

**Thursday 16 January
2020**

**Morning &
afternoon
sessions**

**9.30am – 1.00pm &
2.00pm – 5.30pm**

Matter 6

Transport and other infrastructure

AGENDA

The numbered questions in italics below are the original questions from the Inspector's matters, issues and questions document [IED/020]. For any original question that is not shown below, the Inspector has sufficient information from the hearing statements and responses, and is not inviting further discussion on it.

The commentary in normal typeface is from the Inspector.

*The **lettered questions in bold typeface** are the further questions on which the Inspector will be inviting discussion at the hearing session.*

1. *Has funding been secured for the A120 improvement scheme between Braintree and the A12 through the Department for Transport's RIS2 programme?*
 - (a) *If so:*
 - (i) *has a route for the scheme been approved?*
 - (ii) *what is the programme for the scheme and when will it be completed?*
 - (b) **If not, what are the consequences for the feasibility of the West of Braintree and Colchester Braintree Borders GCs?**

The NEAs' position as set out in their hearing statement is: while no funding announcement has been made, the A120 scheme is well advanced when compared with other competing schemes. Whether it is included in RIS2 (the announcement of which has been delayed due to the general election) or development costs only are included in RIS2 with construction costs in RIS3, the NEAs' view is that construction could start in 2023 with completion by 2026 to 2028.

The Plan's housing trajectory [EXD/070] indicates that 600 dwellings would have been built at the proposed West of Braintree garden community [GC] by 2026, and 1,200 dwellings by 2028.

The NEAs' suggested amendments to the Plan [EB/091A] contain requirements for funding and route commitments to the A120 improvement scheme to be in place before development at the Colchester Braintree Borders GC begins, but there is no similar requirement in respect of the West of Braintree GC.

Countryside Properties and Galliard Homes both contend that the West of

Braintree GC development as a whole is not dependent on the A120 improvement scheme taking place. They point out that only a small proportion (6%-10%) of existing journeys to work to and from the area involve travel east of Braintree, according to the census, and that the funding bid for the Galleys Corner improvement scheme claimed that it would deliver the proposed GC during the plan period.

- A. Does the available evidence demonstrate that the proposed West of Braintree GC can be delivered in its entirety without severe adverse traffic impacts if the A120 improvement scheme between Braintree and the A12 does not go ahead?**
- B. Is there evidence to show that the existing highway network can cater for the additional traffic from the dwellings proposed to be built at West of Braintree GC before the NEAs' expected completion date for the A120 improvement scheme?**

Mr O'Connell and Mr Johnstone say that without improvements, for which there are no current proposals, the A120 between West of Braintree GC, Stansted and the M11 would be well over capacity by 2033, leading to traffic diverting onto unsuitable local roads.

C. Are these concerns justified?

3. (a) *Does the funding that was committed under the DfT's RIS1 programme for the A12 Chelmsford to A120 widening scheme remain committed for the scheme?*
(b) *If so, would the full costs of each of the route options shown in the Highways England consultation (Jan-Mar 2017) be covered by that committed funding?*
4. (a) *Is there still a possibility that funding will be secured through the Housing Investment Fund [HIF] for a more southerly realignment of the A12 in the Marks Tey area?*
(b) *If so,*
(i) *what is the proposed alignment for which HIF funding is sought?*
(ii) *when will a decision on the HIF bid be made, and what would be the likely timescale for completion of the realignment scheme?*
6. *What are the consequences of the answers to 3 (a), (b) & (c) for the feasibility of the West of Braintree and Colchester Braintree Borders GCs?*
7. *What are the consequences of the answers to 4 (a) & (b) for the feasibility of the Colchester Braintree Borders GC?*

The NEAs' position is as follows:

The Government remains committed to the A12 widening scheme. If Colchester Braintree Borders GC is not included in the adopted Plan, the HIF

bid will not proceed and one of the widening options from the Highways England [HE] 2017 consultation will go ahead.

A decision has yet to be made on the HIF bid and no date for the announcement has been published. If Colchester Braintree Borders GC is included in the adopted Plan, and the HIF bid is successful, the A12 widening scheme will include one of the more southerly options from the 2019 HE consultation.

If the HIF bid is unsuccessful, one of the widening options from the HE 2017 consultation will go ahead. This would mean a reduced number of dwellings at Colchester Braintree Borders GC, but the GC would still be deliverable.

Existing funding committed under RIS1 would meet the full cost of the A12 widening based on any of the 2017 HE options, and the HIF funding would be sufficient to meet the extra costs of any of the 2019 HE options, including a fourth lane between J23 & J24 if needed.

Approval for the widening scheme could be achieved in time for construction to start in 2023 with an opening date of 2028.

D. Is the NEAs' assessment of the funding position and timescale supported by the available evidence?

E. Is there evidence to show that Colchester Braintree Borders GC would be financially viable with fewer than 21,000 dwellings?

5. *Funding has been secured through the HIF for a A120-A133 link road to the east of Colchester.*

(a) *Would the full costs of each of the route options shown in the Essex County Council [ECC] consultation (Nov-Dec 2019) [EXD/066] be covered by the HIF funding?*

(b) (i) *Are any other highway improvements needed to cater for the traffic generated by the Tendring Colchester Borders GC?*
(ii) *If so, how would they be funded?*

8. *What are the consequences of the answers to 5 (a) & (b) for the feasibility of the Tendring Colchester Borders GC?*

The NEAs' position is that the successful £99.9M HIF bid includes £41M for the A120-A133 link road, which will be a 50mph dual-carriageway road with two lanes in each direction. That funding is sufficient to meet the full cost of any of the route options in the ECC 2019 consultation. Delivery of the scheme will be in line with the first housing completions on site at Tendring Colchester Borders GC in 2024. The other necessary highway improvements are identified in EB/087 & EB/088 and would be funded by developer contributions.

F. Can the NEAs confirm the expected timescale for the start and completion of construction of the link road?

G. Is the NEAs' assessment of the funding position and timescale for the link road, and of the other highway improvements necessary for Tendring Colchester Borders GC, supported by the available evidence?

Other infrastructure and phasing

10. *Do the Integrated Water Management Strategy [EB/015] and the AECOM IPPD document [EB/088] provide sufficient certainty that adequate provision can be made for water supply and waste water treatment for the proposed GCs?*

Anglian Water [AWS] refer to their Water Resource Management and Water Recycling Long Term Plans which show how they plan to meet future demand for water and provide sufficient capacity at water recycling centres [WRC] in time to serve development in their area. The costs of this are met from customer bills. Connections to water supply and public sewerage networks are funded by charges on developers under the Water Industry Act 1991.

The NEAs say that the Stage 1 Integrated Water Management Strategy [IWMS] for the GCs [EB/015] identified feasible and deliverable strategic options for water supply and waste water treatment. Stage 2 will determine the specific solutions for each GC.

CAUSE and Mr Gilbranch raise concerns about whether there is sufficient certainty that adequate water supplies and treatment facilities can be provided for the GCs, and the potential effect of such provision on vulnerable aquifers and rivers. They say that the £13.3M allowed in the Hyas Viability Assessment Update [EB/086] for a 13km pipeline from Colchester Braintree Borders GC to the Rowhedge WRC appears insufficient when compared with schemes elsewhere.

L&Q, Cirrus Land & G120 propose an alternative sewerage solution for Colchester Braintree Borders GC involving initial upgrades to Coggeshall WRC followed by provision of a new WRC onsite or nearby.

The NEAs' suggested amendments [EB/091A] to policies SP7, SP8, SP9 & SP10 set out the water supply and sewerage requirements for each of the GCs. The Statement of Common Ground with the Environment Agency and AWS [SCG/002a] proposes to amend the timing requirements in those policies to say that the required waste water treatment capacity and sewer connections must be available ahead of the occupation of dwellings.

SCG/002a also proposes to add a new section to policy SP5 saying that necessary improvements to water infrastructure, waste water treatment and off-site drainage should be made ahead of the occupation of dwellings in accordance with environmental legislation.

H. Is it appropriate to plan for water supply and waste water treatment for the proposed GCs using the staged approach of the IWMS?

I. Would the proposed amendments in EB/091A and SCG/002a to policies SP5, SP7, SP8, SP9 & SP10 ensure that adequate and timely provision is made for water supply and waste water treatment for the proposed GCs?

11. *Is the approach to the phasing of infrastructure provision at the GCs, set out in the AECOM IPPD document, justified and appropriate?*
12. *Would an alternative approach to phasing be preferable, such as that set out in the Infrastructure Delivery Plan by Create, submitted with the response to EB/088 from Carter Jonas on behalf of L&Q, Cirrus Land & G120?*
13.
 - (a) *Are the Section 1 Plan's policies sufficiently clear about what infrastructure needs to be provided, and by when?*
 - (b) *Should the Plan's policies require funding for key infrastructure to be committed before planning permission is granted for any of the GCs?*
 - (c) *Should the Plan's policies link the phased provision of infrastructure to defined trigger points in the phasing of development at the GCs?*

The NEAs' position is that the approach to the phasing of infrastructure provision at the GCs, set out in the AECOM IPPD document, provides an appropriate approach at this stage of planning the GCs. Further work to refine the phasing will be undertaken as part of the DPD preparation and masterplanning process.

The NEAs' suggested amendments to the Plan [EB/091A, ref 58] introduce a new paragraph to Policy SP5 which says that funding and route commitments for strategic infrastructure projects will need to be secured in advance of the start of relevant GCs. Other infrastructure, including rapid transit, will be secured in a timely manner and programmed to keep pace with the growth of new communities. In combination with policies SP8, SP9 and SP10, the NEAs consider that this provides sufficient clarity on what infrastructure needs are to be provided for the GCs at this stage in their strategic planning. It may be appropriate to apply further defined trigger points for infrastructure at the DPD, planning application or Local Development Order stage.

Some participants argue that the Plan's policies should require key infrastructure to be in place before development commences, that there are inconsistencies in the evidence on infrastructure provision and phasing, and that the Plan should set clearer requirements for infrastructure phasing including defined trigger points.

Others consider that it is unnecessary to require a commitment to the funding of key infrastructure at this stage, and that some of the infrastructure and infrastructure contributions required for the GCs could be provided at later phases of development than those indicated in EB/088. The appropriate time to consider the detailed phasing of infrastructure, including any trigger points, is when site-specific DPDs are prepared for the GCs and/or during the development management process.

J. Taking into account the NEAs' suggested amendments to the Plan [EB/091A], what other policy provisions (if any) are needed in the Section 1 Plan to ensure that adequate infrastructure is provided at the time it is needed to serve development?

Rapid Transit System [RTS] for North Essex

14. *Are the capital costs for the proposed RTS set out in section 5.1 of the Vision to Plan document [EB/079] realistic?*
15. *Have sources for all the necessary capital funding for the RTS been identified?*
17. *Funding has been secured through the Housing Investment Fund [HIF] for a bus-based RTS serving the Tendring Colchester Borders GC.*
- (a) Which elements of the RTS scheme proposed in the Vision to Plan document would be covered by the HIF funding?*
 - (b) Would any additional funding be required to complete Route 1 of the RTS scheme as proposed in the Vision to Plan document?*
 - (c) If so, how would that additional funding be secured?*

The NEAs say that the partially-segregated bus rapid transit system they are proposing is similar to comparator systems in Bristol and Leigh-Salford. The comparator scheme per-km outturn costs (£4.6M & £5.5M respectively) include structures. Total mid-point "lower-investment" per-km costs for the North Essex scheme are £2.8M; the midpoint "higher-investment" per-km costs are £4.1M [EB/079 Table 5-2].

In EXD/049, answer to Q2, the NEAs say that a distance-based estimate benchmarked against other BRT schemes was used to devise the capital costs given in EB/079. For Route 1 the engineering team have independently provided cost estimates which fall within the distance-based estimates. Hence the cost estimates are considered reasonable at this early stage.

Mr Johnstone says that the NEAs' comparator scheme costs should be inflation-adjusted. He identifies a total allocation in EB/087 of £230M (including 10% contingencies) for the costs of the whole RTS. This excludes structures and land acquisition costs. He says that the Fastrack Route A scheme in north Kent which cost about £13.3M/km provides a more realistic comparison.

In their responses, Countryside and Galliard provide comparisons with bus RTS schemes elsewhere which generally support the NEAs' estimates.

The NEAs say that the full capital costs of Routes 2, 3 & 4 are included in EB/086, based on the lower-bound costs (of the higher-investment scenario). An additional £25M contribution to Route 3 can be expected from the Easton Park GC in Uttlesford. A total of £45M is available for Route 1, comprising £33M from the successful HIF bid, a secured £2M

section 106 contribution and £10M included in EB/086. Based on the lower-bound costs this is sufficient to cover costs to 2033, leaving £10M over for post-2033 costs.

Based on para 6.17a.1 of the NEAs's hearing statement, the works funded by the HIF bid appear to the Inspector to include most of Route 1 apart from the section within Tendring Colchester Borders GC and Colchester town centre. The NEAs say that a further £13M towards the post-2033 lower-bound costs of Route 1 would need to be found from other sources. These could include assigning a higher share of the HIF grant, a recovery and recycling mechanism, planning contributions from other sites, reassignment of part of the Route 4 costs, or further grant funding. It is likely that a DfT/MHCLG major scheme funding bid for the full RTS scheme will be made: the DfT have funded about half the capital costs of the Bristol scheme.

K. Are the RTS capital funding allocations in EB/086 & EB/087 consistent with the cost estimates in EB/079?

L. Is there sufficient certainty at this stage of planning about capital costs and funding sources for the RTS?

16. *Do sections 5.2, 5.3 and 5.4 of the Vision to Plan document provide reliable estimates of revenue, operating costs and commercial viability for the RTS?*

The NEAs say that the modelling approach used to estimate usage of the RTS is appropriate at the strategic stage of development. The modelling will be refined to inform the detailed design stage. Forecasts of usage are based on mode shares which reflect existing travel behaviour, not the ambitious mode share targets in EB/080. Any danger of over-estimation is counter-balanced by other factors. Revenue forecasts exclude government subsidy which improves their robustness.

Mr Johnstone says that the modelling is unreliable, as it is not fully multi-modal and hence does not take proper account of the effects of congestion, and is calibrated to 2014 traffic flows for the AM peak hour only. Forecasts of usage, and the revenue forecasts derived from them, are unreliable because they assume the whole system is in place (apart from Route 4 in 2033).

The Inspector notes that the usage, revenue and operating cost figures for 2033 and 2051 in the Tendring Colchester Borders GC HIF bid [EXD/054 p108] appear to differ from those in EB/079.

Section 5.4.1 of EB/079 says that an element of "pump-priming" (early subsidy to generate patronage) will be required for the RTS. Evidence from elsewhere demonstrates that new services can require subsidy for several years.

M. Is there sufficient certainty at this stage of planning about the commercial viability of the RTS?

N. How has provision been made for "pump-priming"

subsidies to the RTS?

20. *Does the Vision to Plan document provide sufficient reassurance at this strategic stage of planning that it would be feasible in physical terms to construct the proposed RTS system?*

The NEAs say that the robustness of the RTS delivery strategy rests on its ability to alter routes and the level of priority. The transport modelling has shown that different route options can still deliver the expected benefits. Therefore, it is reasonable to expect that a workable route within the range of options presented in EB/079 can feasibly be delivered.

At the strategic planning stage, the NEAs say, it is not plausible to have developed firm route choices nor to have devised solutions to the highway engineering challenges. Rather there should be confidence that solutions can be found within the budget identified and from the experience of delivering schemes elsewhere.

Various respondents argue that route options shown in EB/079 are not feasible in engineering terms, are unacceptable because of their impacts on residents' amenity, landscape, highway safety or traffic flow, and/or would not deliver a genuinely rapid transit service.

O. Leaving aside the question of what level of priority the RTS would have, are there any sections of the proposed RTS routes along which it would be impossible to run a bus service over any of the route options?

18. *Is the proposed phasing of the introduction of the RTS system*
(a) *realistic?*
(b) *consistent with the proposed timing of development at the garden communities?*

In their further hearing statement, the NEAs say that if the RTS is to open by 2025, to coincide with the growth of the GCs, refinement of options and of the business cases will need to commence as soon as possible. A key decision will be whether to make upfront investments in order to create the whole system early in the Plan period. Alternatively, those parts of the system where demands are highest (around Colchester and Braintree) could be implemented first and the longer inter-urban connections created later.

A key principle, say the NEAs, is that the first RTS services will coincide with the delivery of the first homes at the GCs. There is a complex interaction between the phasing of the development and funding of the RTS, the phasing of housing delivery at the GCs, and mode share proposed at the GCs. An incremental approach to delivery is being taken. Interim priority measures on existing highways will support the very early phases of GC development.

In their response the NEAs say that the full rapid transit routeing would be put in place between 2026 and 2033.

Based on Tables 5-7 and 5-10 of EB/079, Mr Johnstone says that only 13%

of the RTS will physically be in operation by 2033. In order to provide a realistic alternative to the car, a targeted package of complete RTS sections is required by first significant occupation within each GC.

P. Should the Plan's policies specify that homes may not be occupied at the GCs until relevant RTS services have begun operation?

21. *What are the implications for the GCs of the proposal not to build Route 4, linking the Colchester and West of Braintree sub-systems, until after 2033?*

The NEAs say in their further hearing statement that by 2033 a Colchester sub-system and a West of Braintree sub-system will be successfully operating. It would be a worthwhile aspiration to connect them at some point after 2033, but neither RTS viability nor growth at the GCs depends on it. Timing will flex depending on the speed of growth at Colchester Braintree Borders GC and will depend on availability of grant funding.

Q. Is Route 4 required to support development at the GCs?

R. How would the absence of Route 4 affect the commercial viability of the RTS as a whole?

18. *How would connecting public transport services within the proposed garden communities be funded?*

The NEAs say in their further hearing statement that distributing public transport services would be on-demand and only required once the GCs reach close to their full size (post-2033). They could be funded from operating surpluses from 2051 onwards.

In their response the NEAs say that other public transport services will be in place at the outset of the GCs with further services being added as the GCs grow.

EB/086 makes provision for "investment in early phase public transport services" at each of the GCs, but it is unclear whether it makes ongoing funding provision for connecting bus services.

S. Should funding provision be made for connecting public transport services within the GCs, and at what stage?

Mode Share Strategy

24. *Should mode share targets be included as requirements of the Section 1 Plan's policies?*

The NEAs do not consider that mode share targets should be included in the Section 1 Plan. It is more appropriate for them to be considered in the Strategic Growth DPDs. Other participants suggest that it would be more

appropriate for policy to include a requirement for the monitoring of mode share, with provision for additional measures to be triggered if targets were not met.

T. Would this be an appropriate approach and, if so, should it be adopted in the Section 1 Plan or in subsequent DPDs?

U. Are there any other points, not already covered, which need to be discussed at this hearing session?