

## Briefcase travelling – time use and value

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### Overview

- The importance to transport and society of travel time use and its value
- A brief introduction to the orthodoxy of travel time valuation in economic appraisal
- Challenging the orthodoxy of economic appraisal and a focus on briefcase travelling
- Mixed-method findings on time use and 'value'
- Some implications
- Some concluding recommendations



## The importance of travel time use and its value

1. Assumptions about travel time importance (relative to other 'costs') are used in the modelling of individuals' travel decisions
2. Transport modelling estimates the level of use of the transport network by mode, route and time of day
3. Modelling is used to determine the total saving in travel time across all travellers attributable to a proposed transport scheme
4. The economic benefit of the scheme is then largely determined by assumptions about how much the saved time is worth
5. Politicians make transport investment decisions guided by cost-benefit analysis
6. Investment decisions shape the nature and use of our transport system
7. The nature and use of our transport system shapes the society in which we live



## A brief introduction to the orthodoxy of travel time valuation



## Key assumptions

- For travel in non-working time (including commuting) value of time reflects people's willingness to trade time for money
- "Time spent travelling during the working day is a cost to the employer's business. It is assumed that savings in travel time convert non-productive time to productive use and that, in a free labour market, the value of an individual's working time to the economy is reflected in the wage rate paid."

DfT (2004). *Values of Time and Operating Costs*.  
TAG Unit 3.5.6. Department for Transport.

- A constant unit value of time applies – regardless of size of travel time saving
- The treatment of travel time in appraisal has remained essentially unchanged for the last 30-40 years



## Values of time

	Resource Cost (£/hour)
<b>Working Time:</b>	
car driver	21.86
car passenger	15.66
PSV (bus) passenger	16.72
taxi passenger	36.97
rail passenger	30.57
underground passenger	29.74
walker	24.51
cyclist	14.06
motorcyclist	19.78
<b>Non-Working Time:</b>	
commuting	4.17
other	3.68

"For proposed road schemes ... although business travel by car only accounts for around one sixth of all traffic, it accounts for about half of the assumed 'costs' of travel time"

Mackie, P. J. et al (2003).  
*Value of Travel Time Savings in the UK*.  
Report to Department of Transport.

Appraisal uses a 'national average' value for equity reasons

DfT (2004). *Values of Time and Operating Costs*.  
TAG Unit 3.5.6. Department for Transport.



## Time is money

- "Travel time savings are the single most important component in the measured transport benefits/disbenefits of most schemes and policies. Hence the methods of valuing them critically affect the measurement of the economic impacts of schemes"

DETR (1999). *Transport and the Economy*.  
The Standing Advisory Committee on Trunk Road Assessment,  
October, TSO, London.

- Transport investment example:  
high speed rail from London to North England



**Costs**  
£8.4bn

**Benefits**  
£11.8bn



£8.8bn = time savings



[Atkins (2004). *High Speed Line Study: Summary Report*. Strategic Rail Authority.]



## Just to be clear!



Isn't it obvious that people  
do things with their travel  
time? Its not just wasted!

- Strictly speaking its not value of travel time but value of saved travel time
- It is sufficient for economic appraisal assumptions to hold true at the average



## Challenging the orthodoxy of economic appraisal and a focus on briefcase travelling



## Positive utility

- Positive utility is gained from one or more of three elements of a journey to a given destination:

- " 1. *the activities conducted at the destination;*
- 2. *activities that can be conducted while travelling;*
- 3. *the activity of travelling itself.* "

Mokhtarian, P.L., Salomon, I. (2001).  
How derived is the demand for travel?  
Some conceptual and measurement considerations.  
*Transportation Research A*,  
35, 695–719.



## Homing in on briefcase travelling

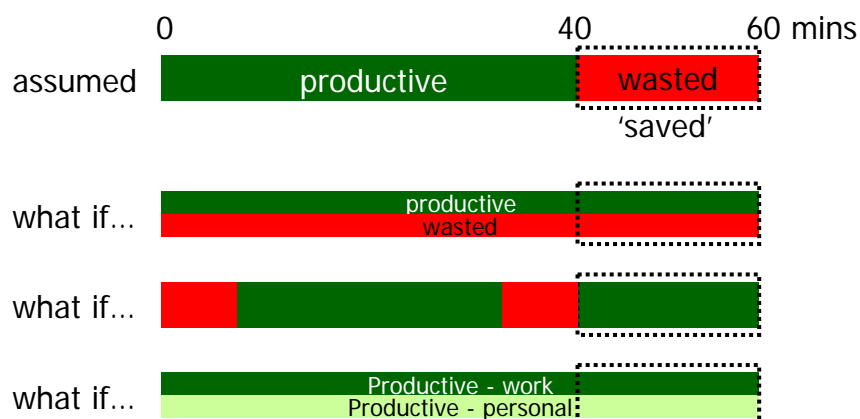
- Willingness to pay *should* account for any positive utility of travel itself
- Travel during the course of work includes people whose job itself is principally travel (e.g. goods delivery drivers, bus drivers) or who more evidently can only be productive once at their destination (e.g. service engineers)
- Briefcase travellers, meanwhile, are individuals with a form of work activity that lends itself to potentially being done while travelling
  - Acknowledged as the 'least robust' element of the orthodoxy

Lyons, G. (2006). Travel Time Use: Developing a Research Agenda, DfT.

- Rail travel as a case in point



## Challenging the orthodoxy – saved time not travelled time



And what if you take journey time saving to the limit?

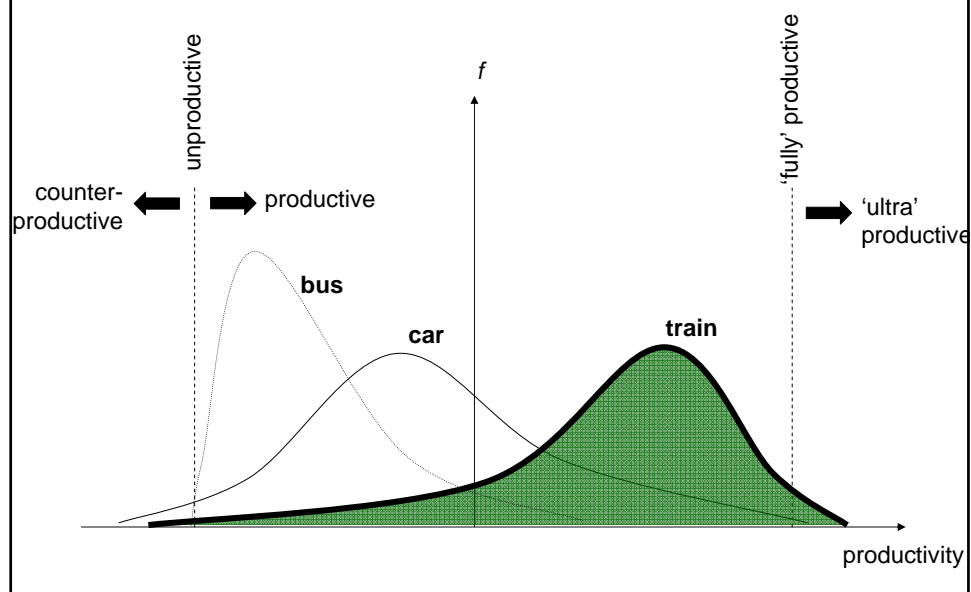




Not all train journeys are the same...



### Frequency distributions of 'productivity'



## Some mixed method findings on time use and value



## Some mixed method findings on time use and value

- National Rail Passengers Survey –  
Nov 2004; 26,221 responses
- Focus groups
- Travel ethnography





## NRPS – business travellers

- Is travel time wasted?
  - 1% indicated that the activity upon which most time was spent was 'being bored' (9% spent some of their time being bored)



## NRPS – business travellers

*% of 'most time' respondents*

Activity	Spent most time (%)	Spent some time (%)	I made very worthwhile use of my time (%)	I made some use of my time (%)	My time was wasted time (%)
Working/studying	31	51	42	54	2
Reading for leisure	25	47	23	63	12
Window gazing/people watching	13	53	12	58	28
Talking to other passengers	5	13	24	56	19
Sleeping/snoozing	3	13	15	57	27
Text messages/phone calls - work	2	22	39	58	2
Text messages/phone calls - personal	1	15	26	50	12
Eating/drinking	1	21	19	80	1

Employer's time or my time?

Don't judge a book by its cover

Time well spent – hardly wasted

Activity mixtures

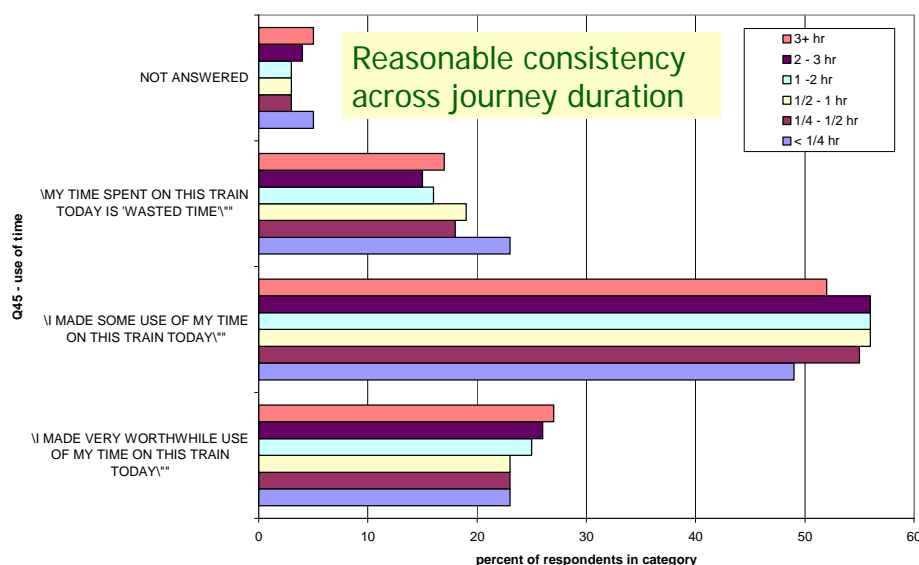
Horses for courses

## NRPS – business travellers

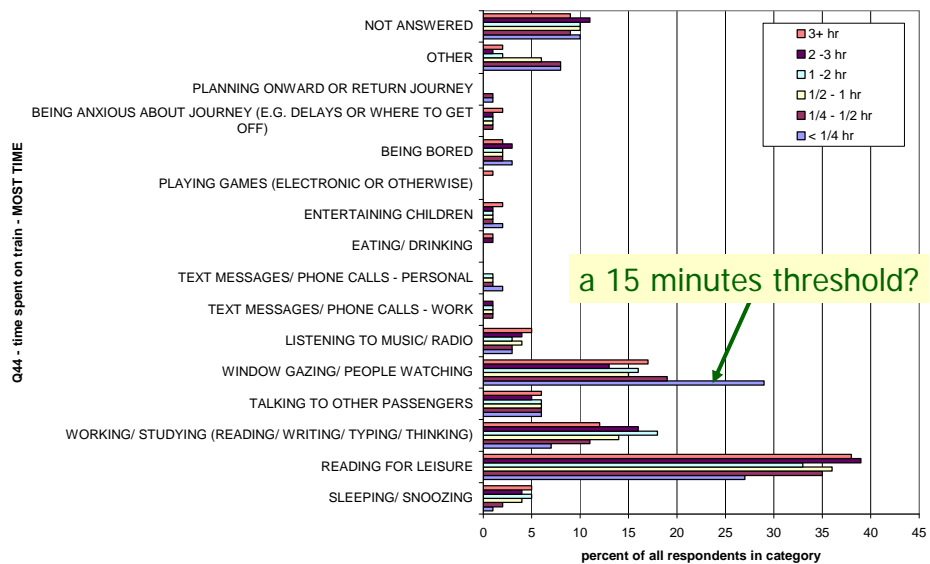
- *"in terms of your paid employment is there some work that could easily be undertaken on the train?"*  
YES – 86%
- Equipped for travel:  
Laptop – 20%; Mobile phone – 78%; PDA – 12%  
Less than half with these devices used them  
Using laptops/PDAs makes journeys better/quicker
- Those passengers [all journey purposes] who consider their travel time to have been wasted are more than twice as likely to have done no advance planning of their time use than those who consider their time use to have been very worthwhile



## NRPS – all travellers



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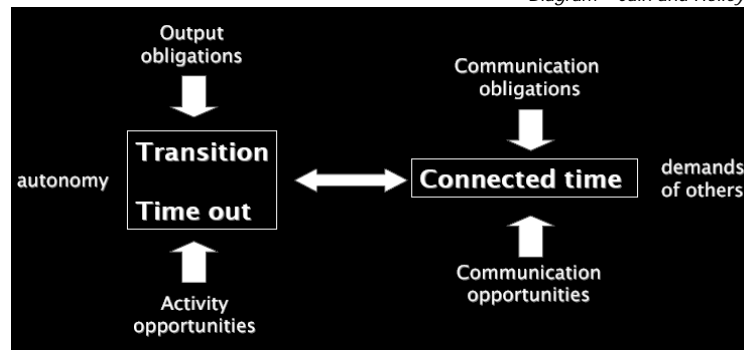
## Taking a closer look...



- The importance of reflection
- Ideal commute is about 20 minutes

## Taking a closer look

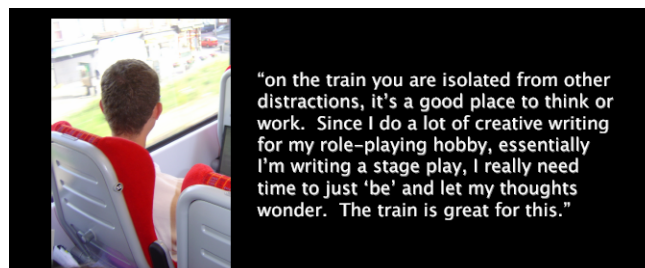
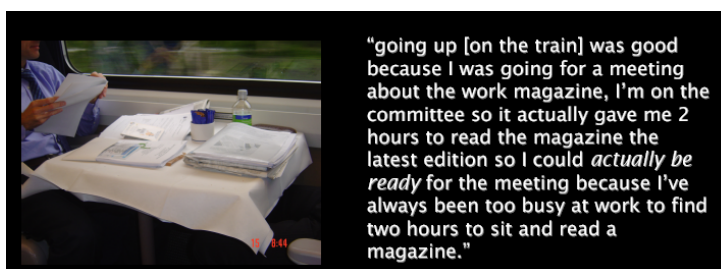
Diagram – Jain and Holley



- *transition time* - a need for experiencing distance and the opportunity for gearing up to the destination's demands; and
- *time out* - escape from the obligations created through co-presence or fixed space that enable *time for* a 'back-stage' time to be oneself or a specific activity (e.g. reading)
- Connected time or infected time?



## Taking a closer look



## Taking a closer look

### ■ First class rail travel:

"Fellow travellers fluctuate between spans of concentrated effort to window gazing, watching others, responding to the constant offers of tea and coffee and checking their phones for messages. This restlessness and flitting suggests that even in the most idealised journey space, i.e. first class rail, assumed sustained concentration is an unnecessary myth. There is a need to make breaks and intermingle business with relaxation and play. Some travellers are obvious in their withdrawal into leisure time with iPods (or similar), DVDs and leisure reading, and only rarely does a passenger spend the entire journey gazing out the window and watching others, although a few do sleep."



## Taking a closer look

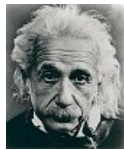
### ■ First class rail travel:

"As we move towards London and 'office hours' the 'work' calls begin and people orientate themselves into the working day. There are rituals of ordering, sorting, packing, and connecting. In the final fifteen minutes, as the train moves through the London suburbs, where delays sometimes occur, there is a sense of suspended time – a legitimate time to idle or fritter. Mobile phones are rarely packed away, but are poised just-in-case, then picked up at the last moment. A few people continue to work for a few minutes after arrival and then quickly pack bags as the train crew clean up around them."



## Taking a closer look

- Travel time is experienced as stretched or compressed
- Being equipped for being on the move and for waiting
- The unpacked traveller
- Infecting and being infected



*" When you are courting a nice girl an hour seems like a second. When you sit on a red-hot cinder a second seems like an hour. That's relativity."*

**Albert Einstein**

## Some implications

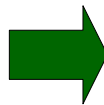
## Measurement is difficult

- Is there a plan B for transport appraisal?
  - An alternative to the wage-rate approach was proposed by Hensher and has been examined
  - Value of time is straightforward in the wage rate approach
  - Measuring productivity of travel time in the knowledge economy is difficult
  - Clock time versus task time – when should willingness to pay and when should the wage-rate approach apply?
  - A persisting dilemma: a questionable orthodoxy versus an unmeasurable alternative?



## Individualised travel time use planning

### The travel remedy kit



- Should travel time be infected?
  - It is becoming increasingly difficult to be 'away' from the office
  - Travel time has an importance for discovery and reflection
  - Travel environments can be fluid and sometimes thus unpredictable
    - infected by sights, sounds and smells

## Passengers versus drivers

- For **shorter journeys** it could be suggested that transition time rather than time out/time for prevails
  - it may be more difficult for collective transport to secure more market share in this context (depending upon what time uses constitute transition time)
- For **longer journeys** (briefcase travelling especially) there appears a clear role for employers
  - to encourage greater consideration and use of collective transport by employees
  - to encourage better employee planning of travel time use
- Beware the implication that investing in roads is better value than investing in rail! (see slide 33 also)



## Remarketing public transport

	Car (driver)	Train	Bus	Plane
Thinking	✓	✓	✓	✓
* Writing/typing	✗	✓	?	?
Talking	✓	✓	✓	?
Listening	✓	✓	✓	?
* Reading/watching	✗	✓	✓	✓
* Sleeping/resting	✗	✓	?	✓
Exercising	✗	?	✗	✗
Eating/drinking	?	✓	?	✓

- \* Time uses where the single occupant car cannot compete



## Using time versus saving time

- Cannot the same effect as saving 'wasted' travel time be achieved by making travel time itself more worthwhile?
  - We should be valuing travel time **used** as well as or instead of valuing travel time saved
  - It should also be noted that travelling slower rather than faster can reduce carbon emissions
- A dilemma is presented:
  - Facilitating travel time use could be encouraging more mobility (e.g. the growth in long distance commuting - 1 in 20 rail commuters mostly sleep/snooze)
  - yet achieving (greater) positive utility of travel could reduce the generalised cost for those travelling (more)
- A need perhaps to lock in the benefits



## Some concluding recommendations



## Concluding recommendations (1 of 2)

1. Briefcase travelling should be reconsidered – assumptions are unlikely to hold true at the average - [see next slide](#)
2. Notions of clock time in appraisal should be reviewed
3. Investing in schemes to save travel time should be weighed against investing in schemes to make sure travel time is well spent
4. Travel time use benefits should be 'locked in' to discourage increases in travel time budgets



## Reconsidering business travel time in appraisal – the saga continues

- 2004-2007 – “Travel time use in the information age”  
(study by UWE and Lancaster University – EPSRC funded)
- 2005 – “Travel time use: developing a research agenda”  
(experts’ workshop organised by Glenn Lyons – DfT sponsored and hosted)
- 2006 – “Exploring the relative costs of travelling by train and by car” (Napier University – on behalf of Virgin Trains)

↓ DfT prompted to commission new research

- 2008 – “Productive use of travel time and work value of travel time saving” (Mott MacDonald and partners)
  - Emerging results presented at European Transport Conference
  - Indications from above research broadly endorsed
  - Researchers suggest current cost-savings approach be replaced



## Concluding recommendations (2 of 2)

5. The multi-modal market for different travel time uses (thinking, reading, sleeping etc) should be further examined (especially for car) to help adapt and promote alternative modes to the car
6. Employers could improve their business efficiency and environmental credentials by introducing individualised travel time use planning
7. Travel environments must be (further) developed as spaces for activity time rather than (only) people movement
8. Trend data are needed to better understand and monitor travel time use phenomena



## Acknowledgements and further reading

- "Travel time use in the information age" was sponsored by the EPSRC; project team: Glenn Lyons, John Urry, Juliet Jain, Laura Watts and David Holley

- Further reading:

- Lyons, G. and Urry, J. (2005). Travel time use in the information age. *Transportation Research*, 39(A), 257-276.
- Lyons, G., Jain, J. and Holley, D. (2007). The use of travel time by rail passengers in Great Britain. *Transportation Research*, 41(A), 107-120.
- Lyons, G., Holley, D. and Jain, J. (2008). The Business of Train Travel: A Matter of Time Use. In Hislop, D. (Ed). *Mobile Work/Technology: Changing Patterns of Spatial Mobility and Mobile Technology Use in Work*, Routledge.
- Travel Time Use: Developing a Research Agenda  
<http://www.dft.gov.uk/pgr/economics/rdg/reportonworkshoptraveltimes1081>
- [www.traveltimesuse.org](http://www.traveltimesuse.org)

