

**AGENDA ITEM 5**

Report to Cabinet	Forward Plan reference number: FP/411/02/16
Date of Cabinet Meeting: 22 March 2016	County Divisions affected by the decision: All Divisions in Brentwood, Basildon, Rochford and Castle Point
Title of report: Lower Thames Crossing: 2016 Consultation Response	
Report by: Cllr Rodney Bass, Cabinet Member for Infrastructure	
Responsible Director: Paul Bird, Director for Commissioning: Transport and Infrastructure	
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1. Purpose of report

- 1.1. To approve the proposed Essex County Council (ECC) response to the public consultation by Highways England on the *Lower Thames Crossing: Route Options*, as set out in paragraphs 3.21 – 3.36.

2. Recommendations

- 2.1. Agree to send a response based on the principles outlined in paragraphs 3.21 – 3.36 to Highways England regarding the consultation on the *Lower Thames Crossing: Route Options*.
- 2.2. Agree that the Cabinet Member for Infrastructure be authorised to approve the final terms of the submission.

3. Background and proposal

- 3.1 This latest consultation is the next step in a project that has been ongoing for a number of years, with the previous consultation carried out in 2013. The ECC response to the 2013 consultation can be found in Appendix A.
- 3.2 The current consultation is non-statutory and is being collated in advance of a preferred route being chosen by the DfT, the necessary detailed design and assessments will then be completed before a Development Consent Order is sought.

- 3.3 In response to the DfT's 2013 consultation, ECC expressed strong support for a new crossing at location C (to the east of Gravesend). This support was based on the economic growth and job creation, positive impact on network resilience and the creation of a new strategic link between the Channel Ports and the Midlands and North.
- 3.4 On 26th January 2016 Highways England issued their consultation on four proposed routes for a new road crossing of the River Thames connecting Kent and Essex; known as the Lower Thames Crossing (LTX). The consultation runs until 24 Mar 2016 and seeks views and comments on the four proposed routes. The proposed ECC position is set out in paragraphs 3.21 – 3.36.
- 3.5 Highways England are at an early stage of the development process and more detailed work will be undertaken at the next stage of the project, and therefore, route designs are illustrative at this stage. Once a route is selected, Highways England advise that more detailed design and planning will be done, which will involve further investigation and assessment of a wide range of factors. This would include noise, air quality, land and property impacts, cultural heritage, biodiversity, landscape, water resources, construction impacts, costs and charging.
- 3.6 As Highways England progress the design in the next phase of the scheme, this would include developing plans to avoid or minimise impacts on local communities and the environment. Where impacts remain, Highways England will seek to mitigate them.
- 3.7 This next stage of assessment, design and development would be the basis for an application for a Development Consent Order granted by the Secretary of State. This would give permission for the development as a Nationally Significant Infrastructure Project. Highways England would consult on future proposals as part of the statutory planning process.
- 3.8 Subject to the necessary funding and planning approvals, Highways England anticipates that the new crossing would be open in 2025, if publicly funded. If private funding is also used Highways England anticipates the crossing being open by 2027.

Highways England proposed routes

- 3.9 Highways England are consulting on four potential routes for the LTX, shown in figure 1:
- Route 1: Location A, a bridge or bored tunnel adjacent to the existing Dartford Crossing.
 - Route 2: Location C (a bridge, bored tunnel or immersed tunnel) -
South of the river: using either a Western Southern Link from the A2 or an Eastern Southern Link from the M2. North of the river: from the crossing following a westerly line via the existing A1089 to the M25 between junctions 29 and 30.

- Route 3: Location C (a bridge, bored tunnel or immersed tunnel) - South of the river: using either a Western Southern Link from the A2 or an Eastern Southern Link from the M2. North of the river: from the crossing following a middle-line to the M25 between junctions 29 and 30.
- Route 4: Location C (a bridge, bored tunnel or immersed tunnel) - South of the river: using either a Western Southern Link from the A2 or an Eastern Southern Link from the M2. North of the river: from the crossing following an easterly line via the existing A127 to the M25 at junction 29.

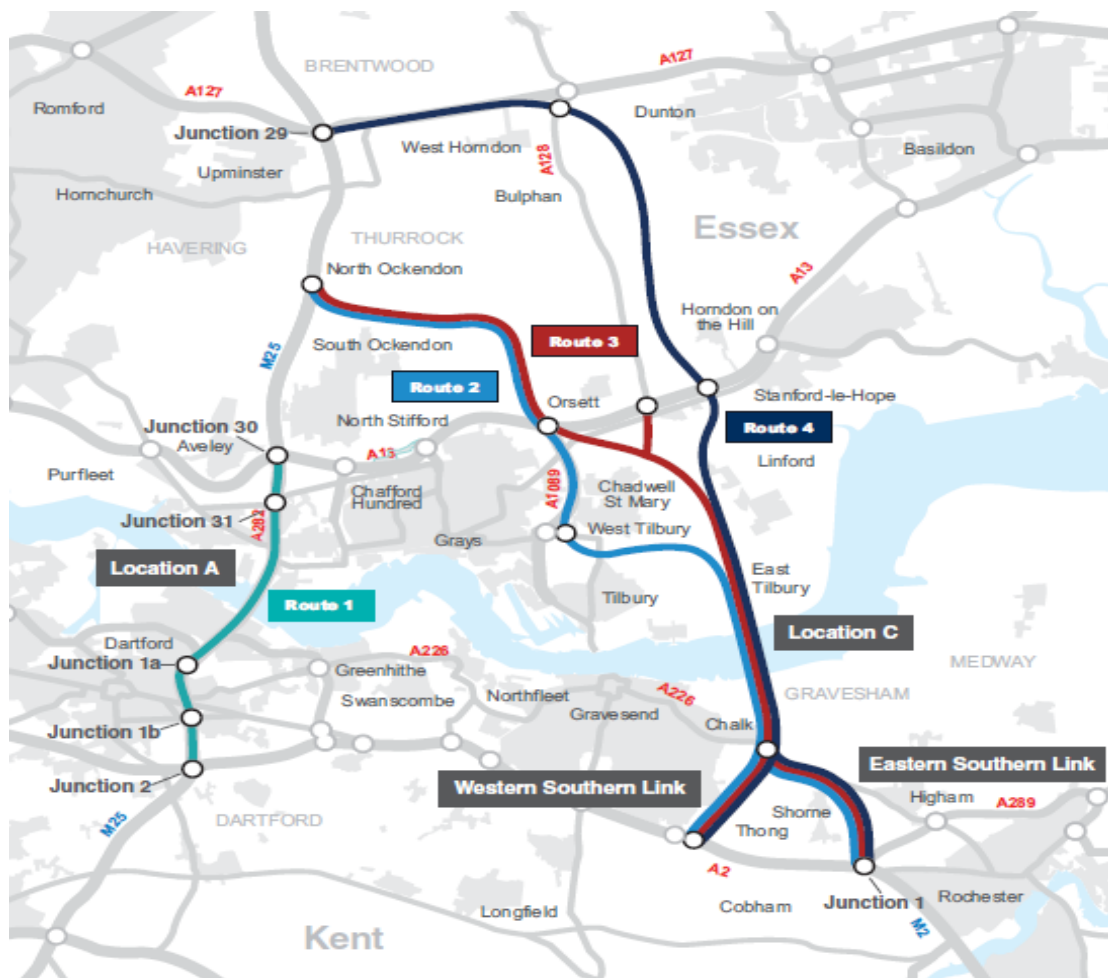


Figure 1: Potential LTX locations and routes

- 3.10 Highways England has indicated that a new crossing at Location A (Route 1) performs poorly against the traffic related scheme objectives. As Location A does not provide an alternative route, traffic would still be funnelled through the existing corridor from junctions 2 to 29 on the M25. Incidents at Dartford would potentially still cause long delays and severe congestion on local roads.

- 3.11 Highways England has also suggested that Route 1 would not provide additional connections to local roads and, by attracting more traffic to the existing corridor, congestion on the adjacent A2 and A13 would also increase.
- 3.12 Highways England advise that construction on Route 1 would take at least six years and would cause considerable disruption to traffic using the existing Dartford Crossing with 40mph average speed restrictions and complex traffic management affecting millions of journeys. Even when the scheme is complete, there would be limited improvement for drivers as the current 50mph speed limit and closely spaced junctions would remain.
- 3.13 Additionally, Highways England have calculated that a crossing at Location A would offer poor value for money and would perform poorly against other scheme objectives such as safety, noise and air quality.
- 3.14 Routes 2, 3 and 4 are sited at Location C, which is Highways England's preferred location. Highways England argue that Location C offers greater benefits than Location A. It would unlock significant wider economic growth and offers higher transport performance in terms of safety, capacity and resilience.
- 3.15 Highways England have indicated that a new crossing at Location C would provide a high quality, safer transport solution with a 70mph road providing improved journeys. Crossing capacity would increase by 70% in the opening year and, as a new route, it could be constructed without impacting the already congested Dartford corridor.
- 3.16 Highways England have calculated that a new crossing at Location C would draw 14% of existing traffic away from Dartford, improving journey times on the existing crossing by up to 5 minutes in peak time and improving journey times from Kent to the M25 by up to 12 minutes when using the new crossing. It would provide a clear alternative to the existing crossing when incidents occur. Traffic flows on the A2 and the A13 would also improve.
- 3.17 Further Highways England suggest that significant economic growth and regeneration would be enabled by connecting key areas (such as Ebbsfleet, Swanscombe and Gravesend to the south and Tilbury and wider areas of Thurrock to the north) to the national road network and improving access to jobs and services. Opportunities for new businesses are estimated to generate double the wider economic benefits at Location C compared with Location A.

Highways England proposed Route

- 3.18 Highways England indicate that their proposed route is a dual carriageway bored tunnel crossing with entrances and exits east of Gravesend and Tilbury (known as 'location C') connecting junction 1 of the M2 to the M25 between junctions 29 and 30, as shown in figure 2 below. Highways England has named this 'route 3'.
- 3.19 Route 3 is preferred by Highways England as it would provide the shortest route, the greatest improvement to journey time and, being an entirely new

road, would deliver a modern high quality road. It would also have the lowest environmental impact of the three options.

3.20 The Eastern Southern Link (in Kent) is proposed as it would provide the most direct route and the greatest improvement to journey times, as it would create a motorway-to-motorway link. Highways England recognise this proposal has significant implications for the local community.

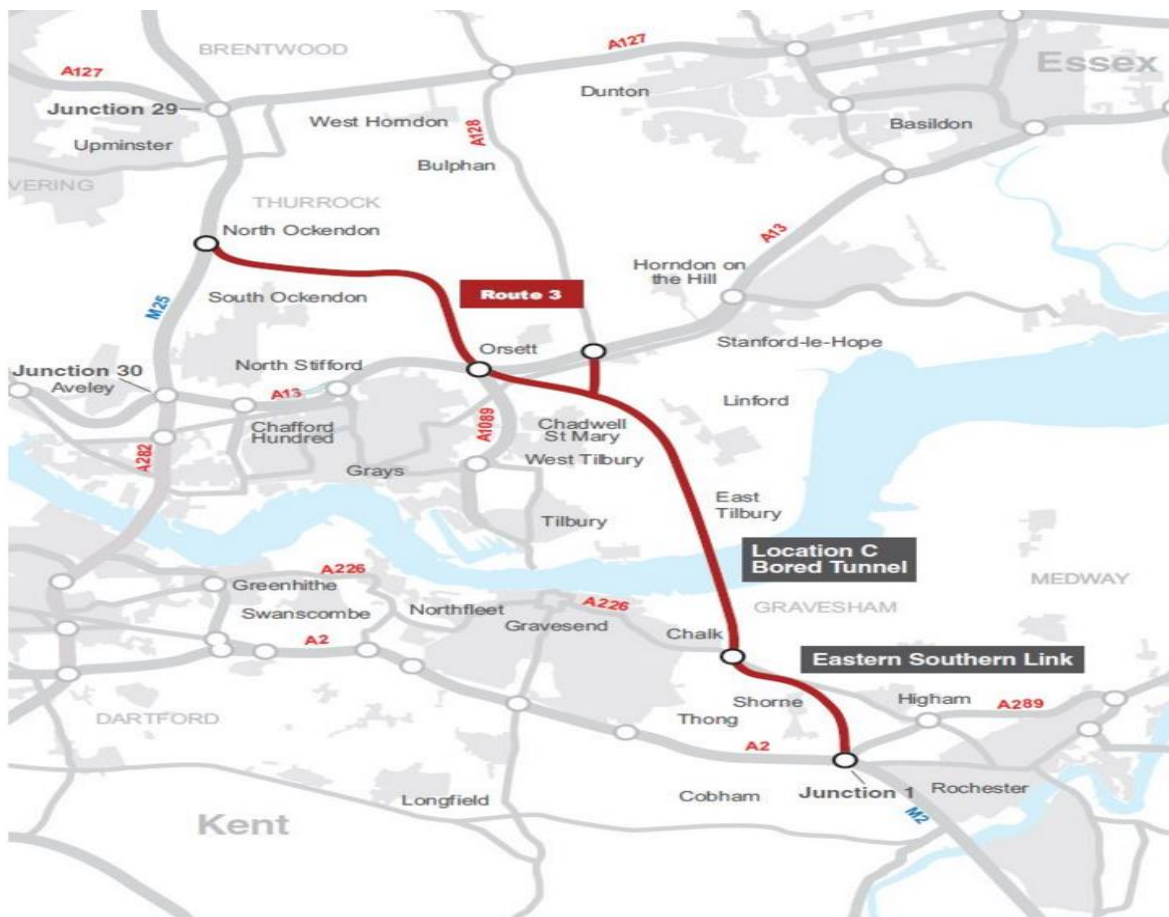


Figure 2: Highways England preferred route

Proposed ECC Response to the Highways England Consultation

3.21 Delivery of the LTX at route 3 could provide 25,000 new jobs and 21,000 new homes and deliver wider economic benefits of £1.4bn. The key principles of ECC's response to the Highways England Consultation are set out below.

3.22 ECC strongly agrees with the proposal for a new Crossing at Location C, east of Gravesend and Tilbury. The reasons for this are:

Economic benefits – the economic benefits of a new Crossing at Location C are significant and this location has the greatest potential for regeneration and job creation. These benefits are of a substantially greater scale than expansion of capacity at Dartford can provide (see Table 1). A study undertaken by KPMG

in 2010 calculated that a new crossing at Location C could contribute £12.7 billion to the local economy.

Network resilience – the provision of an independent crossing built to modern standards and suitable for all users will not only radically improve the resilience of crossing the Lower Thames but also the resilience of the strategic road network (SRN) between Kent, the Midlands/North and mainland Europe.

Strategic transport benefits – the Highways England consultation documents and other studies have shown that during incidents at Dartford, traffic diverts to other crossings (notably the Blackwall Tunnel) or the long way around the M25. Providing a suitable alternative crossing point, has the dual benefit of releasing capacity at Dartford and elsewhere on the SRN. The provision of a faster, more reliable route to the Midlands and North from the Channel ports will be particularly attractive to long-distance freight traffic and will have the benefit of diverting many of these journeys away from Dartford.

	Location A	Location C
New Jobs	17,000	25,000
New Homes	13,000	21,000

Table 1: URS Study Economic Impacts (2012)

3.23 ECC strongly supports the proposed 'route 3', connecting junction 1 of the M2 to the M25 between junctions 29 and 30. The reasons for this are:

Economic benefits – the 2012 URS study used route 3 at location C as a base route. As indicated in Table 1 route 3 supports the long term creation of an additional 25,000 new jobs and enables the construction of an additional 21,000 new homes over the reference case. Assuming the construction of Paramount Park, Option C supports the long term creation of an additional 32,000 new jobs and enables the construction of an additional 28,000 new homes over the reference case. This modelling has not been undertaken for routes 2 and 4.

Network resilience – the 2012 study indicated that route 3 would reduce flows at the existing crossing by between 2% and 19% dependent on time of day and direction of flow (more generally about 10%).

Strategic transport benefits – route 3 is the only option that provides a new strategic link between the Channel Ports and the Midlands and North and provides improved connectivity from Essex to these locations. Dependent upon the direction of travel and time of day 23% and 34% of travellers would chose to use a LTX at route 3 rather than the existing crossing.

3.24 The latest modelling work undertaken by Highways England suggests there will be a ten minute reduction in journey time between junction 4 on the M2 and junction 28 on the M25 via route 3.

- 3.25 Journey times between junction 3 and junction 28 on the M25 using the existing Dartford crossing would also be reduced by three minutes southbound and four and a half minutes northbound. Table 2 provides more information on the latest modelling.

	Western Southern Link Assumed		
	Route 2	Route 3	Route 4
Estimated construction cost (nominal)	£4.1bn to £5.8bn	£4.1bn to £5.7bn	£4.1bn to £6.2bn
Wider Economic Impacts	£1.3bn	£1.4bn	£1.7bn
Adjusted Benefit Cost Ratio	3.6	3.5	3.3
Reduction in journey time between M25 junction 3 and junction 28 using the Dartford Crossing	3 mins (s/b) 4.5 mins (n/b)	3 mins (s/b) 4.5 mins (n/b)	3 mins (s/b) 5 mins (n/b)
Reduction in journey time between M2 junction 4 and M25 junction 28 using the LTX (location c)	9 mins	10 mins	9 mins
Route length	13.8 miles	13.3 miles	15.9 miles

Table 2: Highways England Modelling (2016)

- 3.26 ECC supports the Western Southern Link (WSL) as preferred by Kent County Council (KCC). This is not Highways England's proposed route. The reasons for this route choice are:
- **KCC's preferred WSL** – in 2014 KCC commissioned work to design an alternative alignment because the DfT's indicative route in the 2013 consultation went centrally through Shorne Country Park. It is KCC's alignment that is referred to as the WSL in the 2016 consultation and therefore historically we have supported it.
 - **Junction with the A2/M2** – the Eastern Southern Link (ESL) would terminate with the M2 at Junction 1. This is already a complex junction and using this will require a fourth level of slip roads on viaducts up to 23m high. The increase in complexity will also have possible safety implications and could lead to the whole junction locking up if there is an incident on one part of it. Conversely the WSL would create a new junction on the A2. Although this would require realignment of the A2, this could be completed with minimal disruption to the running of the A2.
 - **Environmental impacts** – the WSL would mostly be located outside of the Kent Downs Area of Outstanding Natural Beauty (AONB)

whereas the ESL has a greater footprint within it, as well as impacting on the Great Crabbles Wood Site of Special Scientific Interest (SSSI) Both would have impacts on the area's heritage but the ESL would divide Shorne Parish and be in closer proximity to a number of listed buildings.

- **Traffic flows** – the choice of WSL or ESL does not have a significant impact on the total volume of traffic using the Crossing but it does influence the distribution of traffic on the existing road network. The ESL tends to attract more HGV traffic but with the WSL more light vehicles would divert from Dartford. The ESL provides more relief to the A2 west of M2 Junction 1 and to the M20 at Maidstone, but puts significantly greater pressure on the M2 west of Junction 1 compared to the WSL.

- 3.27 ECC will argue that it is essential that a swift decision on the preferred route option must be taken by Government following the consultation so as to minimise the uncertainty and potential blight around the potential alternative routes through the community, both north and south of the river.
- 3.28 If Location C is chosen, irrespective of whether the western or southern link is built, there will be an improvement in air quality at Dartford on opening year owing to the forecast 14% decrease in traffic at the existing Crossing.
- 3.29 The Highways England modelling has shown that no residential properties will be at risk of exceeding air quality limits on any of the Location C routes. However, full modelling will be carried out at the next stage of project development.
- 3.30 For noise impacts the modelling has shown a net benefit as properties close to roads where traffic flow will decrease will have a reduction in noise levels but those in the vicinity of the new road or roads where traffic volumes will increase will have likewise experience an increase in noise levels.
- 3.31 The proposed routes will have varying degrees of environmental impacts, most notably on Schedule Ancient Monuments; landscape and the Greater Thames Marshes Nature Improvement areas. It is recommended that the next stages and further assessments should seek to minimise the environmental implications, whilst promoting environmental mitigation, compensation and enhancement, such as biodiversity offsetting and green infrastructure. Further detailed comments shall be provided on this basis with reference to ECC environmental policies and standards.
- 3.32 Longer distance traffic using the new Crossing should remain on the Strategic Road Network (motorways and trunk roads) and not leak onto the Local Road Network which would cause traffic problems for ECC's roads. Therefore ECC requires more evidence before a judgement can be made on proposals for new junctions with the A13 and M25 capacity for which need to be fit for purpose. The reasons for this are:

- The new junctions will improve accessibility to Basildon, Southend and Chelmsford. It is likely that traffic on the A13 will increase as well as that on the local road network leading into the A13 including the A127. The Highways England modelling shows a decrease of around 3,100 vehicles per day on average using the A13 west of A1089 on opening year but it does not state what effect it will have east of the junction. No modelling demonstrating the effects on the local road network has been made available.
- Likewise, in the event of an incident at the junction with the M25 the alternative junction with the A13 will become the alternative route. It has not been demonstrated that the proposed junctions with the A13 can support forecast traffic flows and are future-proofed for growth.

3.33 This consultation, whilst it is focused on route options, also needs to consider the impact on existing junctions on the strategic road network. Where improvements are required as a result of the changing traffic flows created by the new Crossing then such improvements should be funded as part of the scheme to avoid future problems for the Highway Authorities. ECC has consistently argued for a number of wider network improvements and believes these must be delivered in conjunction with the LTX to mitigate current pinch points which would otherwise be exacerbated as follows:

- M25 J28 (A12 junction) - Clockwise flow from the A12 towards the crossing flows well. But anticlockwise traffic from the crossing accessing the A12 is constrained by the need to navigate a complex signalised roundabout. This must be addressed.
- A12/A130 (Fairglen junction) - Likely to see increased traffic flow from a lower Thames Crossing and is already a major bottleneck.
- A12/A130 (Howe Green junction) - Likely to see increased traffic flow from a lower Thames Crossing. This is a major bottleneck on the A12 and is urgently in need of major improvement.

3.34 Finally, the Consultation Questionnaire asks for comments on the consultation itself. It is proposed that ECC will state:

- A range of technical information that is necessary in assessing the impacts of the proposed scheme and relative merits of the different routes has not yet been made available.
- A combination of signage, advanced information boards etc... pointing out the relevant live advantages of alternative route for the two crossing points and alternative routes to the north on the north side of the river and to the south and east on the south side of the river will be essential.

3.35 ECC has been working with other local authorities within Essex and businesses to form a consensus around the best location and route for the LTX within Essex. We have also liaised with other County Councils that border Essex including Kent, Cambridgeshire, Hertfordshire and Suffolk to understand their view and form a consensus on the best location and route for the LTX in terms of strategic traffic movements.

- 3.36 A formal consultation response will be approved by the Cabinet Member for Infrastructure and submitted to Highways England based on the information contained within this report and any additional partner information that officers receive in the interim period.

4 Policy context and Outcomes Framework

4.1 A Vision for Essex 2013-17 sets out the Council's aims and vision. This proposal aligns with the following aims:

- develop and maintain the infrastructure that enables our residents to travel and our businesses to grow
- support employment and entrepreneurship across our economy
- improve public health and wellbeing across Essex
- respect Essex's environment.

4.2 In February 2014 the Council adopted a new Outcomes Framework for Essex - a statement of ambition based on its Vision for Essex 2013-17 (agreed at Full Council in July 2013). The framework sets out the Council's ambitions for Essex and replaces a range of previous outcomes and objectives. This proposal aligns with the following Outcomes:

- Sustainable economic growth for Essex communities and Businesses
- People in Essex experience a high quality and sustainable environment

4.3 Provision of additional crossing capacity will drive economic growth in Essex, widening access to employment and improving the competitiveness of the Essex economy.

4.4 ECC will work with the DfT to ensure that the preferred option delivers value for money and benefits the people of Essex.

4.5 The Thames Crossing is a nationally important strategic road link connecting Essex to Kent, southern England and the Channel Ports. The construction of additional crossing capacity supports the Essex Vision: *Essex means business. We want to be a vibrant place where every individual and community has the opportunity to grow and reach their potential and play a part in our county's success by securing the highways, infrastructure and environment to enable businesses to grow.*

4.6 The Thames Crossing is essential to the delivery of the Economic Growth Strategy vision; *Essex is an economically vibrant and successful entrepreneurial county. Our economic vision is of a county where businesses and our residents can grow and fulfil their potential, making Essex the best place to live and work.* The crossing enables the efficient transport of people and goods, supports our locations for growth and is essential for the development of the ports and logistics business sector.

- 4.7 The Thames Crossing also supports the delivery of the Essex Local Transport Plan vision for *a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex* by providing connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration

5 Financial Implications

- 5.1 There is a strong probability that any of the preferred routes could increase traffic volumes on other parts of the Essex road network. However, the specific impact will be in part dependent on other improvements along the network and patterns of local development. Traffic modelling will be needed to ensure that the impact of local development schemes is fully understood.

6 Legal Implications

- 6.1 None at this time.

7 Staffing and other resource implications

- 7.1 None

8 Equality and Diversity implications

- 8.1 The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:
- (a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc on the grounds of a protected characteristic unlawful.
 - (b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - (c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.
- 8.2 The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).
- 8.3 The proposal for a new crossing may have equalities implications, however the recommendations in this report concerns only a response to consultation and the eventual decision will not be one that is taken by ECC. Therefore a Section 2 Equality Impact Assessment is not considered necessary.

8.4 Equality and diversity impacts will be considered by Government as they progress the preferred crossing option.

9 List of Appendices

(available at www.essex.gov.uk if not circulated with this report)

9.1 FP/221/06/13, *Lower Thames Crossing – Submission of ECC response to DfT consultation* (available online)

10 List of Background Papers

All background papers available from:

<https://highwaysengland.citizenspace.com/cip/lower-thames-crossing-consultation>