

**HEYSHAM - M6 LINK ROAD (HM6L)
CASE REF. NO. TR010008**

**Supplementary evidence from Campaign for Better Transport,
associated with interested party North West Transport Roundtable
UNIQUE REFERENCE NO: 10015179**

As requested by the ExA at the Issue Specific Hearing on Traffic Flows, held on 12th July 2012, we are submitting the article below by Professor Phil Goodwin for consideration.

The ExA has asked Lancashire County Council and their consultants to prepare new sets of traffic modelling data and benefit-cost ratios based on lower demand forecasts than so far modelled.

It emerged at the hearing that the lowest annual growth rate so far modelled has been in modelling carried out in Spring 2010 towards achieving final funding approval from the Department for Transport. This used a growth rate of approximately 0.9% per year.

Following the suggestions put forward by Prof Goodwin in his article, we would urge that at least two new lower background growth forecasts are modelled:

- 1) A rate based on the expected 2013 national traffic forecast, as shown in the red line in the article (with the same extrapolation down from national forecasts to a reduced rate for the local area that was done in order to reach 0.9% - from a 1.5% central national forecast - for the Spring 2010 work)
- 2) A flat rate of growth, acknowledging the realistic prospect that traffic growth has reached a plateau

If time allows, then we also believe a further model that looks at the plausible scenario of traffic that reduces over time would also be very valuable to see.

13 July 2012

**Sian Berry
Campaign for Better Transport**

Campaign for Better Transport's vision is a country where communities have affordable transport that improves quality of life and protects the environment. Achieving our vision requires substantial changes to UK transport policy which we aim to achieve by providing well-researched, practical solutions that gain support from both decision-makers and the public.

16 Waterside, 44-48 Wharf Road, London N1 7UX
Registered Charity 1101929. Company limited by guarantee, registered in England and Wales: 4943428

The article and chart below were printed in Local Transport Today, 6 July 2012 under the heading “Traffic Scenarios for Policy Development”

Traffic Scenarios for Policy Development and Project Appraisal

Phil Goodwin

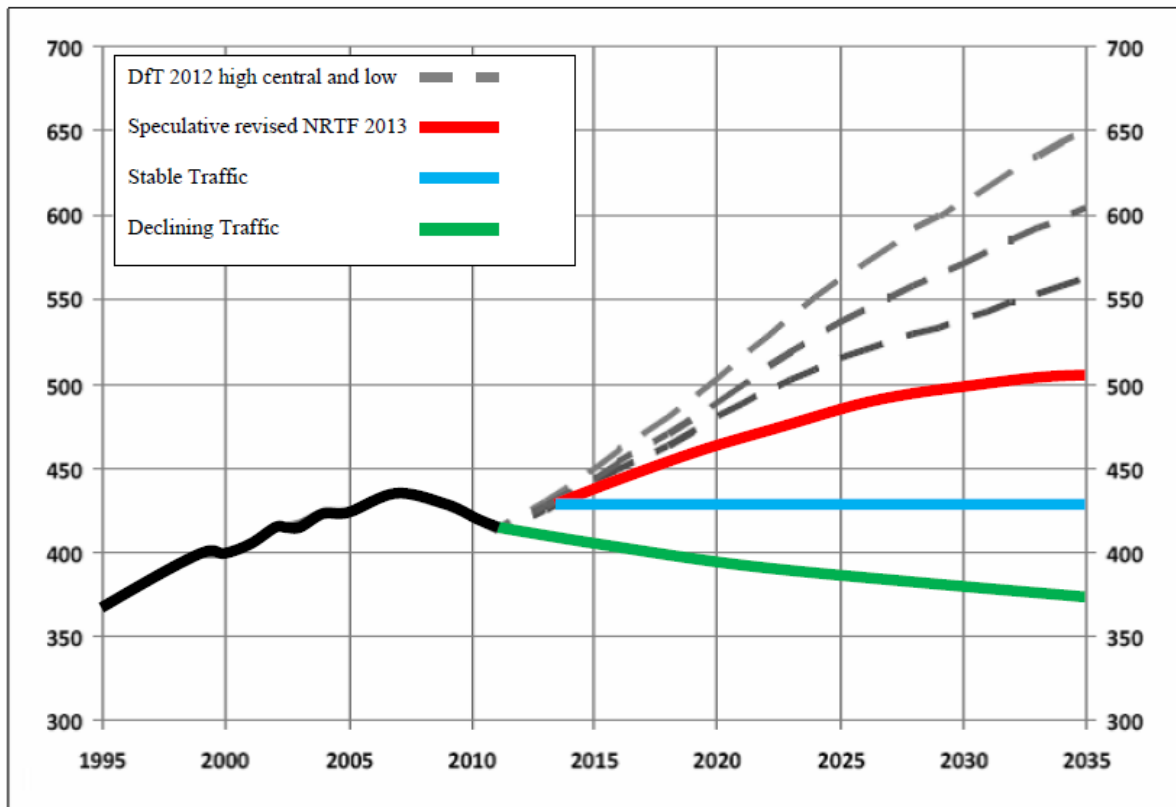


Fig. 1 Suggested Increasing, Stable and Reducing Traffic Scenarios for Appraisal

A forecast often has the intended implication ‘this is what we think will happen’ and a scenario is ‘this is what we think could happen’. The really important reasons for using scenarios are when there is a significant degree of uncertainty or disagreement about the future, or when an official forecast lacks credibility or consensus, or when the future path of policy itself is undetermined, or when ‘thinking outside the box’ is essential because a described future is too unpleasant to be tolerable or too pleasant to be credible.

The difference is however not always well defined. A forecast is often more likely to be the product of some sort of formal model with a statistical base and claims to a theory, whereas a scenario is quite often the product of more open imaginative processes looking in particular at possibilities which are not, for one reason or another, entertained within the model. Scenarios can represent a wider range of possible futures, a more open view about the unexpected, a clearer acceptance of controversy and contested values, and a broader scope for human agency and intention.

There has been good thoughtful work on scenarios in recent years. Miles Tight (formerly of Leeds, now Birmingham) and his colleagues have devised a set of possible transport futures which deliberately go further than most policy assumptions, testing them for internal consistency rather than pathway, for example

in expanding walking and cycling beyond observed constraints. David Banister and others have broadened the set of futures for environmental discussion, and this is common for technological development (always badly handled in forecasts), notably by Shell. Gordon Stokes is developing the demographic processes I discussed last month into an approach for considering what behaviour change could be brought about by shifts in tastes for specific groups, rolled forward by an aging process over time – an approach also being developed by the French research institute ISTTAR and by BMW's interesting in-house work in Munich.

I have been thinking about what sort of scenarios could use the well-established format of the DfT's National Transport Model's outputs – a trajectory of aggregate traffic volumes year by year into the future – but reflecting the range of futures which now start to become credible. This is work in progress, but I offer it for discussion and criticism at this stage, to see where it might take us. The figure you see on this page is the interim result. As a grey background three dotted lines are DfT's current (2012) assumptions about three futures (only for England, nowadays, but I think similar logic applies elsewhere) – a 'high demand', 'low demand' and 'central' projection, which differ (but not by very much) in relation to Government publicly expressed assumptions about economic growth, oil prices and fuel economy.

The central projection could in principle be taken as one of the three scenarios, if it were thought to have a reasonable longevity, but I tentatively suggest a modification, as a purely personal speculation of the next NRTF revision in – say – January 2013. The red line is my 'forecast of the forecast', extrapolated from successive revisions that have been made since 1989, each being lowered, but so far not enough, to correspond with the traffic outcome. This scenario has two great advantages for appraisal. First, even if all the parameters in NTM are right, it is a way of including some recognition that the path back to economic growth may take longer than hoped. And secondly, I estimate that this traffic growth trajectory, up to a shade over 500b vehicle kilometres, is likely to be one where some road capacity expansion, though less necessary or good value for money in CBA terms, might actually start to become more useful in 'making things better' rather than 'slowing down the pace at which they get worse', which has been the fault line in road appraisal at least since 1989. Therefore I guess it might be politically attractive for the DfT to have a forecast with this property, though this would not itself be the reason they would choose it.

The blue line is simply a stable level of traffic continued at a suitably defined 'current' level, somewhat increased to close to its 2005 peak of around 430b vehicle km. This is a simplified version of the idea of traffic saturation, ignoring the critical conversion from per capita saturation to population totals, which depends on the physical location of housing development, so itself requires a high and low envelope. For the scenario, simply choosing a stable volume of traffic has one decisive appraisal advantage: it unambiguously addresses the question 'what would this policy or project do for the current problems that we see and experience'? It therefore does not depend on the elusive concept of 'better than it otherwise would have been': it just relies on 'better'. For public discussion this represents a robust and transparent idea with no trickery. (A reminder: this is about 'base' demand, and it would still be necessary, as in all the scenarios, to calculate induced traffic).

The green line approximately reflects, but simplifies, the idea that the stabilisation then traffic decline in recent years may be in part a structural change in trends, influenced by mobile computing, demographics, cultural expectations, costs and policy. For forecasts, this approach itself would need two branches, depending on whether the associated policies have a positive feedback effect ('virtuous circle') increasing the rate of decline, at least for a period, or a damping effect leading to a new, but lower, saturation level. That is, I think, too complicated to deal with for a scenario, but the simpler version shown, with a reduction of about 0.5% a year back to around the 1995 level of 370b vehicle km, also has a genuine contribution to understanding even in advance of confidence at the forecasting level. This is because it represents downside risk of expensive investments being unremunerated, in money or benefit, hence is crucial for negotiating risk as between the public and private sector, and testing the robustness of both capacity and demand management to different futures.

The three suggested scenarios have a broader span than the current low to high forecasts, but are all lower. Each has been triggered by an empirical and analytical discussion, but they are emphatically not intended to be the quasi-forecasts associated with each of the three views. Rather, they are reduced 'simple-case' scenarios which help the robustness of appraisals by bracketing the real world somewhere within them. (My own view is that it would be quite acceptable to include a much higher growth one, if there were champions for it: the only condition is that there should be at least one increasing, one stable, and one reducing scenario). There will, of course, only be one future which actually happens, but we do not yet know what it is. In the meantime the three scenarios illuminate appraisal while not needing agreement on forecasts, only requiring a shared respect for the legitimacy of views that traffic could, possibly, increase, stay stable, or reduce.