Mode Share at Yeovil Urban Extensions

Briefing Paper

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FINAL

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0.1	Draft	First Draft	RWS	24/01/2014
0.2	Draft	Initial comments from MC	RWS	31/01/2014
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1 Background

Throughout the development of the Local Plan, South Somerset District Council has maintained an aspiration that any urban extension to Yeovil should be developed to 'eco-town' standards, in the form of a Sustainable Urban Extension (SUE). Somerset County Council, as Highway Authority, has supported this in principle[1].

The original scale of the proposed SUE was 5,000 dwellings but during the preparation of the Plan this was reduced initially to 3,700, then 2,500, and eventually to 1,565[2]. Following the suspension of the Examination, Main Modifications were proposed. PMM2 proposes two separate sites: 800 dwellings to the south of Yeovil and 765 to the northeast. Each site would include 2.5 hectares of employment, a primary school, a health centre and a neighbourhood centre.

In terms of transport, these developments would be supported by[2]:

- Well-designed cycle- and footpath infrastructure "that delivers journey times that are better or more comparable to those by car".
- Car parking management and design which discourages use of cars for short journeys whilst prioritising other modes
- Electric car pool scheme
- Quality Bus Partnership delivering desirable bus routes providing "end-to-end journey times that are better or more comparable to those by private car".

Crucially, PMM2 maintains the expectation of delivering "at least 50% of travel originating from the Yeovil SUEs by non-car modes", consistent with the original Eco-town aspirations. A 60% long-term aspiration is also expressed.

This paper discusses the transport issues relating to a SUE much smaller than an 'eco-town' and considers the likelihood of achieving 50% non-car mode share.

2 Scale of the SUEs

Eco-towns were originally envisaged as being of at least 5000 dwellings, allowing them to take "advantage of significant economies of scale and increases in land value to deliver new technology and infrastructure such as for transport"[3]. This size enables a self-contained 'community' to develop, rather than simply a 'housing development'. The Town and Country Planning Association[4] also argues that 4-5000 is the minimum size, allowing for provision of local community facilities such as a secondary school. The "Justification for Change" supporting the Proposed Main Modifications recognises the issue of self-containment; indeed one of the reasons for splitting the 1565 dwellings is that "there is no substantive evidence that a single one site would [be] a totally self-sustaining community of scale".[2]

In respect of Yeovil, these issues have two key effects on transport. Firstly, the proposed SUEs of around 800 dwellings would not support substantial local services and so increase the need for external (and so longer) trips. Secondly the developer funding which would be available to provide enhanced off-site infrastructure and/or services to support sustainable travel would be limited and be unlikely to result in the step-change required for a low car mode-share (discussed further in Section 4).

3 Baseline mode share

Analysis of 2011 Census Travel to Work data, for residential areas on the outskirts of Yeovil in similar locations to the proposed SUEs, shows typical combined car driver, passenger and taxi mode share from 70-85%; whilst lower figures do exist in Yeovil,

these are limited to areas very close to the town centre. These figures are for commuting but there is evidence that the figures are likely to be similar for overall mode share[5]. Department for Transport modelling[6] also estimates that average car mode-share for all types of journey in Yeovil is around 70%, and forecasts that this figure will remain fairly constant over the Plan period.

The baseline for non-car modes (such as bus, cycling and walking) at the SUEs can therefore be taken as 15-30% of journeys so to achieve the aspiration of "at least 50% of travel originating from the Yeovil SUEs by non-car modes" their use will need to be doubled.

4 Achievable modal shift

Many of the measures proposed in PMM2[2] (such as good design of cycling and walking facilities, and priority parking for shared vehicles), whilst beneficial, would not be sufficient in isolation to achieve substantial modal shift. Personalised Travel Planning (PTP) is considered to be the most effective method of achieving modal shift in a new development[7], especially if supported by improvements to walking and cycling infrastructure. PTP entails advisors encouraging individual residents or employees to overcome habitual use of the car by providing a combination of information, incentives and motivation[7]. Car mileage reductions are typically 2-7%, although 11% may be achievable. In the case of the SUEs this equates, at best, to around a 7 percentage point modal shift.[7]

Improved bus services can also result in modal shift; for example increasing a half-hourly service to every 15 minutes could increase demand by 50%[8]. This starts from a very low base in Yeovil[9], however, and some of the new trips will transfer from non-car modes; the impact on car driving would probably be a shift of less than 1 percentage point. A small further shift might be achievable through even higher frequency (5-10 minutes) and bus priority measures which would make bus travel faster than using a private car. Such investment (probably delivered through the Community Infrastructure Levy (CIL)) is likely to be prohibitively expensive and in any case would benefit only some travellers – Yeovil's dispersed employment sites and other destinations could not be served by a single frequent service.

These factors, combined with limited scope for self-containment, mean that *if* substantial investment were made in both Travel Planning Measures *and* public transport a non-car mode share of 25-40% might be achievable (starting from 15-30%). This would still be well short of the 50% proposed within the Local Plan. Figure 1, overleaf, illustrates the shift and remaining shortfall.

5 Conclusion

This paper has reviewed the difficulties in achieving significant shift away from car use at a small urban extension, with limited self-containment and viability issues making this very difficult.

It has been shown that current non-car mode share on the edge of Yeovil is typically 15-30%, and whilst investment in 'soft' measures (such as personalised travel planning) and improvements to bus services may result in some benefits there is no evidence that this could result in the significant 'step change' required to achieve better than 25-40% non-car mode share - well short of the 50% (and still further from the 60% long term aspiration) assumed by the Local Plan. Previous work[1] established that this would be difficult to achieve in Yeovil even with a much larger

development (3,719 dwellings) where the size of the development would have supported internalisation and made high quality public transport and provision of excellent walking and cycling facilities more likely to be viable. With a smaller development of 2,500 the Highway Authority still considered that self-containment and sufficient investment meant that 50% was a possible (if extremely challenging) target. However with these smaller and separate proposals it is no longer considered a realistic aspiration.

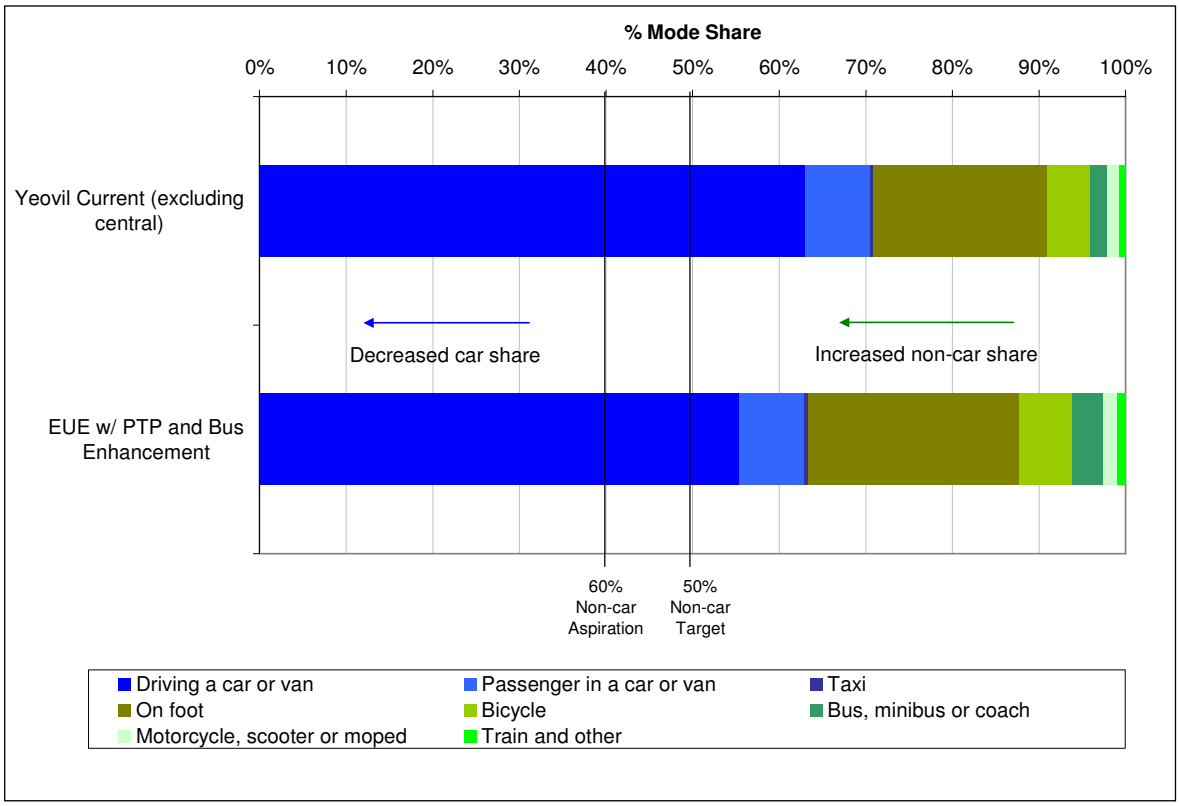

Figure 1: Indicative existing and achievable mode share for SUEs

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