TransportPlanning *Society*

Response to DfT consultation on Wider Economic Impacts

Introduction

We welcome DfT engagement over the last two years and TPS members have participated in several of the expert advisory meetings. However, we would like to see the results of those discussions better reflected in either the main documents themselves, or, if the Department does not agree, see the issues addressed directly in those documents. The main focus of this submission is what has not been done and should be done before consideration of some of the more esoteric arguments. For example, "static clustering" sounds very intriguing, but what does it mean in practice? How close do two distant places have to be before they become a static cluster? Is it a cliff edge at, say 15 minutes (e.g. "the Square Mile"), or is it applicable at any distance? Moving from the document to TAG Unit 2.4, para 2.5 it is clear that these issues are not fully addressed. There is a distance decay function which is derived from a 2009 study and its impact is not very transparent – it should have been accompanied by some worked examples to have any real meaning. There does not appear to be a threshold. Do we have anything like enough data to produce the equations presented?

While the arguments for densification of urban clusters, usually based on walking proximity, are well established (as in para 3.8), static clustering is in our view unproven. There is a difference between the term "agglomeration" and static clustering. There is also the major issue of de-agglomeration caused by increasing the attractiveness of out of town locations for businesses, most of which according to the DfT document would benefit by being close together. This brings in the whole question of land use planning. The document recognises its importance, but does not seem to bring it to the heart of appraisal. These issues were raised at the expert meetings by TPS members and many others.

The guidance makes it clear that Wider Economic Impacts (WEIs) are still seen as additional to user benefits ("arising from distortions or market failures"). A significant number of TPS members (26%) now express a preference for an approach where all time savings are replaced changes by changes in accessibility (or connectivity) to employment, services and other people – i.e. a metric representing the actual impact on people's choices. This removes a certain distinction between user benefits and WEIs because the metric for calculating impacts would be the same. Alternative valuation mechanisms exist for calculating the value of connectivity to firms and individuals (e.g. WTP or through property or land values etc). In this case WEIs are essentially just positive externalities of the change in connectivity.

There are in our view several points to consider with regards to connectivity as the main metric:

- Should be multi-modal improving strategic connectivity by some modes will often reduce local connectivity
- Changes to land use (or service provision) and transport should be evaluated on a common basis
- How should we consider longer term shifts in travel patterns and location choice, which may erode the connectivity benefit over time (see issues 1 and 2 below)?

• How do we deal with marginal utility? For example if I currently have no local shop within 10 minutes' walk, I would probably value a new shop or a new link that gives me access to such a facility within 10 minutes' walk. But if I have access to three already, do I value the fourth as much as the first?

We are not offering detailed rewrites for the WebTAG guidance, and several of the general aims of the document are useful. However, the interpretation of wider economic impacts seems to be a one way street – only the benefits appear to make it into the guidance. We therefore wish to draw attention to the following issues which we consider essential to achieving genuine value for money and which need to be addressed.

Issue 1 The fixed travel matrix and demand management

This is referred to in the documents but not really addressed. It seems to us the heart of the matter and has two parts: demand management and land use interactions. The fixed approach is displayed in the Diagram on page 10, para 2.1. This shows the impact of transport investment in a fixed matrix with perceived cost 100% equalling total cost. This is patently not the case with transport, and it is particularly not the case for road transport.

Demand management, and road pricing in particular, is the elephant in the room. Why is this of crucial importance? At the risk of repeating the obvious we summarise the key impact of unmanaged capacity increases, in this case for road.

The pool of potential demand is very high, third party costs are high and not reflected in marginal user cost. In most congested conditions the addition of one vehicle will have costs to other users much greater than the benefits of that journey to the additional user. Thus, when costs are reduced through transport improvement, some of those journeys not valuable enough to be made without the improvement will be made and costs for existing users will rise back up to previous levels. Because the new trips may have different routes, some existing users will suffer worsening journey times. Similarly, some existing users may re-route their journey so that total congestion goes up even if they perceive a benefit. Pricing can address this directly, but there are a range of transport planning programmes which can address this indirectly, for example restriction of parking in new developments, residential or employment only access schemes, and a whole range of encouragement for sustainable alternatives which we do not elaborate in this response. A great of transport planners' work is in these areas. One problem is that the relative attractiveness of what are often called sustainable alternatives is reduced when less sustainable modes are encouraged.

Perhaps this is the reason that the first choice in our annual members' survey is for road user charging as a revenue raising instrument (followed closely by Lorry Road User Charging). In aviation, 43% said that taxing aviation properly would manage demand such that new capacity might not be needed. If it were, they stressed the need for regional development in preference to building more capacity in the South East.

The generated traffic which is caused by reducing marginal user cost, and the net social loss effect, has been well documented for decades so to seek to add rather tenuously evidenced economic benefits (see later) while ignoring this key factor is not something we wish to support.

This does not mean that TPS opposes building new or improving existing infrastructure. What is frustrating is the lack of understanding and overall framework which should underpin the design and appraisal of such infrastructure. In a complex developed economy, whether it energy, water or

transport, demand management will have to work alongside and integrated with infrastructure improvement.

2 Long term effects and land use

The second issue with the diagram is that land use change is not included. It is referred to in the documentation but we remain convinced that these effects are not fully incorporated into the appraisal framework for transport. This would not matter if only the short term costs and benefits were being considered, but appraisal now runs for 60 years. It is unlikely that time savings will persist after even a few years, let alone for 60. Again the issues over time savings have been discussed before and the key issue of the valuation of small time savings, and (as far as we know) the unevidenced increase of that value in line with forecast GDP. The latter undermines the impact of discounting and produces a benefit to cost ratio which relies heavily on far distant benefits between 30 and 60 years from scheme opening (itself a few years away).

One key problem is that it seems extraordinary to us that the "unclustering" of businesses, which is the direct result of land use change brought about by some (but not all) transport schemes, is not to be counted. This also applies to choice of where to build new homes. Land is often cheap because it is not well located in transport terms. A planned development which seeks to minimise the need to travel and when travel is necessary, particularly to work, it can be made most easily by sustainable modes is totally different from green field sites planned with local road links which take little account of wider area congestion. The latter may be dubbed a "dependent development" and its value added to the appraisal. The lower cost to the developer of such sites is more than likely outweighed by the costs falling on society as whole. This is the fundamental reason for undertaking appraisals which capture such factors and make them explicit.

To be fair to Department, their emphasis on producing a narrative and explaining economic linkages is welcome. It will important that this process remains evidence based and not simply assert that economic benefits will occur.

A final but crucial point is that, while a market will always be imperfect if the user cost does not represent the total cost (including social and environmental costs), it will also be imperfect when policy is applied for what may be very good reasons. Thus it will be imperfect when policies are implemented to address social cohesion and social equity – both factors which in recent times have proved themselves very dangerous to ignore.

Issue 3 Health impacts

In terms of wider impacts the omission of health disbenefits from motorised travel is very striking. These have a major economic as well as personal cost. Again this seems odd especially since the benefits of non-motorised travel are now counted and DfT has produced an easy to use toolkit. If attracting people to walking or cycling (often, though not always out of cars) is good for them, surely attracting them away from walking or cycling is bad for them? A recent study of London Travel Demand Survey data found that car ownership was the most powerful determinant of physical activity from a range of demographic or socio-economic variables¹. What is needed is a properly structured approach which looks at different purposes and modes and there a lot of useful data collected from sustainable transport schemes which is available through programmes such as LSTF

¹ Fairnie et al (2016) Active travel in London: The role of travel survey data in describing population physical activity. Journal of Transport & Health 3 (2016) 161–172

monitoring. Again this was raised at the DfT consultation meetings. In the TPS annual survey, the single most popular reform to appraisal was *Counting positive and negative health impacts (e.g. the disbenefit of car dependency)* with 69% of respondents choosing this as priority for change.

Issue 4 Distribution impacts

The aggregation of social costs and benefits and the application of the Pareto principle has been much criticised and its origins were in a time when decision making was seen as completely arbitrary and in desperate need of some rational basis. However, recent political events here and elsewhere in the world have exposed in a very direct way the flaws inherent in aggregating the willingness and ability to pay and the combination of small but widespread benefits to justify large disbenefits for a few – or worse for a substantial minority already disadvantaged. This was always known in relation to social cost benefit analysis and needs to be taken into account by proper distributional analysis. The section on regeneration is not adequate in this regard.

Issue 5 Multi-modality: London experience

A few insights can be gained from the application of the WEIs methodology to transport schemes in London. The approach is in theory multi-modal but the old guidance on weighting average generalised costs by mode was poor. The experience of London users has been that WEIs for certain schemes are wildly different depending on the weighting method adopted.

The new clarification in Unit 2.4 appendix E is better, but needs to be more explicit on the role of public transport and active modes for the agglomeration effects on service industries in urban areas (those with the highest agglomeration elasticity). This is relevant in London where investment in some active travel schemes (e.g. Cycle Superhighways, Rotherhithe to Canary Wharf bridge) is explicitly aimed at encouraging mode shift to free up capacity on public transport, thus increasing labour market access for clusters with extremely high GVA per capita and high agglomeration elasticity.

A major omission in the analysis of productivity in high value clusters is the role of density (the other side of the equation – labour market access through public transport connectivity – is largely covered). Although public transport capacity is not mentioned explicitly, this was actually the main reason for some of the agglomeration research started for Crossrail. The actual evidence on economic clustering has a clear narrative about the factors driving higher productivity in these clusters². The most obvious examples are in London with the Square Mile, Temple, Mayfair, Canary Wharf, Fitzrovia and Tech City where specialised firms locate within easy walking distance of each other, benefitting from formal and informal synergies between firms. In practice, 'density' is actually just a generalised cost matrix of walking but this is not considered at all.

As a general point, the hypothesis with which the DfT appears to approach its research on agglomeration is that inter-urban roads (and rail) improve connectivity and create higher productivity. However, as shown repeatedly in the analysis of GVA per head in the UK and the highest growth in GVA per head, the cities with the best urban public transport networks have the highest productivity per capita (access to large and specialised labour market). And indeed the fastest growing GVA is observed in the most congested parts of London.

² See for example DfT (2006) *Agglomerations in the UK and the role of transport policy* for a clear narrative on these factors

Conclusions

We welcome the Department's greater openness in discussing the wider benefits issue, and other issues such as time savings and post scheme evaluation. However we would like to see a greater explanation of why the Department has rejected many of the points put at the meetings, or, even better, acceptance of more of them.

However, several members said that the time, effort and resources devoted to appraisal distracts attention from proper discussion of the role of transport in how we live. The effect of the dominance of time-savings has been to favour isolated schemes with severe external disbenefits over integrated transport strategies (which in turn should be part of a broader spatial and transport strategy). This has driven dispersal of activity and social polarisation, with a powerfully negative effect on society as a whole. One respondent encapsulated it as follows:

"as a practitioner I the system OK to work with for comparing major scheme options in a consistent way, but not for saying if a problem needs solving at all", another said

"I fear that the quality of appraisal has fallen, with appraisal being selective in the scheme impacts considered, based on flimsy evidence from comparable schemes elsewhere which may or may not reflect a similar context, and designed to support political preferences without a logical consideration of objectives and options."

Overall in our annual member survey, only 3% thought that the current appraisal system was completely satisfactory, while 39% thought it needed minor adjustment. This left a clear majority in favour of major reform or scrapping it altogether. In this context individual minor adjustments without addressing the key issues will not gain the level of support from practitioners, let alone the public, which is essential if progress is to be made.

In the context of social policy, the pursuit of theoretical willingness to pay versus theoretical willingness to be compensated can be seriously misleading. Cost effectiveness analysis and understanding distributional impacts may be a far better way of proceeding, without rejecting a rational, evidence based approach.

The term "wider impacts" was one example of how the Department responded to the complaint that the term "wider benefits" was not objective. Unfortunately the change in title is not reflected in a change in content. The wider disbenefits need to be understood, and only when they are can build the right infrastructure in the right place. When we do it also needs to work closely with measures to manage demand. Those measures will themselves influence where the best value for money can be obtained and thus the nature of the national infrastructure programme.

Transport Planning Society 22nd December 2016