



*Visions to Step-Change:  
embedding participation  
in transport research*



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# Outline

- **Visions**
- **Step-Change**
- **Embedding participation in transport research**

# Visions for the role of walking and cycling in 2030

- **EPSRC funded project**
- **2008 – 2012**
- **Interdisciplinary collaboration involving 5 partners:**
  - **ITS, University of Leeds**
  - **TSU, University of Oxford**
  - **SURFACE Inclusive Design Research Centre, University of Salford**
  - **Urban Modelling Group, UEA**
  - **CRESC, University of Manchester**

# Vision development

- **Based on imaginary, but recognizable urban area**
- **Developed visualisations plus more detailed narratives**
- **3 alternative futures/visions plus overview of how things are now**
- **Assumed that visions would become the minimum standard across urban areas in Britain**
- **Aimed to understand how different groups react to these futures & provide a means by which those groups can explore their own futures**

# Why visioning & pathways?

- **Permits novel ideas, aspirational thinking**
- **A way of dismissing the inevitable discussion of barriers**
- **Enables longer term view than normally the case**
- **Changes to direction/trends**
- **Targets?**

# 2010



# Vision 1: 2030



# STEP-CHANGE Project

- **Sustainable Transport Evidence and modelling Paradigms: Cohort Household Analysis to support New Goals in Engineering design**



# STEP-CHANGE

- **EPSRC funded project**
- **2011-2015**
- **Interdisciplinary collaboration involving 4 partners:**
  - **ITS, University of Leeds**
  - **CRESC, University of Manchester**
  - **School of Civil Engineering, University of Birmingham**
  - **LSE**

# STEP-CHANGE

- **To create better understanding of factors underlying people's transport practices & to better understand changes to transport behaviour**
- **To develop new transport modelling paradigms that better represent, & account for, the complexity of people's transport practices**

**The knowledge & modelling paradigms developed will provide a foundation for building more resilient and sustainable urban environments.**

# STEP-CHANGE

- **Policy need to promote step-change towards more sustainable futures, especially in transport/travel**
- **Limited evidence of what brings about long-term behavioural change in travel/transport**
- **Existing transport surveys focus on marginal trade-offs, not major qualitative change**
- **Existing mathematical models for city transport planning focus on stable situations/slow change**
- **Challenge: Need for new evidence and models**

# Panel study

- 5 year qualitative longitudinal study
- 4 areas in Leeds and 4 in Manchester
- panel of 240 people
- repeat contact annually for 4 years

# Mobility biographies approach 1

- **To add depth to cross-sectional approaches through consideration of panel studies and/or retrospective interviews e.g. See Lanzendorf; Scheiner; Axhausen; Frändberg**

# Mobility biographies approach 2

**“From this viewpoint people’s behaviour can be explained by its continuity over life time and by specific events that involve major changes in other domains of life. The term ‘mobility biography’, then, refers to the total of an individual’s longitudinal trajectories in the mobility domain and assumes that events in these trajectories exist or, put in other words, that at certain moments in individual’s life the daily travel patterns, the car ownership or other mobility characteristics change to an important degree.”**

**(Lanzendorf, 2003)**

# Embedding participation 1

- **Ambitious and novel research**
- **First largely qualitative longitudinal panel study of households to focus on participants' transport activity, in particular, delving into questions of why they do certain things and how change might be brought about**
- **Complemented by study of historical information over longer periods of time, making use of available information from a variety of transport and non-transport databases, coupled with testimony from planners and others in study areas who have experienced changes first hand**

# Embedding participation 2

- **Task of bringing these diverse data sources together will be innovative and explore integration of these materials in ways which recognise complexity of decisions and practices around transport, allowing us to draw some understanding of why step changes occur.**
- **Results of these analyses will feed into more theoretical work which will consider potential for new planning procedures & practices & new modelling tools which provide the means to help achieve the step changes necessary in transport for sustainable and resilient urban futures by 2050.**



# Range of participation

- **Public – contemporary**
- **Public – historic (from archival materials)**
- **Practitioner – current**
- **Practitioner – historic**

# Challenges

- ❑ **Access to participants**
- ❑ **Willingness to participate repeatedly over 4 years**
- ❑ **Archival information not specific to transport – requires conscientious trawl**
- ❑ **Difficulty finding retired & long-serving LA/PTE/DfT staff**
- ❑ **Semi-structured interviews include lifestyle questions, making them long and requiring substantial time commitment by participants**

## Some issues to consider...

- **A key strength of participatory research is that it enables exploration of local knowledge, perceptions and behaviours**
- **Use of visualizations can take you beyond verbal communication**
- **Research is in complex social environments which may need to be navigated sensitively**
- **Danger of raising community and individual expectations**

# People as central to research

- **Range of people's participation is paramount for acquiring more nuanced understandings of their lives**
- **This knowledge will feed into the development of transport models with potential for increased sensitivity to the lived experience of transport**