Bringing about changes in urban transport to move towards greater sustainability

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STEP-CHANGE project

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

- A strong interdisciplinary collaboration between research centres:
  - School of Civil Engineering, University of Birmingham
  - Institute for Transport Studies, University of Leeds
  - Centre for Research on Socio-Cultural Change (CRESC), University of Manchester
  - Department of Sociology, LSE
STEP-CHANGE Context

- Policy need to promote step-change towards more sustainable futures, especially in transport/travel.
- 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.
STEP-CHANGE Vision

- To achieve a deep, fundamental integration of social scientific and engineering methodologies:
  - State-of-the-art, qualitative, longitudinal survey instruments & analytical methods for eliciting and understanding behavioural change.
  - ‘Vision’- based planning paradigms for designing resilient urban futures for 2050.
  - Develop innovative mathematical modelling theories and methods.
  - To produce as outputs both planning methods and an evidence-base, for future exploitation by the research community and practitioners.
Project Structure

Strand 1: Cohort Study
- Historical information on step changes
- Evidence-based information
- Interview transcriptions
- Feedback

Strand 2: Historical information on step changes
- Evidence for historical changes
- Metaphors
- Feedback

Strand 3: Integrating diverse knowledge sources
- Evidence-based information
- Metaphors
- Feedback

Strand 4: Visions of urban resilience in 2050
- Visions and planning paradigms
- Feedback

Strand 5: New Modelling Paradigms
- Evidence-based information
- Metaphors
- Feedback

Strand 6: Academic and non-academic collaboration
Strand 2

- To understand historical examples of step changes in transport

- Focused discussions with planners and policy makers about changes in transport behaviour and policy over last 20/30 years
Interviews

Main subjects discussed:
- Individual transport career
- How involvement affected personal transport choice
- Views on transport change
Major transport change

- Deregulation
- LRT
- Trolleybuses
Deregulation
Views on deregulation

“There’s been a step change in the way in which transport is provided. That hasn’t happened overnight, required consistent effort year on year by people in the industry. It started before deregulation, it isn’t directly attributable to the private sector but the sector did give it a push and drove it through. So, step change is a set of processes leading to overall change. It is related to making more effective use of resources, consistent commitment through working together and talking together and communicating with each other and with customers”.
LRT - Metrolink
Views on Manchester Metrolink

- Has drawn attention to Manchester.
- Helped people get around a lot more easily & enabled them to access areas they could not previously.
- Ancillary benefits for areas outside the city
- Reported to have opened up new opportunities for people and forced work on pedestrianization of the city
- Brought about extension of P&R.
Trolleybuses
Views on Leeds trolleybuses

- “We got the Act, went on a European tour (e.g. to Essen) – that was revolutionary to let LA people go across the channel and see what other people were doing”.
- “We took politicians like John Prescott, at a later date, to Europe too”.

UNIVERSITY OF BIRMINGHAM
What happened?

“Politician (Portillo) pulled plug on Manchester extensions, Leeds LRT system, Liverpool LRT and South Hampshire LRT. So Manchester had a beautiful tram station but no trams. Decision was related to Alistair Darling wanting to be Chancellor of the Exchequer and the best way to become chancellor is not to spend any money. Ironically, his home city got a tram. Manchester politicians of all parties started a campaign saying give us our trams back. It worked (but only in this area)”. 
Emerging themes

- Social issues tended not to be taken into account as political ones influenced decisions
- Environmental issues not important to pursuit of change or decisions
- Success based on local district councils working constructively together
- Local politicians seen to be key as they shared same vision for transport
- Cross party political differences were transcended in pursuit of common aims
What next?

- Extend range of interviews and further detailed analysis
- Link to city specific literature from Leeds and Manchester
- Consider wider range of literature for change
- Mine data sources which provide evidence for how changes have occurred.