

The potential of longitudinal research in transport

Social research challenges and opportunities

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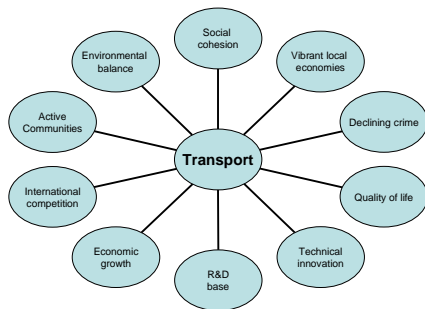
Outline

- Challenges facing DfT research
- Role of social and longitudinal research
- What we have available
- What we hope to be doing in the future

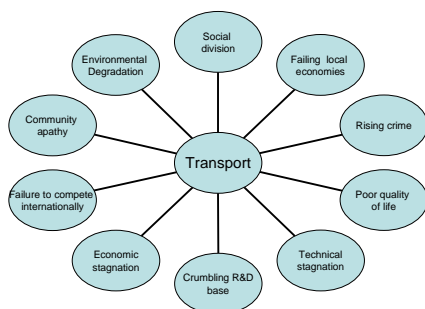
DfT Challenges

- Complexity of transport as a social research field
- Demanding government targets
 - The Department for Transport's objective is to oversee the delivery of a reliable, safe and secure transport system that responds efficiently to the needs of individuals and business whilst safeguarding our environment
 - Individual and social
 - Local and national
 - Built and natural environment
 - Business and 'communities'

Role of social research (1)



Role of social research (2)



Role of social research (3)

- Examples:
 - explore and measure impacts on communities/social groups (toll roads, bypasses, new PT)
 - anticipate social responses to policy (RP, use of new technologies)
 - identify levers and barriers for changing behaviour (climate change, sustainable transport)

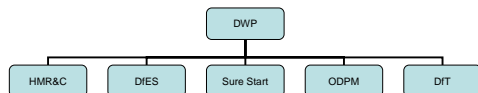
How can longitudinal research help?

- Tracking changes over time (eg transport behaviour, attitudes, experiences)
- Exploring causal links
- Existing longitudinal surveys connect transport with other policy areas

Longitudinal surveys

- DfT Cohort Survey of Learner and Novice Drivers
- English Longitudinal Study of Ageing (ELSA)
- Family and Children Study (FACS)
- DWP Disability Survey (proposed)
- British Household Panel Survey
- Labour Force Survey
- Largely quantitative – but also qualitative longitudinal work, particularly in evaluation

FACS - The Families and Children Study Funding and Objectives

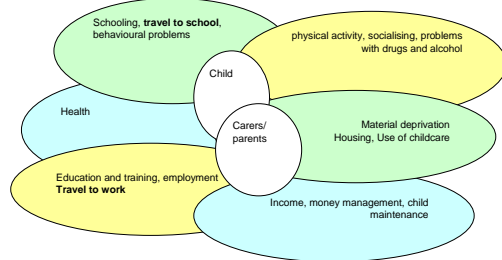


- Objectives:
 - Provide an annual cross-section sample of families with dependent children across Great Britain
 - Provide a longitudinal sample of families with dependent children
- DfT involvement
 - Since 2001 travel to school questions
 - Travel to work since 1999

Sample and data collection

- FACS is a refreshed panel survey, since 1999.
 - The scope has been expanded: in 1999 and 2000 low to moderate income couples with dependent children were interviewed as well as lone parents. Since 2001 a representative sample of all couple families is interviewed.
 - FACS therefore is now a survey of all families with dependent children in Britain.
- Data collection methods
 - Annual household survey interview with main carer (and partner)
 - self completion questionnaire for children between 11-16
 - Telephone interview with partner if not possible to do face to face

See <http://www.dwp.gov.uk/asd/asd5/facs/> for further info



FACS

- Characteristics of families with children
- Health and longstanding illness/disability of mothers' and children
- Schooling - travel, performance in major subjects and behavioural problems
- Children's physical activity, socialising, problems with drink, drugs and alcohol and mothers' awareness of the Connexions service
- Use and opinions of local services for children and young people and mothers' satisfaction with local area
- Education and training qualifications within families
- Levels of employment within families and mothers' barriers in returning to work
- Overall level and source of families' income
- In-work support for families through Working Tax Credit and Child Tax Credit
- Families' type and value of benefits and families on Income Support
- Arrangement and payment of child maintenance and contact between children and absent parents
- Money management, savings and debt
- Use of formal and informal childcare and local childcare services
- Type of property and tenancy and quality of housing
- Material deprivation - items unable to afford

See <http://www.dwp.gov.uk/asd/asd5/facs/> for further info

Current analysis

- 3 waves available
- NatCen carrying out exploratory analysis
 - To investigate travel to school patterns for children in families with children
 - General magnitude of changes in travel to school patterns over time
 - How changes in travel to school patterns relate to characteristics of children, their family and location
 - How changes in travel to school patterns relate to changes in characteristics and key events that children and their family experience
 - Will also investigate travel to work patterns for parents in families with children

Change in travel to school by change in child's family 2003-2004

Row per cent

| | Change in mode of travel to school from 2003 to 2004 | | |
|--|--|--------------------------------------|------------------|
| | Mode change between 2003 and 2004 | No mode change between 2003 and 2004 | Unweighted total |
| All primary school aged children in 2003 | 19 | 81 | 3,758 |
| All primary school aged children in 2003 where there was a new birth in the family between 2003 and 2004 | 24 | 76 | 156 |
| All primary school aged children in 2003 who had a sibling who became a primary school child in 2004 | 13 | 87 | 300 |

Base: All children who were of primary school age in 2003.

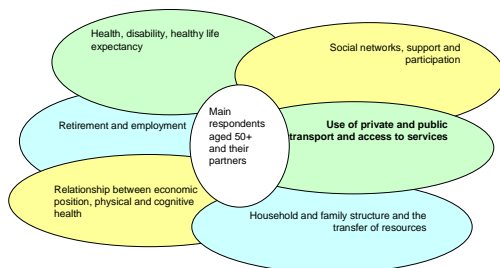
ELSA – English Longitudinal Study of Ageing: Background

- Funded by the American NIA and 8 UK government Departments
- DfT joined the funding consortium 05/06
- Sample of people aged 50+ derived from Health Surveys for England 1998/00/01
- ELSA wave 1 in 2002 – sample followed up every 2 years thereafter
- Various methods of data collection eg face-to-face interview, nurse visits, self-completion questionnaire
- Main respondent plus partner

Transport and ageing

- Ageing and older people of increasing importance to DfT strategy and policy delivery
- Key question: Will the transport demand and behaviour of tomorrow's older people be different to that of today's?
- Answer involves understanding how the lives of older people might be different in the future eg longer working lives, increasing leisure time, longer healthy lives, longer lives in poor health
- What's the role of transport in these processes? What impact does transport policy have? What are the implications of these trends for transport policy and delivery?
- Longitudinal analysis using ELSA data can help us understand these links

ELSA: topic areas



ELSA Transport Questions

Existing questions in main interview

- Access to car or van
- Whether ever drives car or van
- Frequency of use of public transport
- Self-completion Q on how easy or difficult it is to **access** a list of different services eg GP, bank, shops

ELSA Transport Questions

Additional questions to be tested

- Use of lifts by others
- Whether has ever been a driver
- Use of DRT and taxis
- Usual mode of transport to work
- Amount of walking
- Frequency of use of various modes for non-work journeys

Examples of key policy questions

- How does peoples' transport behaviour **change** as they age?
- How does this differ for **different groups** in society?
- How does this **impact** on their demand for different types of transport?
- What **causes** the changes? Eg key life events
- What are the **effects** on other aspects of peoples lives? Eg access to services, independence and well-being

The future: capitalising on the potential

- FACS - first results February 2006 and a likely 2 further waves
- ELSA – likely that DfT will have to fund further analysis to exploit this fully
- Longitudinal analysis is a new area for SRE – would welcome input on further opportunities
- Joined up government – getting transport on the agenda of other policy areas

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