

Teleworking – trends in and causes of location independent working

'Teleworking – trends in and causes of location independent working' is a five-year study investigating the impacts of homeworking on the commute. The study forms part of the FUTURES research programme that began in April 2004. FUTURES is one of four transport research consortia within the EPSRC's 'Towards a Sustainable Urban Environment Programme'. Within FUTURES, CTS is working with the Universities of Southampton and Leeds/Newcastle alongside a number of stakeholder partners – for this study, these include: the Department for Transport; Hampshire County Council; and the Telework Association.

Background

Teleworking is not a new phenomenon, with substantial interest in recent years on its consequences for commuting travel. Why therefore is another study justified?

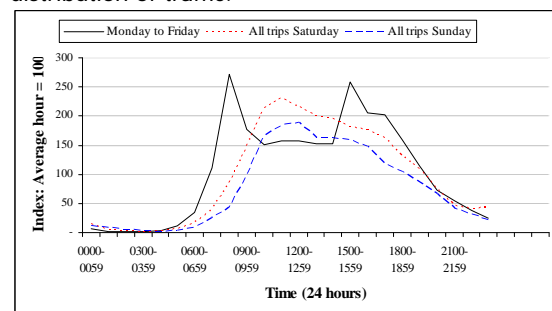
Lack of empirical evidence – The UK's Ten Year Plan for transport states that: "the likely effects of increasing Internet use on transport and work patterns are still uncertain, but potentially profound, and will need to be monitored closely".

Changing social trends – Women who now represent 46% of those in paid employment. Pressures of work are increasing – about a quarter of working men and more than one in ten working women are working more than 50 hours a week in the UK. It appears that (perhaps because of social and technological changes) teleworking is now coming of age. The UK Labour Force Survey revealed a 65% increase in teleworkers between 1997 and 2001.

Impacts of the information age – Much of the research into teleworking has pre-dated the mainstreaming of Internet use into society. The pertinence of new technologies (laptops, wireless Internet networks, broadband and 3G mobile phones) has enabled a real change in where people can work and the ways in which they can communicate and share information.

Past studies of teleworking have tended to label an individual as either being a teleworker or not; either teleworking or not teleworking on a given day. This project seeks to recognise that in practice, teleworking, and in particular, working from home

is not as absolute. Working patterns may involve working at home for *part(s)* of the day. Whereas working at home has typically been associated with removing the commute journey, part-day homeworking may *displace* the commute instead – with potential consequences for the temporal distribution of traffic.



Source: DfT, 2005

Objectives

- to gather longitudinal data nationally on the incidence of flexible working and specifically of ICT-dependent teleworking and the corresponding consequences for commuting in urban areas;
- to track the changing practice and nature of teleworking and associated travel for a selected sample of individuals;
- to determine how and to what extent the temporal and spatial constraints faced by individuals as a result of their employment and personal lives are influencing the propensity to telework;
- to establish the extent to which the attributes of the commute are causal factors in teleworking uptake;
- to assess the extent to which transport policy can therefore influence the incidence of teleworking; and
- to produce recommendations on the future importance of teleworking to sustainable urban transport and guidance, accordingly, on whether, to what extent and how government policy should respond.

Methodology

Early stages of the research involved a literature review and focus groups with individuals in paid employment. These informed the development of a 4-wave, yearly, national survey conducted via the

Internet (administered by GfK-NOP). This aimed to capture people's working and commute patterns for a chosen reference week. The first survey wave was completed in March 2005 (n = 1014). This was repeated in March 2006 (n=1015), March 2007 (n=1015) and March 2008 (n = 1002). Effort was made to retain individuals for all waves and to achieve overall samples representative of the UK population. 95 respondents took part in all 4 waves, with 864 taking part in more than one wave. Where people work both at the workplace and at home (for a minimum continuous period of 30 minutes), the study terms this "varied-spatiotemporal (VST) working" or part-day homeworking. VST working patterns can be classified as home-work ('H-W'), work-home ('W-H') and home-work-home ('H-W-H'). Qualitative interviews amongst Hampshire County Council employees were carried out in March 2007 to supplement the findings emerging from the survey - allowing key issues from the survey to be explored and understood in more detail. Below are the key findings from the two areas of research.

Survey key findings

Descriptive findings of the data have shown:

- The number of respondents who VST work and the frequency of VST working was higher than for whole-day homeworking (H) – more than double at 14% compared to 6%;
- Blue collar workers practice more VST working than whole-day homeworking;
- 'W-H' is the most common form of VST working; Monday is the most popular day for VST working; Friday is the most popular day to H work;
- There is evidence of some displacement of the commute when VST working is practiced.

Cross-sectional analysis of data from individual waves shows:

- More explanation is possible of inter-personal variation in H working than VST working;
- More explanation is possible for inter-personal *desire* to whole and part-day homework compared to *frequency of whole and part-day homeworking*;
- Four subjective statements are found to be associated with increased *desire* to both part-day and to whole-day homework: avoiding interruptions at work; avoiding wasted time in traffic; other household members appreciating the employee homeworking; and working longer hours;
- Employer support is found to be associated with an increase in H and VST frequency – with interruptions from work uniquely increasing frequency of VST working, and commute struggle uniquely increasing H working.

Longitudinal descriptives of four waves shows:

- Respondents who practiced neither form of homeworking in the reference week remained consistent over the 4-waves (at 82-3%);

- People who practiced both forms of homeworking in the reference week increased from 2% to 4% between wave 1 to wave 4;
- 7% of the panel changed their homeworking status between waves.

Qualitative interview key findings

A variant of VST was considered. BVST concerns working days in which at least 30 minutes of continuous work is undertaken at home as well as work being undertaken at business location(s) which may not include the usual 'workplace' (such as offsite visits, external meetings etc). Findings from the qualitative research include:

- VST working is distinct from overworking and is not seen by all as an elongation of overall working hours;
- BVST has emerged as more practiced than VST working;
- BVST can cause the removal of one or both commute trips while VST can only cause commute displacement;
- For some, the (perceptions of) stigma associated with VST inhibits more VST days, whereas for others the stigma of homeworking generally can be avoided when VST working;
- Working outside traditional hours of work is common. For most interviewees this was 'contained' in their overall worked hours - for others hours are not 'capped' in any case;
- ICTs are important in both (B)VST and H working; and
- Checking emails at home is generally considered work – even if it's a little as 5 minutes.

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