



EUROPEAN CITIES AND REGIONS NETWORKING
FOR INNOVATIVE TRANSPORT SOLUTIONS

Intelligent transport systems: a tool or a toy?

Suzanne Hoadley, Polis

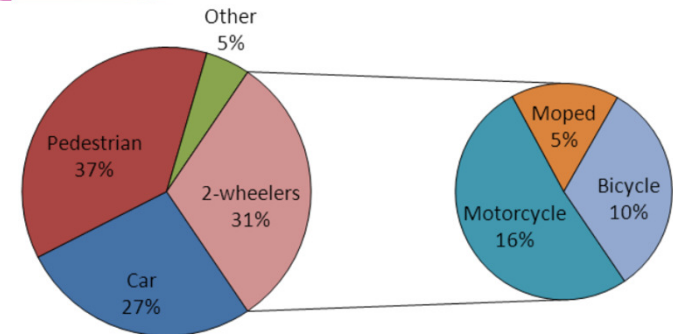
Urban transport – key policies

- **Modal shift from car to public transport, bike & walking**
- **Journey time reliability (all modes)**
- **Safer roads for all (especially VRUs)**
- **Improved air quality**
- **Healthier citizens through active travel**

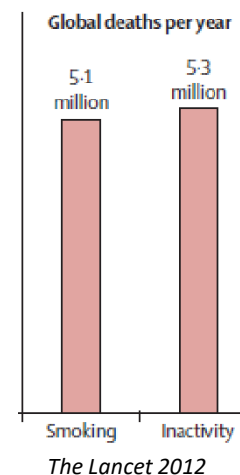
Air pollution is still the main environmental health hazard, resulting in high costs for health care systems, unhealthy workers and an estimated 400 000 premature deaths in Europe in 2011
European Environment Agency

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

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Share of road fatalities inside urban areas (2011/12) - EC Road Safety Vademecum



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Urban transport – ITS as an enabler

Traffic/network management

Traffic light control



Public transport priority



Demand management (enforcement)



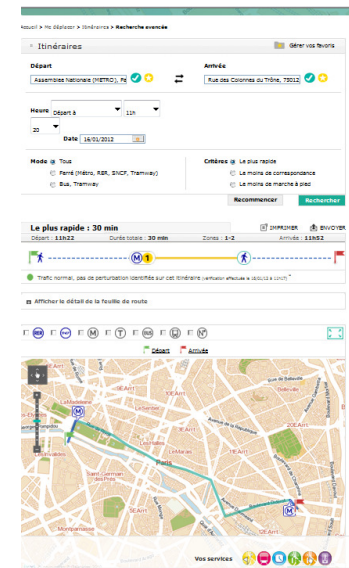
London launches congestion charging

Real-time information



Information services

Multimodal info



Payment systems & other areas



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ITS developments – views of cities & regions

- Data-related activities (including MAAS)
- Connectivity/C-ITS
- Automation

Data-related activities – open data



➤ Growing momentum for opening up transport data

Transparency Outreach Optimal use of network
Innovation Economic benefit Reduce costs

➤ Most local authorities are committed to opening up transport data where technically, legally and financially viable

- Local authority is not always owner of data
- Systems not designed for publishing data
- Lack of dedicated resources

Open data – local phenomenon

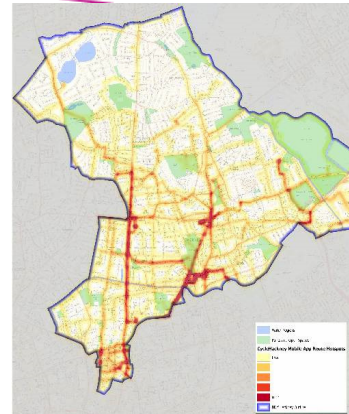
RTTI service continuity - EC objective



Data-related activities – data analysis

➤ Cycle Hackney app

Monitor cycle trips to know least/most popular routes
Report issues/suggest improvements



Gender Differences ?

Male Cycle Choice



London Borough of Hackney Female Cycle Choice



More work needed however...

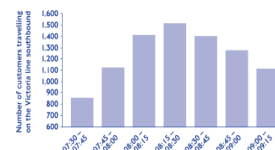
➤ Influencing travel demand in London

Source: Simon Reed, TfL presentation, EC stand, ITS Congress 2015, Bordeaux

Highbury & Islington station

New or occasional customer at this station?

The busiest time here is between 0815 and 0830



TfL is investing to improve the capacity and frequency of Tube services but we know that at certain times and places the network can be very busy.

If you are able to travel outside this time you could have a more comfortable journey.

- Approximate 5% shift in demand during target time period of 08:15 to 08:45
- Total peak demand over the trial period relatively unchanged



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MAYOR OF LONDON



Data-related activities - MAAS

Questions

- **How will this build on trends and initiatives happening independently of MAAS?**
 - Open data
 - Integrated information & integrated ticketing
 - Sharing economy
- **Where is the business model?** (no money in information & ticketing)
- **What role does MAAS community expect city authorities to play?**

Recommendations

- **To win the support of cities, ensure public transport is at the heart of MAAS**
- **Do not underestimate the organisational challenges – current focus seems to be on data and the technology platform**

Cooperative systems



Why?

- *“How will C-ITS help me deliver my policies?”*
- *“Why is a C-ITS solution better than the ITS I have already?”*
- *“How much will it cost to install, operate and maintain?”*
- *“how can C-ITS build on existing investments?”*
- *“When will C-ITS be on the market?”*
- *“who is liable if technology failure leads to an accident?”*
- *“Most day one use cases are driver-centric and relevant for highways”*



How?

- Start from the problem rather than the technology
- Understand the benefits/business case
- Facilitate procurement
- Enable integration
- Address organisational issues
- User response

Automated vehicles



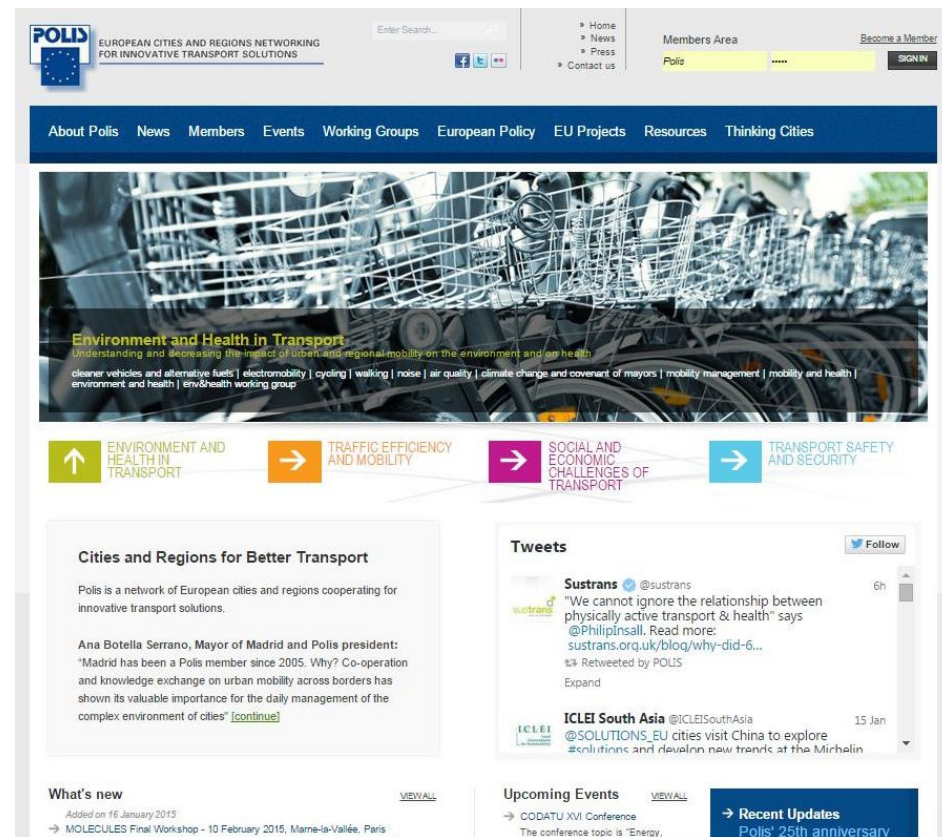
1. What are the perceived benefits and threats of automated vehicles in the urban environment and how can the former be maximised and the latter mitigated?
2. What is the view of the industry on the introduction of automated vehicles in cities, given the complexities of the urban environment? What role does industry expect local authorities to play?
3. Does automation really mean automation?
4. Local authorities have expressed interest in automating ride sharing services and in services that can complement public transport, such as first/last mile services. When could these types of services realistically be available on our roads?
5. To enable co-existence, should automated vehicles be separated from the rest of the road users (pedestrians, cyclists, driven vehicles). Is this feasible & beneficial?
6. Should local authorities be preparing for the introduction of automated vehicles?
7. Autonomous vehicles versus connected automation. Is this a debate that local authorities need to enter?

Conclusions

- **Most ITS developments (EC policy & R&D) have tended to be designed with motorways in mind (ITS Directive, C-ITS and automation) -> city engagement & deployment is lagging behind motorways:**
 - Motorway is a home for vehicles – main objectives: safety & efficiency
 - Urban roads more complex to manage than well controllable motorways
 - Cities are comparatively complex structures – strongly **policy** driven
- **Cross-border services – harmonisation/standardisation**
 - Most cities support and aspire to this
 - But the effort must be reasonable, staggered and shared
- **Very few cities (if any) have a dedicated ITS strategy & budget**
 - ITS must compete with other transport projects (potholes, cycling lanes) & other municipal services (social services, day care, schools, etc)
 - It is therefore imperative to have evidence of benefits for cities

More information

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The screenshot shows the Polis website homepage. At the top, there is a header with the Polis logo, the text "EUROPEAN CITIES AND REGIONS NETWORKING FOR INNOVATIVE TRANSPORT SOLUTIONS", a search bar, and navigation links for Home, News, Press, Contact us, Members Area, and a "Become a Member" button. Below the header is a main navigation bar with links for About Polis, News, Members, Events, Working Groups, European Policy, EU Projects, Resources, and Thinking Cities. The main content area features a large banner image of a bicycle rack with the title "Environment and Health in Transport" and a subtitle "Understanding and decreasing the impact of urban and regional mobility on the environment and on health". Below the banner is a row of four colored boxes with arrows pointing right, labeled "ENVIRONMENT AND HEALTH IN TRANSPORT", "TRAFFIC EFFICIENCY AND MOBILITY", "SOCIAL AND ECONOMIC CHALLENGES OF TRANSPORT", and "TRANSPORT SAFETY AND SECURITY". The "Cities and Regions for Better Transport" section describes Polis as a network of European cities and regions cooperating for innovative transport solutions, mentioning Ana Botella Serrano, Mayor of Madrid and Polis president. The "Tweets" section shows a tweet from @sustrans about the relationship between physically active transport and health, and a tweet from @ICLEISouthAsia about a visit to China. The "What's new" section mentions the "MOLECULES Final Workshop" on 10 February 2015. The "Upcoming Events" section mentions the "CODATU XVI Conference" with the topic "Energy". A "Recent Updates" button is also visible.