Braintree Local Plan – BDC/036 Preferred Option Assessment

Update on A120 & A12 Studies

May 2017





Update on A120 & A12 Studies





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1 Introduction

This addendum summarises the current status of the A120 Braintree to A12 feasibility study, and A12 Chelmsford to A120 widening projects. Where information is available, a summary of the potential impacts of a new / widened route have been included.

2 A120 Braintree – A12

2.1 Project Status

The A120 Braintree – A12 feasibility study has over the last two years developed 68 options, assessed these and reduced them to the 5 options that were considered to perform best against the set criteria. These were recently shared in an 8 week long public consultation. The study is aiming to meet the following objectives:

- Provide and maintain physical infrastructure that facilitates housing and economic growth and enables businesses to flourish.
- Reduce congestion related delay, improve journey time reliability and increase the overall transport capacity of the A120 corridor.
- Increase the resilience of the transport network by improving the ability of the A120 corridor to cope with incidents such as collisions, breakdowns, maintenance and flooding.
- Improve safety for all road users and road workers within the A120 corridor.
- Improve the environmental impact of transport on communities along the existing A120 corridor and reduce the impact of new infrastructure on the natural and built environment by design.
- Improve connectivity within communities and to the wider transport network by reducing severance and increasing accessibility for local residents.
- Improve the quality and connectivity of transport provision within the A120 corridor for people using non-motorised forms of transport, such as pedestrians, cyclists and horse riders. Encourage alternatives to car travel through improvements to the attractiveness of public transport along the A120 corridor.

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Following the consultation, the responses will be analysed and any issues raised will be reviewed and changes incorporated into the design as appropriate. It is then expected that Essex County Council will make a recommendation on a preferred option to the Secretary of State for Transport and Highways England in Autumn 2017.

2.2 Route Options

The five route options shared at the public consultation event are shown on Figure 2.1 and summarised below.

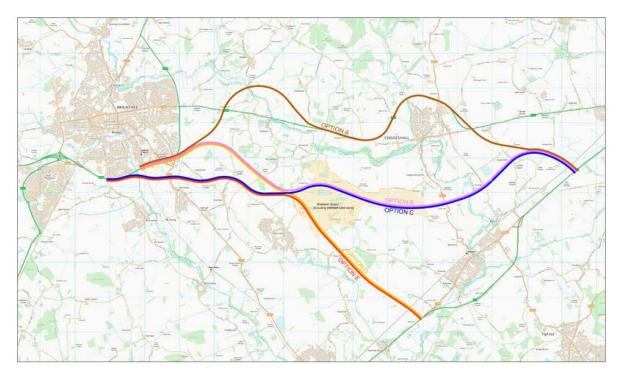


Figure 2.1: A120 to A12 Options

Option A – This route option is approximately 14km long, 5km of which runs along the line of the current A120. It starts just west of Galleys Corner then bypasses Bradwell to the north, crossing the River Blackwater, and then joins the current A120. East of Coggeshall, it leaves the current A120, heading south east where it joins the A12 at a new junction between Kelvedon and Marks Tey.

Option B – This route option does not follow the current A120 and is approximately 13km long. It starts just west of Galleys Corner, passes to the south of Glazenwood Park, runs through Bradwell Quarry, crosses the River Blackwater, joining the A12 at a new junction between Kelvedon and Marks Tey.

Option C - This route option does not follow the current A120 and is approximately 15km long. It starts on the Braintree southern bypass, passes



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north of Tye Green and Cressing, runs through Bradwell Quarry, crosses the River Blackwater, joining the A12 at a new junction between Kelvedon and Marks Tey.

Option D – This route option does not follow the current A120 and is approximately 9.5km long. It starts just west of Galleys Corner, passes south of Glazenwood Park, runs through the south-west corner of Bradwell Quarry, joining the A12 at Kelvedon south junction.

Option E – This route option does not follow the current A120 and is approximately 11km long. It starts on the Braintree southern bypass, passes north of Tye Green and Cressing, runs through the south-west corner of Bradwell Quarry, joining the A12 at Kelvedon south junction.





2.3 Potential impacts

Figure 2.2, below, shows the predicted changes in average peak hour traffic flows in 2026 for each of the route options compared to the flows in 2026 if there was no new A120 route.

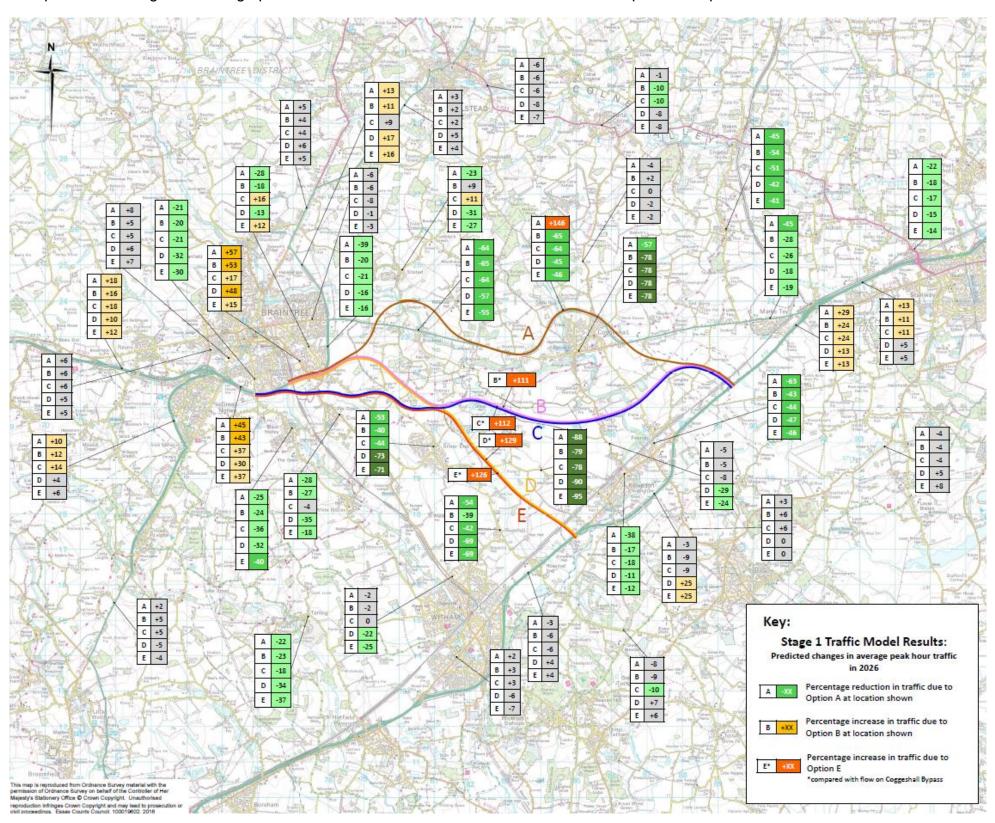


Figure 2.2: Predicted changes in average peak hour traffic in 2026 as a result of A120 options



The map (Figure 2.2) on the previous page outlines the predicted change in traffic flows, taken from opening year (2026) modelling results for each of the routes, at various locations within the study area if a new A120 route were implemented compared to if there was no new route. Depending on the option Galleys Corner roundabout will either be removed and replaced by a new grade separated junction in a different location or bypassed. Outlined below are the key junctions assessed in the Local Plan work that are likely to be affected by a new A120 along with a description of the possible changes. It should be noted that no direct conclusion can be drawn from these forecasts in relation to the Local Plan impact as different base and forecast years and flows have been used in the A120 modelling work.

Broad Road, Braintree – Both A131 arms are likely to see an increase in traffic flows, with the A131 South possibly seeing an increase of between 9% and 17%, while the A131 North could see an increase of between 4 and 6%, depending on the option taken forward.

Cressing Road, Braintree – Depending on the option chosen, Cressing Road may either experience an increase or decrease in traffic flows. Option A is predicted to decrease flows by 28%, while Option C could increase flows by 16%.

Marks Farm, Braintree – Regardless of the option chosen, Marks Farm is likely to experience decreased traffic due to a new A120 route, with significant decreases in traffic flows predicted on the two A120 arms and a small decrease on Coggeshall Road. There may be a small increase in flows on the A131 arm but this is likely to be offset by the decreases on other arms.

Panners Interchange, Braintree – All arms are likely to see an increase in traffic flows, regardless of which option is chosen. In particular the A120 to the east of the junction is likely to see an increase of between 30 and 45%.

Springwood Drive, Braintree – A small increase in flow, between 5 and 6% is predicted on Pods Brook Road in all options.

A131 – Cuckoo Way & A131 – London Road, Great Notley – On the section of A131 between the two junctions, an increase in traffic flows of between 4% and 14% could occur depending on the option chosen.

A120 – Colne Road, Coggeshall – If Option A were to be implemented, an increase in traffic flows of 146% is predicted. However, all other options are likely to significantly reduce traffic flows with reductions of between 45% and 65% expected.



Rye Mill Lane & Feering Hill, Kelvedon – Flows along the High Street, which feeds into both junctions, are likely to decrease by between 11% and 38% depending on the option chose.

3 A12 Chelmsford – A120 Widening

3.1 Project Status

The A12 Chelmsford – A120 study has over the last two years developed 15 highway improvement options, 5 public transport options and 3 collision reduction options, assessed these and reduced them to the 4 best performing options, which were recently shared in an 6 week long public consultation. The study is aiming to meet the following objectives:

- Making the network safer
- Improving user satisfaction
- Supporting smooth traffic flow
- Encouraging economic growth
- Delivering better environmental outcomes
- Helping cyclists, walkers and other vulnerable users on the network

Following the consultation, the responses will be analysed and issues raised reviewed. Additional technical work will be undertaken, and if there is a compelling case for the scheme and a suitable option is selected, a preferred route will be announced in Summer 2017. Further engagement will then take place, followed by a statutory public consultation. Responses from this consultation will be analysed and an application for a Development Consent Order will be submitted. It is currently expected that the Planning Inspectorate would then make a decision late 2019 / early 2020 and construction would start in March 2020.





3.2 Route Options

Figure 3.1 and Figure 3.2, below, show the four A12 route options publicised during the recent consultation.

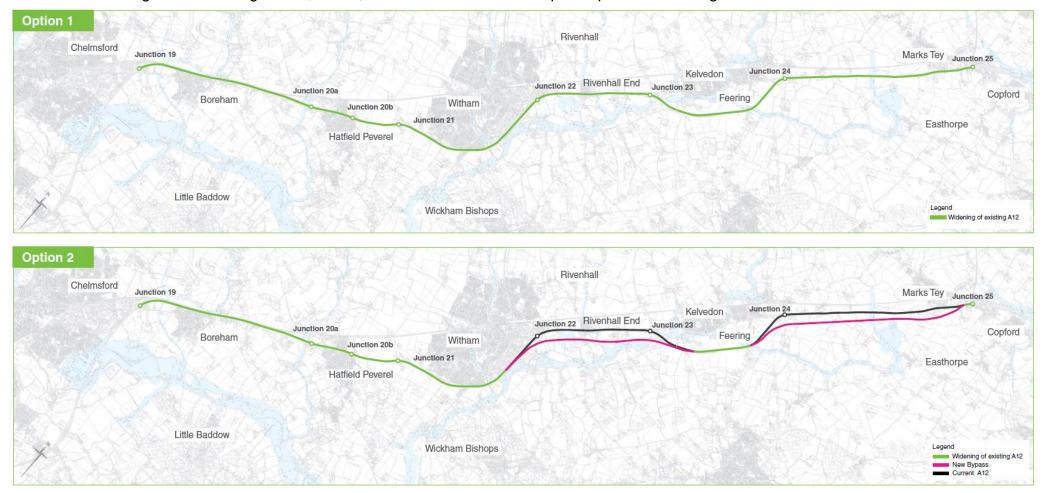


Figure 3.1: A12 Options 1 & 2





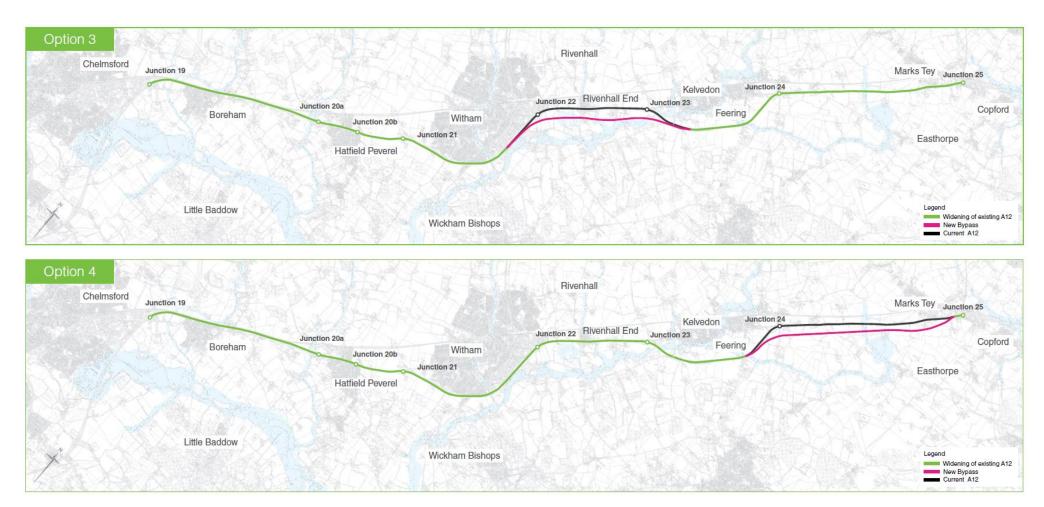


Figure 3.2: A12 Options 3 & 4

The four options shared at the public consultation event are detailed below:

Option 1 – This option widens the A12 between junctions 19-25 (Boreham to Marks Tey/A120) by using the existing highway boundary or adjacent land.

Option 2 – This option would widen the road along the existing A12 except where widening could have a high local impact. Two new bypasses would take traffic off the A12 and onto a newly created A12 between junctions 22-23 (Colemans to Kelvedon South) and junctions 24-25 (Kelvedon North to Marks Tey/A120).

Option 3 – This option is the same as Option 2, but with one new bypass between junctions 22-23 (Colemans to Kelvedon South).

Option 4 –This option is the same as Option 2 but with one new bypass between junctions 24-25 (Kelvedon North to Marks Tey/A120).

3.3 Potential Impacts

Due to the limited amount of information available during the A12 consultation, it has not been possible to provide commentary on specific Local Plan junctions. However, Table 9.1, in the "A12 Chelmsford to A120 widening: Options Assessment Report (March 2016)", indicates that Option 2 is likely to provide the best volume / capacity ratios at junctions along the A12. It should be acknowledged though that these options will be further consulted on and subject to further change.

4 Council Responses

This section summarises ECC's, BDC's, Colchester Borough Council's (CBC's) and Tendring District Council's (TDC's) responses to the A120 – A12 feasibility study consultation and the A12 Chelmsford to A120 Widening consultation. Full responses can be found on the respective councils' websites.

4.1 Essex County Council

4.1.1 A12 Chelmsford to A120 Widening Response

The County Council fully supports the widening of the A12 and also has a preference that all links passing under or over grade separated junctions should also be dual three lane carriageways. The improvements to the A12 would also assist in enabling the construction of the proposed dualling of the A120 between Braintree and the A12, which is currently out to consultation. The County Council views the A12 as one of the most important road projects in Eastern England and wishes to see a speedy implementation of this project which was identified in the

recent Route Based Strategies and included in the Roads Investment Strategy for 2015 and 2020.

While it is acknowledged that all of the options meet to a greater or lesser extent the aims and objectives set by Highways England by widening the road to provide 3 lanes in each direction, it seems clear that this cannot simply be an on-line widening based on the pattern and configuration of junctions which currently exist. The present configuration of the A12 is essentially the line of the Roman road complemented by (in the main) bypasses implemented in the 1960s and 1970s. Because of this, the road is hugely compromised in seeking to achieve the design aim of an Expressway.

The County Council do not feel that on-line widening under an Option 1 scenario will ever address either these historic shortcomings, or provide Essex with a modern trunk road built to expressway standards in providing the resilience this key artery requires, both from a transport, housing and economic growth perspective. In particular the County Council recognises that future growth will put additional pressure on the A12 junctions, and in order to address the historic problems, options which provide more modern alignments with the opportunity to construct safe and properly aligned junctions will be successful. Options 2, 3, and 4 are essentially variations on this this latter theme and upon which the County Council has the following views:

- Option 3 is supported because it presents an opportunity to address probably the worst section of the A12 at Rivenhall. Realigning the existing A12 in this way, between Junction 22 and 23, allows improvements to be made which enhance the safety, capacity and accessibility of the A12.
- Option 2 could also be supported but will require further joint working to demonstrate that the existing alignment of the A12, between Feering and Marks Tey, can be used effectively, and does not become a fragmented section of dual carriageway road, with long term maintenance problems and liabilities. No information was provided at the consultation to address these issues. It is fully appreciated that this section of road is simultaneously a trunk road carrying longer distance traffic, but also the only reasonable route between Kelvedon and Marks Tey and indeed Colchester. The County Council would welcome continued collaborative discussions with Highways England and the Local Planning Authorities, to understand the pressures associated with growth and the emerging housing allocations from individual local plans in the area particularly between Junctions 24 and 25.

- Option 4 is rejected, not only is there the problem alluded to above but it does not include the essential improvement needed at Rivenhall.
- Option 1 is opposed by the County Council, since it does not offer same opportunities to accommodate local road movements and future growth particularly in relation to the junctions.

All links between junction 19 and junction 25 should be dual three carriageways. All links passing under or over grade separated junctions should be dual three lane carriageways.

The County Council believes the way forward is to seek as wide agreement as possible on the widening and junction improvements which will offer the widest strategic benefits and the least dis-benefits to the local communities. In this respect the County Council is happy to work with Highways England to bring together a consensus view with all local authorities in the area. The key points of this response have already been shared in draft with those authorities and this final submission will also be similarly shared. The County Council advocates a collaborative approach in developing the selected option further and is very happy to engage, facilitate or assist in any way it can.

4.2 Braintree District Council

4.2.1 A120 - A12 Response

Braintree District Council (BDC) is strongly supportive of the proposals to improve the A120 between Braintree and the A12. Improvements to the strategic road network are long overdue and are needed to enable the delivery of new homes and economic growth, whilst reducing congestion, bringing benefits to existing communities and businesses.

We would draw particular attention to the garden communities proposed along the A120 corridor as part of the North Essex Garden Communities Project of which ECC is a partner. These are significant new settlements in the A120 corridor, which have the potential to affect traffic movements in the vicinity significantly and should, therefore, be specifically factored in. Other small sites proposed for growth may have more local impacts but nevertheless should be considered in the context of wider impacts. This includes the 1,000 homes to the north of Feering and new homes proposed in the vicinity of Braintree town, including 1,000 homes at Straits Mill and up to 2,000 homes to the south of Braintree near Great Notley. Highways investigation work for the Great Notley site includes converting one of the two slip roads off the A120 into the main

access point for this development. BDC do not know if that has been factored into the modelling and how it may affect any modelling which has been undertaken.

Having studied the route options and considered the impact of each on the delivery of our emerging Local Plan, BDC does not wish to confirm specific support for a single option; it appears that none of the growth options set out in the draft Local Plan would be compromised by the proposals in this consultation. Indeed, improvements to the strategic road network should ensure that capacity is available for the growth generated from new homes and employment facilities.

Following a detailed review of the options, BDC does have a preference to discount Option A. Overall in the view of BDC, Option A offers the least advantages of all the routes that are under consideration. While all options will have varying impacts on local communities, Option A will have a significant effect on the larger villages of Stisted, as well as having the potential to bring more noise, pollution and visual impacts to Coggeshall. Both villages have significant Conservation Areas with a large number of listed buildings sitting in a rural context. Option A would bring the new route of the A120 into closer proximity to these communities with the subsequent negative implications.

Option A largely uses the existing route of the A120 which means there is less resilience in the highway network and less overall capacity when compared to other options where both a new dualled A120 and the existing single carriageway route will be available to traffic in addition to the smaller local road network. In other routes there is opportunity to develop the existing A120 as a public transport route. These options are not available with Option A.

BDC is committed to working with Essex County Council (ECC), our communities, businesses, neighbouring authorities and all other relevant stakeholders to promote the A120 to A12 Improvement Project and optimise the positive effects the final preferred route option.

4.2.2 A12 Chelmsford to A120 Response

Braintree District Council (BDC) is strongly supportive of the proposals to widen the A12 between Chelmsford and the A120. Improvements to the route will deliver significant benefits to our communities and businesses by reducing congestion and improving journey times. Critically, the A12 corridor represents a key growth area in the Braintree District, with the potential to accommodate the development of significant numbers of new homes.

The A12/mainline railway corridor has been identified as one of the key growth areas in the District. It will directly accommodate around 3,500 new homes in the

town of Witham and villages of Hatfield Peverel, Kelvedon and Feering which sit directly adjacent to the A12 at present, and have mainline railway stations. However, the A12 corridor, as one of only two major link roads in the region, attracts large volumes of traffic for more rural parts of Essex, which also causes congestion issues for villages such as Hatfield Peverel, Kelvedon and Feering, as traffic seeks to get on or off the A12.

The decision for online or offline will be critical to capacity for development of the proposed garden community but equally important is the future use of any bypassed sections of road which will determine ultimate impact and capacity. As such it would be prudent to plan specifically for this growth within the A12 proposals. This would ensure that appropriate land is safeguarded and junction numbers and sizes are proposed as part of this scheme, which would resolve existing issues and provide long term resilience to the A12.

Overall however BDC believes that the offline solution in this area would create more resilience and capacity in the network which would ensure that the garden community proposed at Colchester Braintree borders is served by the most appropriate highway solutions. BDC also believes that the 'orphan' stretch of the existing A12 created by the offline solution could be used to promote modal shifts: for example, the creation of dedicated bus lanes.

Following a detailed analysis of the route options, BDC does not feel it is in a position to commit to a single preferred option. However, following the analysis, BDC does have a preference to discount Option 1.

4.3 Colchester Borough Council

4.3.1 A120 – A12 Response

Colchester Borough Council supports the principle to make investment in the A120 as part of the strategic trunk road network to support economic growth and improve the safety and reliability of the route. The Borough "strongly agrees" that the A120 needs to be upgraded to a modern consistent standard throughout. Additionally, Essex County Council decisions on the preferred option should have regard to the consequential effects on the location and design of a Garden Community.

The new junction with the A12 and A120 could also serve the Garden Community but would be large. The consultation highlighted that the exact location of the new A12 and A120 junction could be located within a 1.5km stretch of road. Colchester Borough Council believes that the junction should be located to optimise the development of the Garden Community. The route could then in part follow the

pylon line which runs across the area. This would suggest the junction is further from Marks Tey. The exact scale of the junction and links need further detailed engineering and traffic modelling assessment.

In considering which option to select the following issues should be considered:

- How each option (with modification) can fit with the proposed Garden Community
- How each option provide benefits to Marks Tey as result of a reduction in through traffic
- How each option provides a strategic route to support the wider growth of north Essex and Haven Gateway
- How each options improve the journey time and reliability of the route
- How each options fit with the A12 proposals and minimise the widening of the A12.

Colchester Borough Council supports option B or C with modification to take into consideration and optimise the Garden Community opportunities.

4.3.2 A12 Chelmsford to A120 Widening Response

Colchester Borough Council supports the principle to make investment in the A12 as part of the strategic trunk road network to support economic growth and improve the safety and reliability of the route. The A12 needs to be upgraded to a modern consistent standard throughout.

Of the 4 options shown at this time Colchester see greater merit in an option which is "off line" at Rivenhall and from the Kelvedon bypass northwards (option 2) with confirmation of the relationship with a potential Garden Community, a package of mitigation measures and revised access arrangements.

The A12 options have been developed independently from the ideas for the Garden Community. The process for developing and delivering a trunk road improvement requires a Development Consent Order (DCO) which is a combined planning application and land compulsory purchase order process. The DCO process only considers development which has been allocated and adopted in the Local Plan process. Therefore, currently the DCO will not take into account proposals in the Council's emerging Local Plan. The connectivity between the parcels of land in garden community areas will be important to ensure a cohesive development.

With an improved A120 and a widened A12, traffic flows could be in the region of 110,000 vehicle per day on the section of A12 north of the new A120 junction.

With these high traffic volumes the design of junctions may need to be large; possibly 3 level grade separation and/or include some form of "free flow" slip road arrangements. This would require increased land take in the area of the garden community.

Colchester Borough Council is concerned that the scope and timescale that Highways England are working to is limited and has constrained its thinking. Greater consideration needs to be given to the potential Colchester Braintree Borders Garden Community.

The choice of option for the A12 is complex and the proposal should consider the following:

- How each option (with modification) fits with the Garden Community proposal
- How each option fits (or can be modified to fit) with the A120 options which are also under consideration
- How each option improves the safety, journey time and reliability of the route
- The opportunity to provide a strategic route to support the wider growth of north Essex and Haven Gateway
- How each option improves local access to the trunk road network reducing the amount of through traffic in nearby villages
- Timely delivery of the section in Colchester through the proposed Garden Community.

The planning processes for the A12 and the Local Plan, including the Garden Community, will take place over the next couple of years as the proposals are developed in more detail and formally examined. CBC believe that it would assist both processes if the HE were directed to widen the scope of their project, taking into greater consideration the potential Garden Community which supports economic growth and national housing demand, which are also objectives of the Road Investment Strategy.

4.4 Tendring District Council

Tendring District Council fully welcomes and supports the consultations on the need for significant improvements to A12 and A120 and has campaigned for such improvements since setting up the Haven Gateway Partnership back in 2002. Both the A120 and A12 improvements will be a significant boost to the accessibility and economy of the Tendring District.

Specifically the improvements will aid:

- east /west transit between Harwich International Port and London Stanstead Airport;
- provision of additional capacity and journey reliability time to help the North Essex authorities meet their nationally significant growth aspirations, including the potential for three Garden Communities; and
- the championing the government's industrial strategy by the North Essex authorities.

A12 Expressway

Tendring District Council (TDC) agrees with the emerging consideration of Essex County Council and Braintree District Council that Option 1 for the A12 is the least beneficial. The Council's preference is for Option 2; which is also the emerging preference of Colchester Borough Council. TDC considers Option 2 would maximise the benefits of removing the sub-standard carriageway at Rivenhall End; this would increase the travel safety of the occupiers of the buildings in Rivenhall End as well as the travel safety of A12 users. In addition Option 2 provides an off-line opportunity for accessing the proposed Colchester Braintree Borders Garden Community. TDC suggests that the realigned A12 could re-join the carriageway further north as opposed to Junction 25, this could improve options for the garden communities. Whilst this is currently out of scope, the Council along with Braintree District Council considers that such an alignment could bring additional benefits to A12 users and better accommodate the growth being considered in the currently congested Junction 25 area. Options 3 and 4 do not provide the benefit of Option 2 in full. This council wishes to remain engaged on the options analysis and selection process moving forward.

A120 Braintree to the A12

In regards to the A120 TDC reiterates its support for a new carriageway alignment of the A120 from Braintree to the A12. They do not at present have a preferred route for the A120 and wish to remain engaged on the options analysis and selection process moving forward.