

# North Essex Authorities - Shared Strategic (Section 1) Plan

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Prepared by:

Steer  
28-32 Upper Ground  
London SE1 9PD

+44 20 7910 5000  
[www.steergroup.com](http://www.steergroup.com)

Prepared for:

Andrewsfield New Settlement Consortium &  
Countryside Properties  
The Drive, Brentwood  
Essex  
CM13 3AT

Our ref: 23451103

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## Introduction

- 1.1 This note has been prepared following the invitation from the Inspector for written responses to the NEA note providing clarification on Rapid Transit System (RTS) Vision to Plan (EB/075). It also considers additional commentary provided in relation to this note at the Matter 6 session of the 16<sup>th</sup> January.

### Q1: Capital cost

- 1.2 Steer have separately undertaken a benchmarking exercise to understand the potential cost for an RTS scheme. A summary of this was provided in the Matter 6 response provided in December 2019 on behalf of Countryside and the Andrewsfield Consortium. These confirmed similar costs to those identified in the NEA evidence.
- 1.3 The approach of considering the reported costs of comparable schemes with suitable adjustment in relation to the relative complexity and degree of urban/greenfield elements of schemes vs a potential North Essex bus based RTS is supported by Steer. Such an approach has been adopted by Steer when advising a range of authorities at a similar stage of scheme development across the UK.
- 1.4 The reported level of allowance for contingencies appear consistent with the Department for Transport (DfT) guidance on Optimism Bias that would be expected to be adopted if and when the formal business case for elements of the project are being reported.

### Q2: Journey times

- 1.5 The adoption of 40km/hr through garden communities and 50-80 km/hr on inter-urban sections appears appropriate.
- 1.6 From our own detailed knowledge of the area through work associated with Stansted and other commissions we believe that for considerable lengths of the inter-urban sections of the RTS route, such speeds could reasonably be expected to be delivered through the use of existing highways, either in mixed traffic mode or through the introduction of segregated bus lanes.
- 1.7 We have reviewed the WYG transport report that was provided as evidence to the Uttlesford District Plan and referred to by Mr Johnstone at the Matter 6 hearing session. It was suggested that this provides evidence that both the A120 west of Braintree and other local roads would be over capacity by the end of the local plan period and that this would result in very low vehicle speeds.
- 1.8 We note that the WYG report was a simplified transport modelling approach and was provided to help inform options for land use being considered at the Uttlesford Local Plan. In particular we note the following statement relating to the traffic modelling:

*“The results are the ‘worst case’ in terms of highway traffic impacts because the methodology used to derive them:*

- *assumes all committed development will be complete by 2033*
- *applies robust TRICS trip generation rates*
- *applies observed (2011 Census) modal splits*
- *makes no allowance for peak spreading or route reassignment*

- *makes no allowance for the benefits of new garden communities in terms of reducing the need to travel*
- *makes no allowance for expanding the supply and availability of sustainable travel alternatives.*
- *takes no account of the potential benefits of future technology such as autonomous vehicles etc.*

*The combined effects of the provision of sustainable transport measures, demand management and peak spreading is expected to deliver lower traffic impacts in practice than those forecast in the study.”*

- 1.9 It was noted at the Matter 6 session of the 16<sup>th</sup> January that Highways England did not accord with the view that the capacity of the A120 West of Braintree was of concern and that evidence provided by Jacobs on behalf of the NEAs suggested that an on-road option for the RTS between West of Braintree and Stansted could provide improved journey times compared with the current assumption of a route passing through Easton Park.

### **Q3 and 4: Revenue forecasts and viability**

- 1.10 Steer believes that the revenue answers provided are comprehensive and accord with the assumptions adopted for viability purposes.

### **Q5 Mode share assumptions adopted for viability modelling**

- 1.11 The transport modelling approach adopted by Jacobs is consistent with modelling Steer have adopted for many similar scheme appraisals across the UK.
- 1.12 The adoption of census travel to work data for a local area is a common starting point for understanding peak hour travel patterns. The 2011 census data is current and considered a reliable data source. There have been no significant changes in local circumstances in and around Braintree since 2011 and any alternative local surveys could be expected to provide only a very low sample rate by comparison.
- 1.13 The modelling approach adopted by Jacobs relies on a generalised cost model for understanding the likelihood of changing modes of travel from this starting point. This cost model considers the cost of time as well as direct costs of travel by alternative modes. A small portion of the generalised cost relates to the direct cost of fuel and the current guidance is that any costs savings for electric vehicles are offset by the additional depreciation costs. The use of generalised cost modelling is commonly adopted when forecasting future trip mode and travel demands for transport systems such as the RTS and the approach adopted by Jacobs appears sound.

### **Q6 Vehicle costs**

- 1.14 The vehicle costs identified in the note are consistent with figures Steer have adopted for similar studies in the UK. They are also consistent with our understanding of the quality of vehicle envisaged within the Vision document.

### **Q7, 8, 9 and 10- mode share modelling**

- 1.15 The NEA’s responses provided to the Inspector’s questions are comprehensive. Steer have adopted similar modelling approach for a number of studies for a range of private and public sector clients to help develop transport strategies, examine the likely patronage of new public

transport systems and to examine the scale of transport interventions required to achieve target mode shares. Such modelling can be refined by examining additional factors and updated as additional information becomes available during a typical scheme development process.

- 1.16 The process requires extensive data collation and analysis. As a result, such modelling is expensive to develop and refine and clearly there is a balance to be made between the cost of the modelling and its value to help in decision making processes. Our view is that the level of detail that has been considered in the reported modelling is appropriate to the stage of development of the North Essex RTS. As with the cost side of the scheme, it would be anticipated that it would be refined and updated as the formal business case for the scheme is developed.

# Control Information

**Prepared by**

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Steer  
 28-32 Upper Ground  
 London SE1 9PD  
 +44 20 7910 5000  
 www.steergroup.com

**Prepared for**

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Countryside Properties plc  
 The Drive, Brentwood  
 Essex  
 CM13 3AT

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