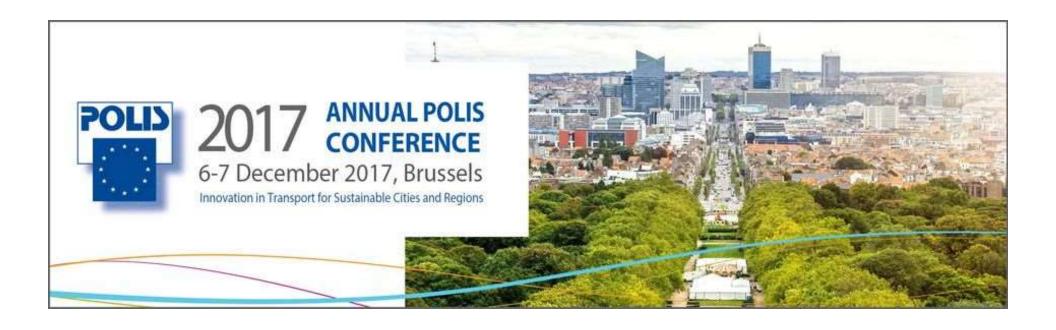
- Investments depend on AV implementation path: autonomous, CAV or systems-approach
- Where significant investments required, new business models must be found

The changing role of cities and regions

- Changing institutional landscape
 - Dynamics towards the best institutional setting to manage mobility in cities
 - Cooperation between different levels of governance
- Adopt a long-term and integrated planning vision going beyond political cycles
- Initiate and test new mobility services together with the private sector
- Regulatory and legal aspects
 - adopt clear regulations for existing and new services
- Enable ITS service development through open data policies
- Unlock investment by adopting new economic approaches
 - Procurement of innovation
 - Public-private partnerships, etc.
 - Data-driven policies
- Cities and regions as living labs for testing and deploying innovation







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