Equality Impact Assessment

Reference: EQIA405135817

Submitted: 02 March 2022 14:55 PM

Executive summary

Title of policy or decision: Army and Navy Sustainable Transport Package: Preferred Option for the junction improvement.

Describe the main aims, objectives and purpose of the policy (or decision): The Army and Navy Sustainable Transport Package has a number of elements to it and this decision relates specifically to the junction itself. The need to identify a Preferred Option for the junction improvement is to enable progression of the development of the Outline Business Case for the Department for Transport (DfT) to bid for Major Road Network (MRN) funding, which is required to deliver the project.

The Army and Navy Sustainable Transport Package would deliver benefits in line with the Environment: Transport and Built Environment commitments set out within Everyone's Essex; to deliver a step change in sustainable travel across the county and encouraging active and sustainable travel to reduce pollution and congestion.

The stated vision for the project is: To provide a sustainable solution which maximises the level of people throughput into and out of the City and which provides a gateway to the City befitting of the 21st Century.

The objectives of the project are to:
• Offer inclusive, attractive, and safe active travel measures (walking and cycling) across an improved and comprehensive network to encourage increased use for all
• Positively manage resilience and journey time reliability, improving journey times for passenger transport services travelling into/ out of the City Centre Core
• Provide enhanced connectivity for communities within and beyond Chelmsford to support and promote sustainable housing and economic growth and regeneration both now and in the future
• Increase the attractiveness of the gateway into the City Centre through design and public realm enhancements
• Improve safety and the perception of safety for all users on the Chelmsford City network to enhance and promote a safe travelling environment
• Manage environmental conditions (Air Quality and Noise)
• Actively manage resilience and journey time reliability for private transport trips within the core urban area of Chelmsford and in particular management of through trips.

What outcome(s) are you hoping to achieve?: Strong, Inclusive and Sustainable Economy, High Quality Environment, Health, Independence and Wellbeing for All Ages, A good place for Children and Families to Grow

Which strategic priorities does this support? - Enable inclusive economic growth: Infrastructure

Which strategic priorities does this support? - Help people get the best start and age well: Transport and built environment

Which strategic priorities does this support? - Help create great places to grow up, live and work: Healthy lifestyles

Which strategic priorities does this support? - Transform the council to achieve more with less: Safety

Is this a new policy (or decision) or a change to an existing policy, practice or project?: a new policy (or

decision)

Please provide a link to the document / website / resource to which this EqIA relates:
https://www.essexhighways.org/army-and-navy-taskforce

Please upload any documents which relate to this EqIA, for example decision documents:
https://www.essexhighways.org/army-and-navy-taskforce

Assessing the equality impact

Use this section to record how you have assessed any potential impact on the communities likely to be affected by the policy (or decision): A dedicated Army and Navy Taskforce, made up of elected members of Essex County Council, Chelmsford City Council and Great Baddow Parish Council and the local MP, has been supporting in driving forward the project and lobbying the Government for funding.

Extensive work has been carried out to help identify the right long-term solution for Chelmsford for this project. Significant work was undertaken to reduce a number of ideas to five initial options, which were shared with the public in November 2019. During the various stages of the assessment process, lower performing options have been ruled out and the two remaining junction options - Hamburger Roundabout and Separate T-Junctions were taken forward to public consultation (August - October 2021).

Due to uncertainty about restrictions caused by the ongoing COVID-19 situation, it was decided that the consultation would have a strong digital focus, complemented by some more traditional approaches to help ensure it was as accessible as possible. The exhibition contained a series of information boards outlining the background to the project and details of our current options and proposals, as you would expect to find at a traditional consultation event. The virtual exhibition had a total 5,847 visitors during the consultation period.

In total, 850 responses to the consultation were received, including 842 survey responses, with the majority (76%) of those from residents of Chelmsford. Among the key findings were:
• More than half of participants agreed that the proposed package would have a positive impact on Chelmsford (18% strongly agree and 37% agree) while a further 24% described their views on this as neutral.
• 60% of respondents indicated they preferred the hamburger roundabout option, compared with 21% who preferred the separate T-junctions option; 18% were undecided/no preference.
• 20% of respondents said the hamburger roundabout option, together with the wider measures proposed, would encourage them to travel through the junction using a different mode of transport in the future – compared with 16% for the Separate T-junctions option.
• Almost half of respondents agreed the ‘proposed walking and cycling improvements would create a more coherent network for pedestrians and cyclists in Chelmsford’ (12% strongly agree and 35% agree), while a further 32% described their views on the statement as neutral.
• Most respondents (67%) had no preference about their preferred site for a proposed new Park and Ride in Widford, with slightly more respondents preferring the Greenbury Way site (18%) over the London Road site (13%).
• The majority of respondents (60%) supported the idea of expanding Sandon Park and Ride before work got underway at the Army and Navy junction to help manage disruption and improve travel options during construction.
• 99 respondents commented that they would prefer a new flyover to either option. This option was not the subject of consultation for the reasons set out in paragraph 5.4 and these comments do not change our view that a new flyover should not be progressed.

In terms of notable qualitative feedback
• There was a good level of support for the proposed junction options and the impact they would be likely to have, however there were also a number of respondents who felt a flyover would be a better option for the junction. Concerns were also raised about certain elements of the junction options, notably the potential for confusion, the increase in the number of traffic signals, perceived worsening of congestion and traffic flow and the negative impact of proposals to remove existing permit parking bays in Van Diemans Road.
• Some respondents felt the proposed walking and cycling measures did not go far enough and there was mixed feedback about proposals to remove the existing subway and replace it with ground-level crossings.

• There was good support for the proposed expansion of Sandon Park and Ride and a proposed new Park and Ride site in Widford, although some questioned the demand for these measures, particularly in light of the impacts of the COVID-19 on passenger numbers. A number of concerns were raised about the safety of pupils regularly walking to a school playing field neighbouring the London Road site and needing to cross the road at the proposed entrance to the site.

The consultation provided a valuable insight into the public's views about the proposed Army and Navy Sustainable Transport Package. The feedback received plays an important role in informing the decisions made on the project including supporting the identification of a preferred junction option, as well as helping inform detailed design and highlighting points to be considered. However it is one factor of various other factors which form part of the decision-making process such as benefits and costs, environmental considerations, construction and objectives.

The benefits of the Hamburger Roundabout and Separate T-Junctions are outlined below, focusing on the Safer, Greener Healthier elements:
• Walking and cycling – Both options would enable quicker and safer journeys for cyclists, reducing average peak period journey times through the junction by 35% (Hamburger Roundabout) and 22% (Separate T-Junctions). Improved pedestrian facilities would provide a safer and more attractive walk through the junction, with all crossings at ground level rather than in a subway. Walking through the junction at ground level would be about 11% quicker (Hamburger Roundabout) and 4% quicker (Separate T-Junctions) on average, while average walking times would be similar (Hamburger Roundabout) and slightly slower (Separate T-Junctions) to those where the subway is currently used.
• Health and wellbeing – More people walking and cycling would result in health benefits, such as reduced illness and increased life expectancy, valued at £19 million* (for both the Hamburger Roundabout and Separate T-Junctions)
• Park and Ride – Would result in a 28 - 32%* increase (Hamburger Roundabout) and 38 - 45%* increase (Separate T-Junctions) in total Park and Ride passenger numbers by 2041
• Bus improvements – New bus priority measures would reduce peak period bus journey times through the junction by about 24% on average (Hamburger Roundabout) and average peak period bus journey times through the junction would be marginally quicker (0.2%) with the Separate T-Junctions.

Detailed evaluation of the junction options, using predicted future travel levels to assess the likely impacts of the option across a range of categories, has been undertaken. The results of which are:
• Economic Growth: Positive impact on the economy, resulting in an estimated £62m - £73m* increase (Hamburger Roundabout) and £12m - £27m* increase (Separate T-Junction) in GDP (Gross Domestic Product) over 60 years
• Travel Time: Large travel time and journey time reliability improvements, with benefits valued at about £245m - £284m* (Hamburger Roundabout) and £86m - £144m* (Separate T-Junction)
• Traffic: Reduced congestion at the Army and Navy junction, with an average reduction in travel time through the junction at peak times for motorised vehicles of about 49% (Hamburger Roundabout) and about 7% (Separate T-Junction) in the opening year (2026).
For the Separate T-Junction no U-turns would be possible at the junction. No direct turns from Baddow Road to Essex Yeomanry Way or Chelmer Road and Van Diemans Road to Baddow Road. The movements would instead be made by performing a U-turn at the Odeon roundabout.
• Objectives: Both schemes meet the project objectives well and are also in line with wider Government objectives, such as improving access and productivity. However, the Hamburger Roundabout scores more highly across the objectives than the Separate T-Junction.
• Costs: The overall cost of the Army and Navy Sustainable Transport Package varies by just 2%, depending on which junction layout option is chosen, however the Hamburger Roundabout is estimated to cost less than the Separate T-Junction.

Other impacts
• Air Quality: The Air Quality Management Area (AQMA) between the Army and Navy junction and the Odeon Roundabout is not expected to be an AQMA by the opening year of the scheme (2026). For both the Hamburger Roundabout and the Separate T-Junctions no exceedances of annual mean nitrogen dioxide (NO_2) Air Quality Objectives (threshold levels set to protect human health) are predicted at sensitive receptors (areas where the occupants are more susceptible to adverse effects of exposure to air pollutants) within the current Air Quality Management Area with the scheme in place.

• Carbon Emissions: Increase in greenhouse gases of 0.03 million tonnes (MtCO2e) over 60 years (0.003% of total surface transport emissions in the wider Essex area) for the Hamburger Roundabout and 0.05 million tonnes (MtCO2e) over 60 years (0.005% of total surface transport emissions in the wider Essex area) for the Separate T-Junction, although this could potentially be lower in the future with parking strategy changes, vehicles switching to more efficient fuels or changing travel behaviours. These increases are relatively low for schemes of this type and ECC will have the opportunity, with a fully signalised junction in place, to far better control and prioritise traffic flows through the junction. The vastly improved pedestrian and cycling facilities at the junction, in association with the improved bus priority measures will encourage active travel and support the Council's net carbon neutral ambitions.
• Construction: Construction is estimated to take approximately 18 - 22 months for the Hamburger Roundabout and approximately 22 - 26 months for the Separate T-Junctions. The economic impact of the traffic delay caused by the construction of the option is valued at about £7.3 million (2010 prices) for the Hamburger Roundabout and about £5.3 million (2010 prices) for the Separate T-Junctions. The economic impact of the Separate T-Junctions is lower than the Hamburger Roundabout option because more of the construction is away from existing roads.
• Noise: Change in noise levels would be likely to be experienced throughout our study area, although the change in levels would generally be minor or negligible (+ or – 2.9dBA). Some homes would be likely to experience a minor noise increase due to increased traffic flows/speeds, primarily those along Princes Road and Van Diemans Road for the Hamburger Roundabout option and those along Essex Yeomanry Way in Meadgate and parts of Great Baddow and Moulsham for the Separate T-Junctions option. Other properties would be likely to experience a minor noise decrease, including those along Longfield Road, Gloucester Avenue and Maldon Road in Great Baddow, and within the Old Moulsham Estate for the Hamburger Roundabout option and those along Baddow Road, Longfield Road, Gloucester Avenue and Maldon Road in Great Baddow, and within Moulsham for the Separate T-Junctions option. Noise mitigation measures, such as noise barriers, could reduce these adverse impacts, where possible.
• Landscape: The Hamburger Roundabout option would largely be within the footprint of the existing roundabout, and it is likely that some of the existing trees would be lost within the roundabout. The reconfiguration of the Separate T-Junctions would move traffic away from residential properties at the northern end of Baddow Road and listed buildings (Hamlet Terrace and Moulsham Mill). Both options would have a localised impact on the Chelmer and Blackwater Navigation Conservation Area West, including loss of vegetation along Essex Yeomanry Way, however there are opportunities for replanting in this area. With the Separate T-Junctions option there would also be the opportunity to improve pedestrian circulation and could include extending the green space next to the Chelmer and Blackwater Navigation Conservation Area West to soften views of the road from the conservation area and listed buildings at Moulsham Mill.
• Historic Environment: For both options, no impact on historic landscape is expected. The proposals could have an effect on the setting of individual Grade II listed buildings and on non-designated heritage assets, however, further assessment would be required.
• Flooding: Certain elements of the options, such as the new left-turn slip road from Chelmer Road to Essex Yeomanry Way for the Hamburger Roundabout option and the realignment of Chelmer Road for the Separate T-Junctions, would be within an area of floodplain and would be likely to have an adverse impact of flood risk. However, with both options, mitigation measures would be included within the design to avoid or minimise the impact. Further assessment is required.
• Biodiversity: Both options could result in adverse impacts on local habitats, including Chelmsford Water Meadows Local Wildlife Site and protected species. There would also be a loss of trees (approximately 80 for the Hamburger Roundabout and approximately 60-70 for the Separate T-Junctions). Mitigation measures would minimise any adverse impacts and ecological enhancement opportunities would be explored. There will be a biodiversity 'net gain' target, with habitat compensation either on or off the site of the scheme.
• Safety: Both options would provide a safer junction than the existing one for private vehicles, although total accidents would increase by 1.2-1.9%* for the Hamburger Roundabout and by 0.9-1.8%* for the Separate T-Junctions simply because of the additional traffic currently predicted to travel through the junction (using the DfT's growth forecasts) and the creation of a new access junction for a proposed Widford Park and Ride site. The package of sustainable transport measures included within the Army & Navy scheme will provide ECC with the tools needed to be able to further encourage active travel, which should help to control traffic growth at the junction.

In summary, when assessed against the DfTs key business case criteria (as set out in Figure 3, below), the Hamburger Roundabout option performs better than the Separate T-Junction option because it:
• Fits better with project specific and wider Government objectives
• Would have a much greater positive impact on the economy

• Represents far better Value for Money
• Would have a more positive impact on Well Being
• Would be quicker to build, with fewer risks
• Has greater public acceptability

The preferred option for the junction improvement is therefore the Hamburger Roundabout.

Does or will the policy or decision affect:

Service users: Yes

Employees: Yes

The wider community or groups of people, particularly where there are areas of known inequalities: Yes

Which geographical areas of Essex does or will the policy or decision affect?: Chelmsford

Will the policy or decision influence how organisations operate?: No

Will the policy or decision involve substantial changes in resources?: No

Is this policy or decision associated with any of the Council's other policies?: Yes

Is the new or revised policy linked to a digital service (website, system or application)?: No

Description of impact

Description of Impact. If there is an impact on a specific protected group tick box, otherwise leave blank. You will be given the opportunity to rate identified impacts as positive, negative or neutral on the next page: Age, Disability - physical impairment

I confirm that I have considered the potential impact on all of the protected characteristics: I confirm that I have considered the potential impact on all of the protected characteristics

Describe any actions that have already been taken to mitigate negative impacts on any of the protected characteristics: - Although the recent public consultation had a strong digital focus this was complemented by some more traditional approaches to help ensure it was as accessible as possible.
- The design of the scheme has to be compliant to design standards and LTN1/20 guidance so all users of the network are considered.

Age

Nature of impact: Positive

Please provide more details about the nature of impact: Improvements for sustainable transport measures (bus, walking and cycling) will offer a positive impact to all ages accessing education, employment, health, retail and leisure. However this would specifically positively impact the younger and older generation.

Extent of impact: Medium

Please provide more details about the extent of impact: • Walking and cycling – enables quicker and safer journeys for cyclists, reducing average peak period journey times through the junction by 35%. Improved pedestrian facilities would provide a safer and more attractive walk through the junction, with all crossings at ground level rather than in a subway. Walking through the junction at ground level would be about 11% quicker on average, while average walking times would be similar to those where the subway is currently used.
• Health and wellbeing – More people walking and cycling would result in health benefits, such as reduced illness and increased life expectancy, valued at £19 million.
• Bus improvements – New bus priority measures would reduce peak period bus journey times through the junction by about 24% on average.

Disability - physical impairment

Nature of impact: Positive

Please provide more details about the nature of impact: Improvements for sustainable transport measures (bus, walking and cycling) will offer a positive impact to those with a physical impairment. The improvements to the walking and cycling options, which would be LTN1/20 compliant, would help facilitate journeys. Or if they use the bus services the improvements here would also offer benefits.

Extent of impact: Medium

Please provide more details about the extent of impact: • Walking and cycling – enables quicker and safer journeys for cyclists, reducing average peak period journey times through the junction by 35%. Improved pedestrian facilities would provide a safer and more attractive walk through the junction, with all crossings at ground level rather than in a subway. Walking through the junction at ground level would be about 11% quicker on average, while average walking times would be similar to those where the subway is currently used.
• Health and wellbeing – More people walking and cycling would result in health benefits, such as reduced illness and increased life expectancy, valued at £19 million.
• Bus improvements – New bus priority measures would reduce peak period bus journey times through the junction by about 24% on average.

Action plan to address and monitor adverse impacts

Does your EqIA indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?: No

Details of person completing the form

I confirm that this has been completed based on the best information available and in following ECC guidance: I confirm that this has been completed based on the best information available and in following ECC guidance

Date EqIA completed: 02/03/2022

Name of person completing the EqIA: Hannah Neve

Email address of person completing the EqIA: hannah.neve@essex.gov.uk

Your function: Place and Public Health

Your service area: Highways and Transportation

Your team: Transportation and Infrastructure Planning

Are you submitting this EqIA on behalf of another function, service area or team?: No

Email address of Head of Service: andrew.cook@essex.gov.uk