

## A comment on 'The Myth of Travel Time Saving'

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18 June 2008

The matters of saving travel time, using travel time and valuing travel time have constituted an interest I have actively engaged in researching over the past four years. Presented with the privilege of being one of the reviewers for David Metz's paper, I instantly took a liking to it: for me it harnessed two key strengths, namely that it was prepared to challenge orthodox thinking in a crucial area for the development of transport and society and that it did so in a clear, coherent and accessible way that hopefully encourages a wider constituency of researchers, practitioners and policymakers to engage in ongoing deliberations around this topic. What is so intriguing and challenging about travel time in terms of policy and appraisal is that a consensus of understanding and interpretation does not exist in the intellectual debate and yet the orthodox accounting for travel time in appraisal, in particular, has endured for some four decades. I had the privilege of convening and reporting upon a workshop in the UK in 2005 which brought together many of the individuals, including Metz, who have engaged in the debate – some subscribing to orthodox thinking and practice; others contesting it. The report sits quietly on the Department for Transport's website should the reader have an interest in probing further<sup>1</sup>. One important point, which has stuck with me, was made at that workshop by John Bates – a staunch contributor to and supporter of current approaches to valuation and appraisal of travel time savings. He expressed his frustration at the *misconceptions* that prevail in and which hamper the intellectual debate – such misconceptions can distract from being able to identify the truly contestable propositions and arguments. A good example of this, from my own point of view is the following. In UK transport appraisal, travel time during the course of the working day is assumed to be unproductive and thus any saving in travel time results in a conversion of unproductive time into productive time with a unit value based upon wage rates. The misconception in this instance is that appraisal is valuing travel time – which evidence shows increasingly *can* be used productively<sup>2</sup>. In fact appraisal is valuing travel time *savings* – a rather different matter. The contestable proposition then becomes that of whether there is an overlap in practice (at the aggregate) between the proportion of time used productively (fully or partially) on a journey and the proportion of time that could be saved on such a journey if investment in a transport scheme were made.

This is an area in which the arguments and counter-arguments can be both compelling but also subtle. What is clear is that there is more riding upon the debate than only the pursuit of the intellectual high ground. As Metz points out in his paper, £100 billion has been invested in highway infrastructure in the last 20 years in the UK – with a substantial justification for such decisions arising from the core proposition that travel time is being saved and that this results in a positive contribution to the economy. This investment has impacted on our dependence upon

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<sup>1</sup> <http://www.dft.gov.uk/pgr/economics/rdg/reportonworkshoptraveltimeus1081>

<sup>2</sup> See, for example, 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.

motorised mobility, upon patterns of land use and patterns of travel – and in turn upon the environmental sustainability credentials of transport. In short, the shaping of society itself has been substantially influenced by our addressing of travel time; and the future shaping of society is now also at stake.

I am attracted to the invitation in Metz's paper to reflect upon the counterfactual – what sort of society would we now be living in had an argument been made and won 40 years ago that saving travel time was a myth and thus making major investment decisions on the basis of making journeys quicker was considered ill-advised and rejected? Would economic growth have been adversely affected? Would we be living in a happier, healthier more socially cohesive society? I do not have the answer. And I'm not sure economic appraisal does (or is meant to) either. The problem, it appears to me (though I may be told I'm guilty of a misconception!), is as follows. A key contention is that it *is* legitimate to value travel time savings even if saved travel time is reinvested in more travel because this is the *choice* of the consumer.

I cannot fully agree with this - the matter of choice is not as straightforward. We are not only dealing here with an individual preferring a quicker journey to a slower journey for a given origin and destination or being able to choose to travel to a different destination further away at higher speed and thus in the same time. Suppose a transport scheme improves speed of access to existing sites of consumer preference for shopping, but also makes possible access to a more distant and more attractive larger shopping facility. Many consumers may choose to travel further to access this larger facility. Others may choose *not* to and wish to benefit from quicker journeys to their existing sites of preference. However, once such sites disappear as their business case crumbles due to the loss of trade to the larger facility and its economies of scale, consumers then find it *necessary* to travel further to the new site – the level of discretion in the choice making is reduced. Indeed for some, independent access to shopping facilities may be seriously impaired by such a development if they cannot access the larger facility at reasonably cost, in reasonable time and with reasonable ease. This is the problem – there are secondary and unintended effects of travel time savings which change the pools of social practice and change the opportunities that present themselves to individuals. For this reason I believe there is merit in one of the concluding possibilities to Metz's paper – namely that “standard CBA [cost benefit analysis] is not a reliable guide to the value [to society] of infrastructure investment and arguably should be abandoned”. Current economic appraisal of transport schemes is not capable of reflecting the true value to society of travel time savings from transport schemes – irrespective of whether travel time is reinvested in more travel – because we do not adequately understand what comprises that value or how it comes about. Of course this is a bitter pill to swallow and leaves us with the dilemma of what we would do instead. Metz points to one possibility which is, instead of attempting CBA for transport schemes, to assess the cost-effectiveness in achieving policy objectives.

What might then be a scenario which could be considered that would (re)shape policy objectives in a brave new world where the sanctity of values of travel time saving as the pillar of economic appraisal was put to one side? Here is my own view. Economic and social prosperity is underpinned fundamentally not by motorised mobility but by *access*. We have come to rely upon motorised mobility to gain (and enhance) access because speeding up travel (because of motorised mobility!) has imposed a greater need to transcend distance as patterns of land use and activity have been changed. However, land use continues to change and we are now also living in an age where we can (sometimes – perhaps often) transcend distance using telecommunications to gain access. Thus land use change and virtual mobility could provide the

equivalence of savings in travel time that economic appraisal has concerned itself with for transport schemes. We should recognise that constancy of travel time at the average means our investments will either create a greater dependency upon motorised mobility which is environmentally unsustainable or could create a lesser dependency upon motorised mobility as land use patterns and the distribution of means of access are encouraged (in pursuit of economic prosperity) to change – presenting in turn a prospect for changes in the relative suitability and attractiveness of non-motorised means of travel. Meanwhile, with the reduction in the importance of travel time saving should come a greater importance attached to ‘valuing’ travel time use thus leading to efforts to improve the quality rather than the quantity of (motorised) travel.

A final point I would end upon concerns the distinction between travel time amounts at the aggregate versus those at the level of the individual – something Metz also highlights in his paper. One of the key qualifications of appraisal of travel time savings is that its assumptions are argued to be ‘fit for purpose’ if they hold true at the aggregate – appraisal is concerned with the overall effect not the distribution of effects across the travelling population. Yet to begin to more fully appreciate the true/full consequences at the aggregate of making it quicker to get from A to B by investing in transport – in particular the matter of accessibility as considered at length in the paper – we must devote attention to improving our understanding of how individuals’ choices, opportunities and patterns of behaviour are changed. Underneath the aggregate/average lies a distribution of behaviours across the population and when the aggregate is considered over time (as in Figure 1 in Metz’s paper) there are the churn effects of the behaviours of individuals also changing in response to key life events, life course and other external stimuli.

One outcome of this paper and our reflections upon it will undoubtedly be to (temporarily) resurrect attention and interest in the topic and to underline differences of opinion. The challenge is to move the debate further forward so some points of resolution can be reached. This demands that serious research attention be given to gathering new empirical evidence. Indeed what is implied is the need not simply for a ‘light touch’ research project but for a substantive programme of research. This must surely be warranted given the magnitude of the implications in terms of investment decisions and the shaping of society.