Life Transitions and Travel Behaviour Project Research Storyline

How Life Events Prompt Changes in the Commute to Work

















The value of gaining a better understanding of commuting

- Commuting trips account for about a quarter of carbon emissions from passenger transport
- Achieving a modal shift in commuting towards public transport, walking and cycling will generate considerable benefits locally and globally
- But commuting behaviours become routine and people are often resistant to change
- Research is needed to understand in what circumstances people are open to changing commute mode
- There is increasing interest in life events like moving home or changing jobs as opportunities for behaviour change

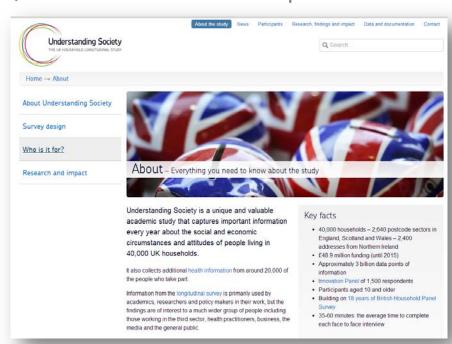


Understanding Society

- Longitudinal studies survey the same participants at regular intervals over time
- This enables us to understand how and why their behaviour is *changing* over time
- Understanding Society began in 2009 as a new longitudinal study of the UK population

It is tracking the lives of members of 40,000 households and is part funded

by DfT

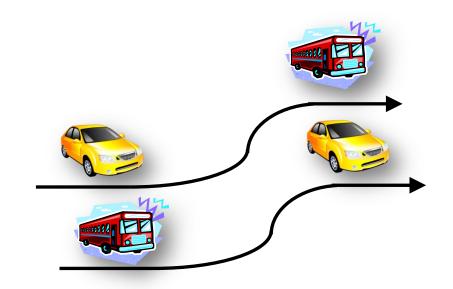


A longitudinal study of commuting behaviour

The Life Transitions and Travel Behaviour Project

- Took advantage of the first two waves of Understanding Society (2009/10 and 2010/11)
- For the first time it enabled us to examine the circumstances in which individuals change their commuting mode across a large sample of the English workforce

We investigated the relationships between commute mode changes and life events by examining bivariate associations and conducting multiple regression analysis



How were people commuting to work in 2009/10?

Mainly by car...



Nearly 2 in 3 people travelled to work by car in 2009/10

	Percentage of English workforce				
Commute mode	(weighted)				
Car (as driver or passenger)	64.2%				
Walk	10.0%				
Working from home	7.8%				
Bus/coach	5.4%				
Train	4.5%				
Cycle	3.6%				
Underground/light rail	2.7%				
Other	1.7%				
Total	100.0%				
Source: Understanding Society Wave 1 (2009/10)					

How likely is it for people to *change* commute mode from year to year?

This depends on commute mode

- Non-car commuters were much more likely to change mode than car commuters e.g.
 - 1 in 3 cyclists and public transport users switched to another mode
 - Only 1 in 10 car commuters made a change

- The car also exerts a strong pull to users of other modes
 - Half of the cyclists and public transport users that *changed* mode switched to car commuting
 - Young adults (<30) were the most likely age group to switch to commuting by car

Car commuting is **highly stable**

 Car commuting is also sustained for twice as long as noncar commuting:

Average period of time spent commuting by different modes (no. of consecutive years)				
Car / motorcycle	6.3			
Walk or cycle	3.2			
Public transport	3.0			
Source: British Household Panel Survey : 1991- 2009				

 Once people start commuting by car they remain commuting by car for a significant period of time

Changes to and from car commuting are much more common for those experiencing life events

e.g. 15% of non-car commuters changed to car commuting with **no change** in employment

		%age of workers switching from:			
		car to non-car		non-car to car	
Life event	Life event	with life	with no life	with life	with no life
Life event	prevalence	event	event	event	event
Gained a driving licence	1.9%	18.48	8.49	34.68	16.10
Switched employer	10.5%	18.21	7.38	29.39	15.08
Gained a partner	1.9%	16.32	8.40	23.86	16.65
Residential relocation	6.8%	15.01	8.04	23.24	16.15
Had child	3.9%	8.54	8.58	22.85	16.56
Lost a partner	1.2%	16.45	8.48	15.78	16.81
Source: Understanding Society Wave 1 and 2 (2009/10 to 2010/11); n=15,200 workers Bold figures highlight greater prevalence of commute mode change amongst the group experiencing			each life event		
The table illustrates simple bivariate associations. Individuals may experience more than one life event					

This doubles to 30% of non-car commuters changing to car commuting with a change in employment

Change in distance to work is the **main driver** of changes to commuting mode

Clearly this occurs when people move home or change employer



- Change to car commuting is more likely if the distance increases above two miles (30 times more likely!)
- Change to non-car commuting is more likely if the distance reduces below three miles (9 times more likely)



Commuting mode is *highly sensitive* to distance, especially to *increases* in distance



Changing where you live is also influential

- There is *increased likelihood* of switching to non-car commuting with:
 - Moves to areas with higher population density
 - Moves to areas with lower journey times to employment by public transport



- There is *increased likelihood* of switching to active commuting (walking and cycling) with:
 - Moves to areas with mixed land uses (homes, shops, jobs and services)





Changing employer has an independent effect beyond changes in work distance

- Changing employer makes it more likely that people change to <u>or</u> from commuting by car
- This may relate to a change in transport availability to or at the workplace
- But it could also be that employment change simply prompts deliberation over commuting behaviour





Environmental attitude makes a difference

- Car commuters are more likely to switch to non-car commuting if they are 'willing to act to protect the environment'
- Conversely, being unwilling to act does <u>not</u> make it more likely to switch to car commuting



Other factors that make it more likely to change to/from car commuting

Changing to car commuting

- Acquiring a driving licence
- High no. of household cars
- Live outside London
- Live close to large employment centres
- Aged 16-29
- Male
- Do not have higher education qualification



Changing to non-car commuting

- Stopping cohabitation
- Low no. of household cars
- Live in an area with a poorer living environment (main roads)
- Self-employed or working for a small employer



Implications

- Job changes and home moves are frequently experienced events that strongly increase the likelihood of a change in commuting mode
- The characteristics of where people live also matters
- Policy areas that can respond to this:
 - Travel planning, especially working with employers
 - Public transport provision
 - Spatial planning
- For further information, including a more detailed Evidence Summary, see...

www.travelbehaviour.com