

How can travel time use affect transport strategy?

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Whose transport strategy?

- **Government**
 - Reducing adverse impacts on the *environment*; improving *safety*; improving transport' *economic efficiency*; enabling *access* to locations and facilities
- **Transport service providers**
 - Vehicle sales; fare-box takings
- **Employers**
 - Productivity of staff; staff morale and retention

Overview

- Four guiding questions:
 - Is travel time, savings in which have been taken to constitute the main benefit of new transport schemes, misrepresented in transport appraisal?
 - Could enhancements to travel time use enabled through information and communications technology (ICT) be helping to perpetuate a culture of (hyper) mobility?
 - Does the notion of productive travel time use point towards an opportunity for collective transport modes to secure greater market share?
 - What are the logistical and design constraints upon productive travel time use?
- Concluding recommendations

Transport Appraisal

A brief overview

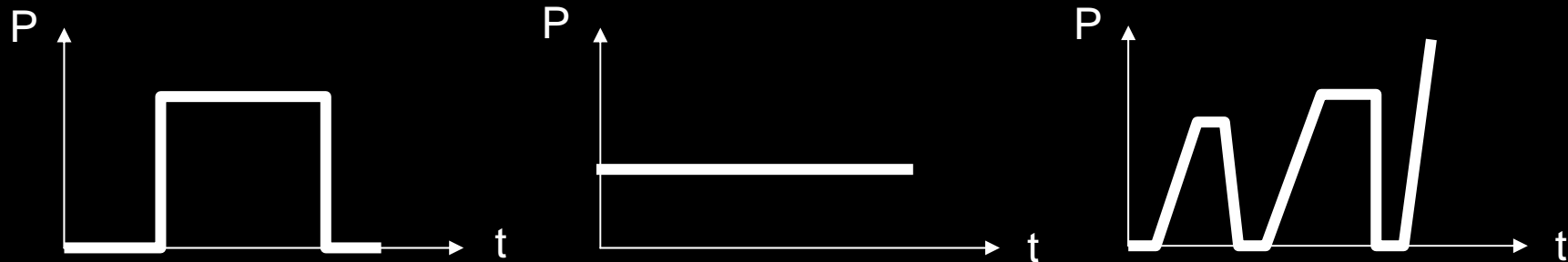
- Travel time *savings* form a major element of the *monetary* benefits of most transport scheme investments
- Assumptions infer that travel time is wasted/unproductive – strictly speaking assumptions refer to *travel time savings*
- Value of (saved) travel time:
 - during the course of work based on wage rate for mode (e.g. for rail - £36.96/person/hour)
 - outside the course of work based on equity value of willingness to pay (e.g. for commuting - £5.04/person/hour)
- Whatever the amount of time saved, the unit value remains the same

Appraisal appraised (1 of 4)

- The orthodoxy of appraisal is ‘least robust’ for the briefcase traveller
- Boundaries between work, leisure and family time are (increasingly?) blurred
- Industrialisation and clock time are less relevant (though not irrelevant): in a *task-based* knowledge economy who own’s which time?
 - A matter not of where or when time is being used but what it is being used for
 - The answer is needed to determine when different VOTs (wage rate or willingness to pay) are assumed to apply (if they do at all)

Appraisal appraised (2 of 4)

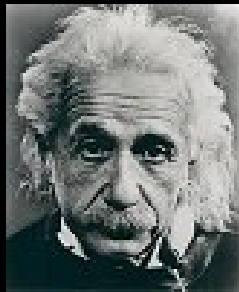
- Would saved time have otherwise been wasted?
 - This depends on how time is used and how productivity (economic and 'social') is constituted/measured over time



- The case for the answer being 'yes' seems no stronger than that for it being 'no'

Appraisal appraised (3 of 4)

- Do we really understand willingness to pay?
 - People think about travel time on different levels
 - ‘Transition time’ and ‘time out/time for’
 - Clock time versus sense of time



“ 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.”

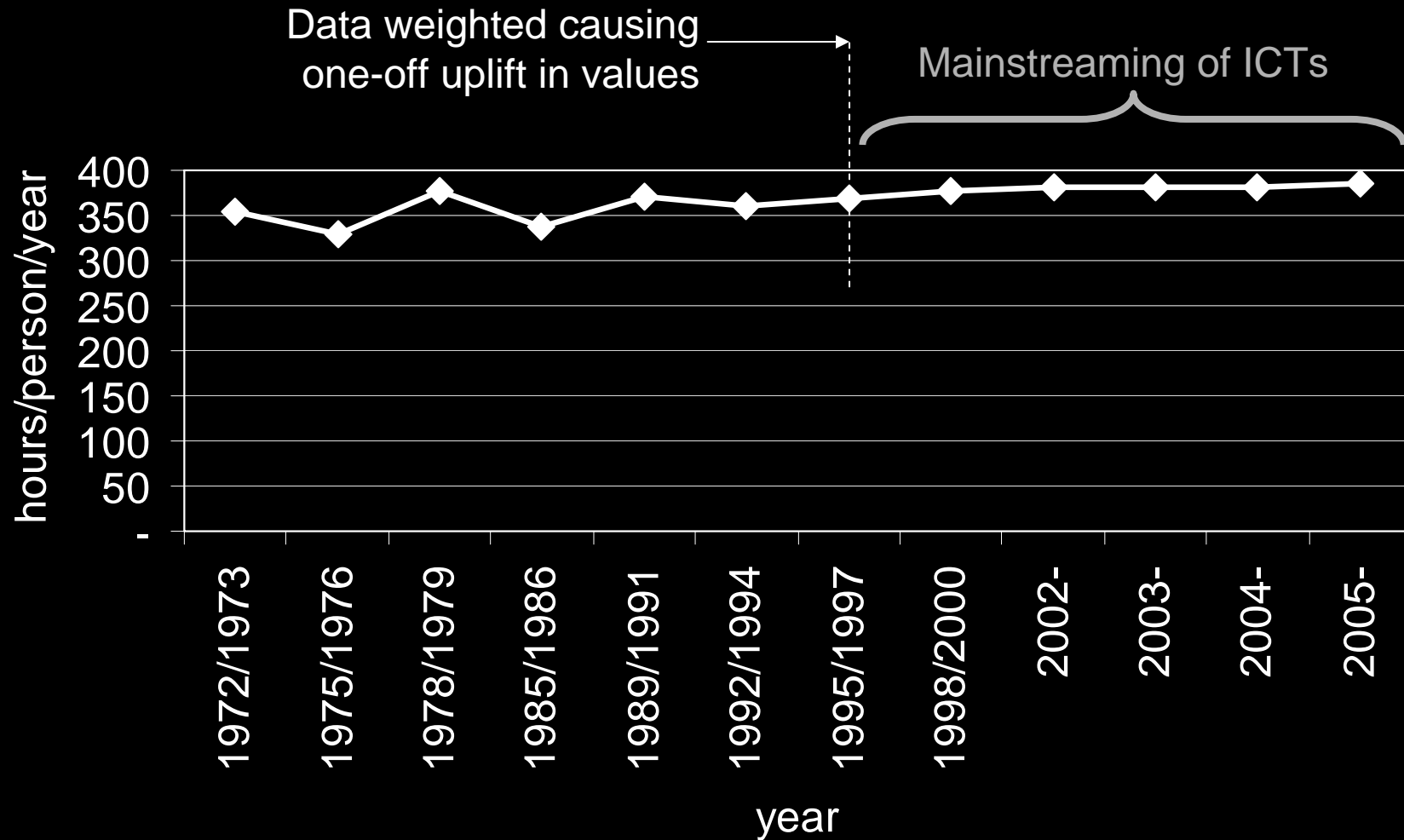
Albert Einstein

Appraisal appraised (4 of 4)

- 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
 - Saving 'clocked' travel time versus compressing experienced travel time versus enriching experienced travel time
- Assumptions are sufficient if they hold true at the average
 - Is this the case in light of the above?

Perpetuating (hyper)mobility?

Travel time constancy?



4.3% increase from 1995/97 to 2005

(3.9% decrease in number of trips; 7.8% increased in average trip length)

Journey duration (1 of 2)

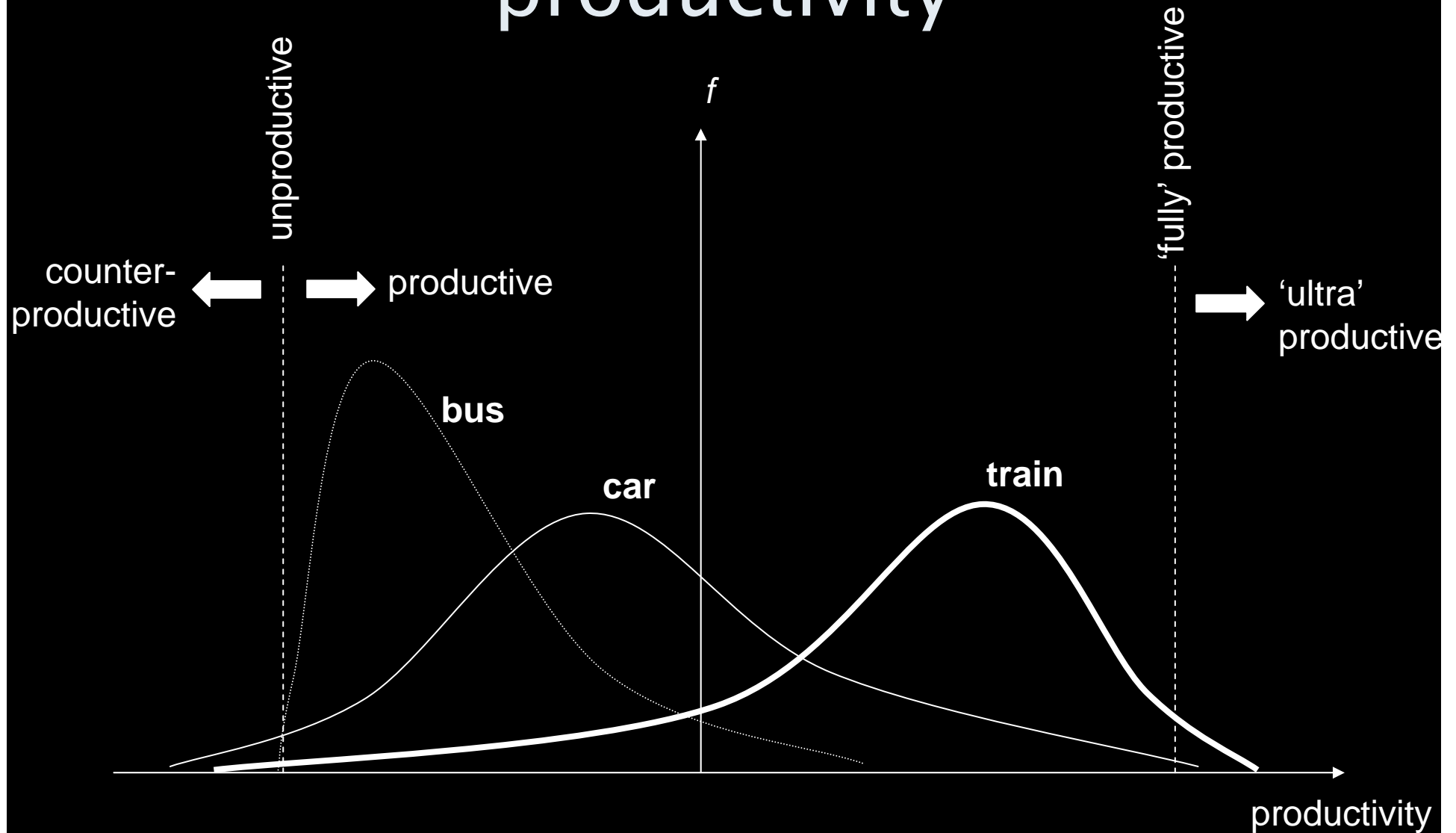
- Evidence of modest increase in time spent travelling *at the aggregate*
 - Not clear this can be attributed entirely, directly or at all to positive utility of travel or to the rise of the information age
 - However, shape of distribution and trends across people/journey purpose/mode types could be changing - longitudinal analysis of NTS data sets could be insightful
- There is evidence to suggest that some travel is desirable
 - Transition time, time out/for; the 20 minute 'ideal' commute
 - Thus in the limit of all travel time being saved, appraisal assumptions and VOTs would not hold true

Journey duration (2 of 2)

- We can suggest that travel time use can *facilitate* increases in travel duration at the level of the individual
 - But increases would arise for other reasons (e.g. changes in spatial separation of home and workplace)
 - The nature of travel time use could change the perception of journey times and make longer journeys more bearable (e.g. sleeping on the commute – 1 in 20 rail commuters mostly sleep/snooze; 1 in 5 spend some time doing so)
- A dilemma is thus presented:
 - facilitation could be encouraging more mobility (e.g. the growth in long distance commuting)
 - yet achieving (greater) positive utility of travel could reduce the generalised cost for those travelling more

Collective transport's market share

Frequency distributions of 'productivity'



Boiling down travel time uses

	Car (driver)	Trai n	Bus	Walk	Cycl e	Plan e
Thinking	✓	✓	✓	✓	✓	✓
* Writing/typing	x	✓	?	x	x	?
Talking	✓	✓	✓	✓	?	?
Listening	✓	✓	✓	✓	?	?
* Reading/watchin g	x	✓	✓	?	x	✓
* Sleeping/resting	x	✓	?	x	x	✓

Exercising	x	x	x	✓	✓	x
Eating/drinking	?	✓	?	✓	?	✓

* Time uses where the single occupant car cannot compete

Passengers versus drivers (1 of 3)

- Passengers can (and drivers cannot):
 - write/type
 - read/watch
 - sleep/rest
- What rail passengers spend most time doing on a journey:
 - reading for leisure – 34%
 - sleeping/snoozing – 3%
 - working/studying (reading, writing, typing, thinking) – 13%

Passengers versus drivers (2 of 3)

- Could travel time uses partly explain the increase between 1995/97 and 2005 of 24% in trips by rail and the 39% increase in distance travelled by rail?*
- We don't have comparable data for car users and don't know from NRPS how travel time use has influenced mode choice
- Note that between 1996 and 2005 rail's share of all trips has only increased from 5% to 6% **; as at 2005 rail's share of trips of 50 miles or more was 9% compared to 45% for car/van driver (and 32% for car/van passenger)***
- Note that 68% of all trips are under five miles; 84% are under ten miles***

*Source: Transport Trends 2006 ** Source: Transport Statistics Great Britain 2006

*** Source: National Travel Survey 2005

Passengers versus drivers (3 of 3)

- 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
- Walking and cycling need more research

Logistical and design constraints

Assisting travel time use

(1 of 3)

- It is important to recognise that travel time and activity time are not (any longer) separate or mutually exclusive
- The information age is visibly impacting upon travel time use
 - 1 in 5 rail passengers think having electronic devices with them makes the spending of travel time a lot better and nearly half think time seems to pass more quickly
 - However, the majority of rail passengers (60%+) equipped with ICTs (laptop/PDA/mobile phone) do not use them
 - Pen and paper remain popular – travel time use is not new (though it may be relatively new to our *understanding* of travel)
 - We do not yet know how the significance of ICTs is changing over time

Assisting travel time use (2 of 3)

- Equipping people for time use appears key
 - Individuals can benefit from being equipped themselves with ideas and artefacts
 - They can further benefit if the travel environment is compatible with the use of such artefacts
 - Artefacts can help overcome limitations of the travel environment
 - ‘Individualised travel time use planning’ can help people question and change their behaviours and habits
 - A traveller needs to be in an unpacked state to make effective use of time

Assisting travel time use (3 of 3)

- 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
- Perceived journey durations can be stretched or compressed

Concluding recommendations (1 of 2)

1. Notions of clock time in appraisal and measurement of willingness to pay should be reviewed
2. Briefcase travelling should be reconsidered – assumptions are unlikely to hold true at the average
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

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. Marketing of travel time use as a lifestyle accessory should continue to be enhanced
9. Trend data are needed to better understand and monitor travel time use phenomena