

TP004

Chelmsford Local Plan

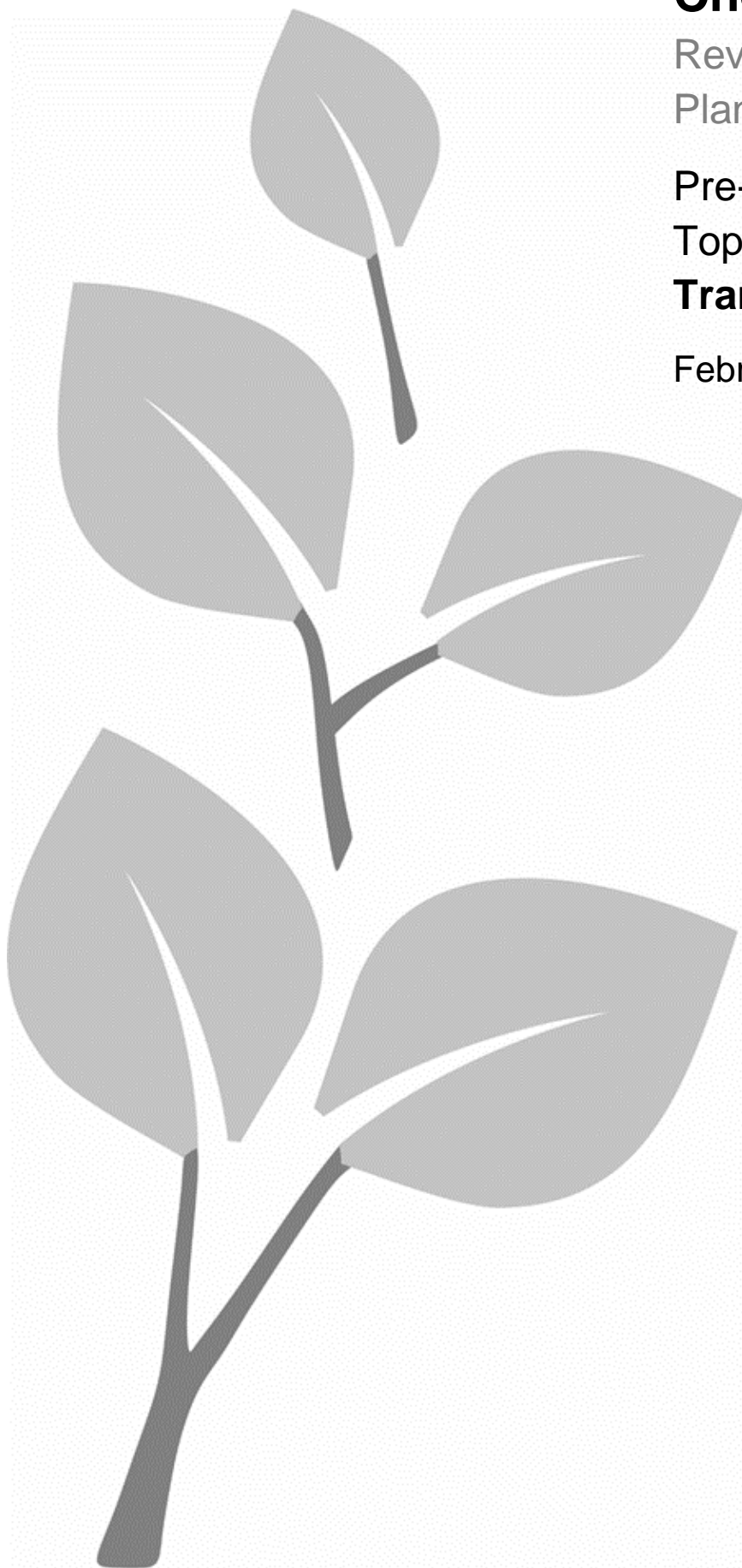
Review of the adopted Local Plan

Pre-Submission (Regulation 19)

Topic Paper:

Transport

February 2025



1. Purpose

- 1.1. This Topic Paper is one of a number produced by Chelmsford City Council to set out how the review of the Local Plan has been developed. Topic papers have been refreshed and updated at each stage of the Local Plan Review process to ensure the latest information/position is available. The previous Transport Issues and Options and Preferred Options Topic Papers are given in Appendix 2. As such, this topic paper supersedes previous versions.
- 1.2. The intention of the topic papers is to provide background information; they do not contain any policies, proposals or site allocations. Topic papers form part of the Local Plan evidence base which will be submitted alongside the Local Plan for independent examination.
- 1.3. This paper covers how transport matters and transport impacts have been considered when preparing the review of the adopted Local Plan and how the review will seek to provide a development strategy compatible with sustainable movement objectives.
- 1.4. The Topic Paper provides background information and provides context of how the Local Plan has been formulated. This Topic Paper should be read alongside the other Pre-Submission Topic Papers produced, in particular:
 - Spatial Strategy and Strategic Sites
 - Infrastructure.
- 1.5. The main issues covered by this Topic Paper relate to:
 - Policy proposals to assist in increasing active and sustainable travel
 - The approach to highway modelling
 - Relevant Strategic Priorities and Policies related to transport including Strategic Priority 1 and 2, Strategic Policies S1, S14 and S16.

2. Background

- 2.1. Chelmsford is located in the heart of Essex, 30 miles north-east of London and consists of the principal settlements of Chelmsford and South Woodham Ferrers, surrounded by villages set within countryside and Green Belt, which generally follows the A130 in the south of the district to the administrative boundary and westwards along the A1060.
- 2.2. An improved transport network can bring about much-needed change connecting people to opportunities for work, education and leisure, and supporting local economies. Enhanced transport links between and within growing places and business clusters will enable an area to function as a coherent economy and improve productivity. Government has clear commitments to cut transport related carbon emissions to net zero through the decarbonisation of transport. Dependence on the private car causes other problems beyond carbon emissions. Many urban areas are heavily congested at peak times and a behavioural

change is necessary to prioritise walking, cycling and public transport movements particularly for short trips.

Transport in Chelmsford

- 2.3. High car ownership and high levels of vehicle movements and commuting cause traffic congestion on main roads across Chelmsford at peak times. The high cost of local housing also results in some workers living a significant distance from their workplace.
- 2.4. Chelmsford has a wide influence on its surrounding area. The principal roads that connect Chelmsford to the rest of the strategic road network are the A12, A131, A130, A132 and A414. These roads together with the rail network are heavily used, particularly given the proximity to and connectivity with London. The transport modelling evidence base reveals that all the principal roads and many local roads through Chelmsford are at, or near to, capacity during peak periods. The first phase of the Chelmsford North East Bypass (CNEB) (Section 1a) is programmed for delivery in Spring 2026. The complete CNEB has planning permission and a safeguarded corridor and will provide when fully complete a new 4.6km single carriageway bypass from the A12 in the south to Braintree, and London Stanstead Airport in the north.
- 2.5. Chelmsford is well served by a range of urban and inter urban bus services between key centres in Essex. Chelmsford also has two Park and Ride facilities (Chelmer Valley and Sandon) with frequent connections to the City Centre for commuters and shoppers. North Chelmsford is also served by a bus-based rapid transit (ChART) connecting the new neighbourhood in north east Chelmsford with the City Centre and rail station.
- 2.6. The Great Eastern Main Line provides rail services between London Liverpool Street and the East of England, including Chelmsford. It also carries freight traffic to and from Freeport East (Harwich), which handles container ships and freight transport to the rest of the UK. Freeport East (Harwich) works in conjunction with Harwich International and Port of Felixstowe operating as a ports and logistics hub for offshore and green energy projects. The Elizabeth Line (Crossrail) provides services commencing south of Chelmsford in Shenfield providing additional capacity and quicker journeys to a wider choice of destinations through central London towards Reading. The new Beaulieu Park Rail Station will provide Chelmsford with an additional railway station and access with regular connections to London, with services taking around 40 minutes. The new station is programmed to be operational from the end of 2025. The Elizabeth Line and the new main line rail station at Beaulieu Park in north east Chelmsford will contribute to the continued attractiveness of Chelmsford as a place to live and to do business. Chelmsford also has good connections to London Stansted and Southend airports, as illustrated below:

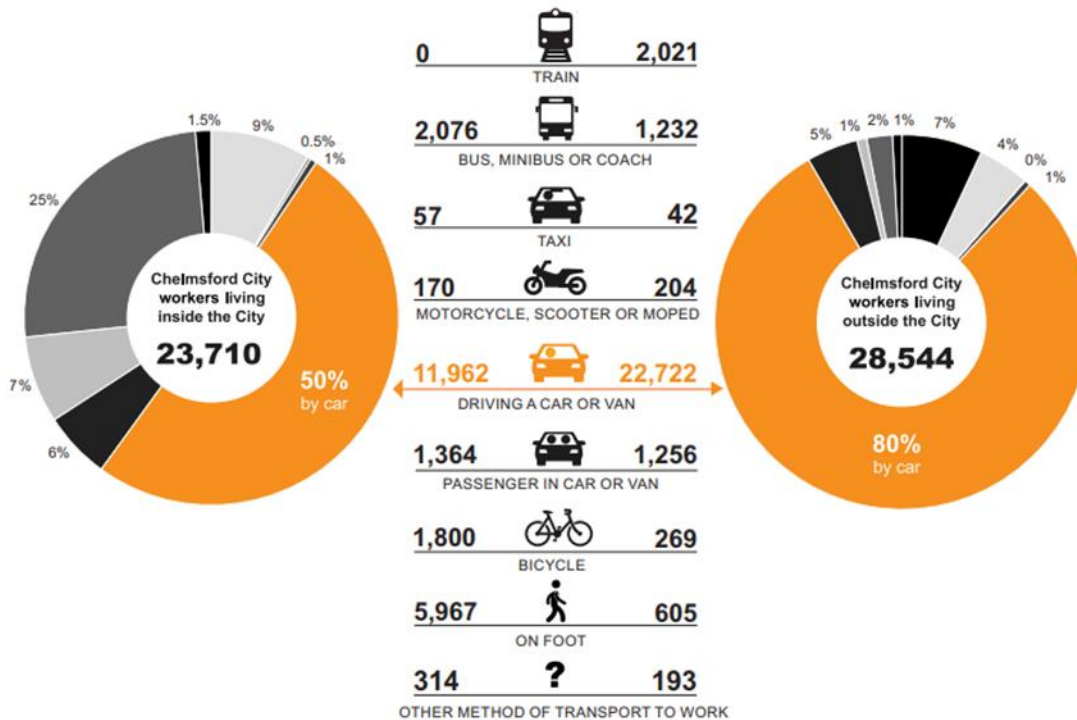


- 2.7. Chelmsford's relative affluence combined with good access to the local and strategic road network means that there are high levels of car ownership. This contributes towards heavy use of Chelmsford's road network with some main roads through the City Centre at, or near to operating at 96% capacity during peak periods. This includes peak time congestion into and within Chelmsford City Centre, notably around the Army and Navy Junction and along Baddow Road and also along Broomfield Road, Springfield Road and Waterhouse Lane. There are also congestion 'hotspots' on the strategic road network for example, the A12 between junctions 15 and 19, and the A414 east of the A12 can be heavily congested during peak hours, particularly if there are issues on the A12.
- 2.8. In determining the locations for future growth, consideration will be given as to how they can take advantage of any additional capacity or help secure the funding towards any necessary transportation infrastructure be it highway or active and sustainable modes. For example, the Housing Infrastructure Fund (HIF) in combination with developer contributions from site allocations is helping to fund the new rail station and Chelmsford North East Bypass (CNEB), rather than the provision of new roads in the existing built-up areas. The CNEB was granted planning permission by Essex County Council (ECC) in March 2022.
- 2.9. The CNEB will be delivered in stages with the first stage (Section 1a) being funded by the Housing Infrastructure Fund (HIF). When complete, Section 1a and 1b of the CNEB will provide a new 4.6km single carriageway route between Beaulieu Parkway and the A131 at Chatham Green with the existing A131 becoming dual carriageway to the Deres Bridge junction south of Great Leighs.

- 2.10. Under the staged approach Section 1a of the single carriageway (the southern section) will be delivered first, connecting with Beaulieu Parkway in the south and providing connectivity to the A12 at Boreham Interchange via the newly opened Generals Lane Connector Bridge. To the north, the CNEB will join with a new east-west link (i.e. the Northern Radial Distributor Road) which is due to be delivered as part of the planned North East Chelmsford Garden Community and will connect through to the Wheelers Hill roundabout on the A131 Essex Regiment Way.
- 2.11. To the north of Beaulieu Parkway, a new conveyor bridge will allow the existing mineral quarry at Bulls Lodge to continue to operate during construction and operation of the bypass. Once the quarrying is complete, the conveyor bridge will be upgraded by the North East Chelmsford Garden Community developers to provide a new east-west pedestrian, cycle and vehicle route. This will provide connectivity for local residents between the two areas of the Garden Community either side of the CNEB. Section 1a and the Northern Radial Distributor Road are planned to be delivered by March 2026. Construction work commenced on the mainline of Section 1b in January 2025 following advanced works completed in 2024.
- 2.12. Section 1b of the CNEB will be single carriageway and connect the bypass north to the A131 at Chatham Green, and Section 2 will dual the A131 between Chatham Green and Deres Bridge roundabout. It is anticipated that these sections will be subject to a future round of DfT/Major Road Network funding combined with potential developer contributions and will be delivered at a later date. The safeguarded route for the bypass is shown on the Local Plan Policies Map.
- 2.13. Essex Highways (EH) has undertaken further traffic modelling consistent with, and following on from, the modelling undertaken for the development of the 2020 Local Plan transport evidence base (see Evidence Base section below). This modelling has continued through the Local Plan process and has assessed the likely need for infrastructure by 2041 to inform the Pre-Submission Plan. The assessment uses the forecast model developed to assess the latest proposals for the Army and Navy junction and updated infrastructure assumptions for a 2041 future year, including the latest National Highways A12 widening proposals (DCO granted), CNEB proposals and capacity assumptions at Beaulieu rail station.
- 2.14. Chelmsford's wider sub-regional economic, transport and community functions means that significant levels of trips to Chelmsford originate from outside the City Council's area. For example, the neighbouring town of Maldon has no railway station and pre Covid-19 many residents commuted to London as well as employment locations in Chelmsford via the A414. The Council expects that this pressure will return on both the road network and public parking within the City. Some 7,000 commuters also travel to Chelmsford from the Braintree area via the A131 for employment purposes.
- 2.15. Likewise, Chelmsford's second largest town, South Woodham Ferrers, is served by the Southminster branch line without direct access to Chelmsford. Although there are bus links, many residents travel by car to Chelmsford along the A130 via Howe Green (A12, junction 17) and into the City Centre via the Army and Navy junction. Similarly, some villages have poor public transport links and are sufficiently far from the City Centre to make walking or cycling impractical or less desirable. The Sustainable Accessibility Mapping and Appraisal: Technical Note (T003) assessed the existing level of sustainable accessibility at 25

'settlement areas' identified across the five draft Spatial Approaches included in the Issues and Options consultation.

- 2.16. There are 24 public car parks that the City Council operates providing a mixture of short, medium and long stay car spaces. The majority of these are located within or on the edge of the City Centre.
- 2.17. ECC has developed a Strategic Zonal Approach to the Chelmsford transport system which seeks to remove as much traffic as possible from the outskirts of the city and reducing the need for city centre car parks. Park and Ride is a key means of achieving this. Chelmsford has two existing Park and Ride sites at Chelmer Valley to the north and Sandon to the east, which presently have just over 1,000 and 1,420 car spaces respectively. Buses run approximately every 10-15 minutes during the day into Chelmsford city centre. Although the COVID-19 pandemic changed people's travelling behaviour, Park and Ride demand has been recovering year on year since 2021/22. Patronage was around 63% of 2019/20 levels by the end of September 2024 and is expected to increase in the future due to Local Plan growth, both in Chelmsford and wider Essex. The Park and Rides are still a key component of the long term strategy. As such, land was safeguarded at both Park and Ride sites for their expansion in the adopted Local Plan along with additional sites in West Chelmsford and North East Chelmsford being identified for consideration. Planned expansions of the Chelmer Valley and Sandon Park and Ride sites will be delivered via the Army and Navy Sustainable Transport Package project.
- 2.18. The Army and Navy roundabout is a key gateway into and out of Chelmsford and experiences severe congestion and delays for all users at peak periods. The Planning Applications for the Army and Navy Sustainable Transport Package were approved in November 2024 by Essex County Council. The scheme comprises a new Hamburger Roundabout junction layout; walking and cycling improvements at and on the approaches to the junction; a 350-space expansion of Sandon Park and Ride; a 500-space expansion of Chelmer Valley Park and Ride; extension of the Essex Yeomanry Way bus lane; a new northbound bus lane on Princes Road; and improved bus priority in both directions on Parkway. In October 2024, ECC was conditionally awarded £69m from the Government's Major Road Network funding towards the overall £81m costs, which will also be part funded by ECC and Chelmsford City Council via Community Infrastructure Levy monies. A final business case is planned to be submitted to DfT in Spring 2026 with construction scheduled to commence in 2027 and be open to traffic in 2029. The sequencing of the construction of the different elements of the package is yet to be agreed
- 2.19. ECC's Chelmsford's Future Network Strategy highlights that the network is under significant strain with limited highway capacity in the city centre available during peak periods. This leads to queuing, unreliable journey times, poor air quality and increased traffic on unsuitable residential streets. It also impacts bus users, and the quality of journeys made by walking and cycling as well as health issues such as obesity levels which may be worsened by children being unable to walk or cycle to school because of safety concerns. The Chelmsford's Future Network study 2017 showed that 80% of those working in Chelmsford but living outside the City drove to work in cars, and 50% who live in the City still drove to work.



2.20. A different approach is required to ensure that future travel demands are managed in the most sustainable way. This includes managing public car parking which allows people to access local services and support local businesses without causing significant traffic congestion or environmental impacts.

Rail

2.21. Chelmsford has regular main line rail services that connect the city with London Liverpool Street (with up to ten trains per hour), Ipswich and Norwich. The network also carries freight traffic to and from Freeport East (Felixstowe, Harwich and Ipswich), which handle container ships and freight transport to the rest of the UK. Although services are more limited, the Southminster branch line provides train services to London every 40 minutes with some all-through trains at peak hours passing through the town of South Woodham Ferrers and the small settlement of Battlesbridge in the Chelmsford administrative area. New trains provide significant additional passenger seating capacity of some 66% in the off peak and at peak times a new 10 car train has about 12% additional seating capacity than the old 12 car train. However, given the imposed speed limits and number of crossings on the line the one train every 40 minutes is the best timetable that can presently be offered. Any improvement to provide 2 trains per hour would require significant investment in the track and platforms. Other issues include connectivity issues at Wickford and onwards via Bow Junction to London Liverpool Street.

2.22. Chelmsford's rail network is heavily used, particularly given the proximity to and connectivity with London. Chelmsford rail station is one of the busiest in the East of England, accommodating up to 8 million passenger trips per year. The new Beaulieu Park rail station will provide Chelmsford with an additional railway station and access with regular connections to London, with services taking around 40 minutes. The new station is programmed to be operational from the end of 2025. This will help to relieve pressure on the

existing congested station and reduce the need for people commuting into London to travel into Chelmsford by car. By locating new development within acceptable public transport travel distances (cycle, walk, bus) of the existing and proposed rail station in North East Chelmsford, there will be greater potential for residents to make their journeys by rail.

- 2.23. The new Beaulieu Park railway station will provide access to the Great Eastern Main Line (GEML) with a central loop line and new tracks to enable stopping services while allowing fast trains to pass through unimpeded to make the whole line more reliable. It will relieve crowding at Chelmsford railway station and act as a transport interchange to encourage sustainable travel by bus, cycle, electric vehicles and on foot to strategic and local housing development, including the new Chelmsford Garden Community.

Bus

- 2.24. Bus services are concentrated within the centre of Chelmsford, linking the city centre, railway station and the surrounding areas. The majority of services run through Chelmsford bus station, and therefore the city centre is well served by existing bus services. Chelmsford Area Bus Based Rapid Transit (ChART) is a direct, frequent bus service that connects development in North East Chelmsford with the City Centre. When the new Beaulieu Park station in North East Chelmsford opens by the end of 2025 phases of ChART will create a link to serve the station from Chelmsford Garden Community and onwards into the city centre. It is critical for enabling local, frequent travel without reliance on the private car.
- 2.25. Further out from the centre, the number of buses serving the local area decreases although South Woodham Ferrers and larger villages have a good service particularly during the peak period to Chelmsford and other larger settlements such as Braintree and Basildon, but are more limited in the evenings and at weekends. A new bus service 16, operated by First Essex, has been introduced, connecting the large new residential-led development at St Luke's, Runwell with Wickford rail station (approximately two buses per hour) and is initially funded through the S106 agreement. Travel by bus offers a main alternative to journeys made by private car. By locating new development adjacent to urban areas and their high frequency reliable bus services there will be greater potential for residents to make their journeys by public transport.

Cycling and Walking

- 2.26. Chelmsford has an extensive 61 mile well used cycle network which includes National Cycle Route 1 which provides east / west connectivity through the city centre and provides access to Writtle and Chelmer Village alongside the river and in parks, with on-road routes provided on quieter roads. The Chelmsford City Growth Package provided upgrades to existing cycle links, signage, surfacing and lighting improvements through 11 schemes, of which 7 related to cycling. There are opportunities to further enhance cycle routes along Chelmsford's Green Wedges by creating multifunctional greenways, whose design will depend on their location and function (recreational, commuting), and need to balance sustainable and active travel movements and biodiversity enhancement. Where possible these routes should be funded by developers where they directly relate to development. Any design of new routes should be consistent with LTN 1/20 – Cycling infrastructure design (2020) and be:

- Coherent - allow people to reach day to day destinations easily in a way that is easy to navigate, avoiding arrangements that are unintuitive or taking cyclists away from the obvious route;
- Direct – to be as direct, if not more direct, than the routes available to motor vehicles;
- Safe - as well as being safe, emphasis is given to the need for infrastructure to feel safe;
- Comfortable - quality maintained surfaces, proper widths and favourable gradients are crucial; and
- Attractive - should contribute positively to the urban realm, and naturally be attractive to use.

2.27. Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the Government's Cycling and Walking Investment Strategy, are a new, strategic approach to identifying cycling and walking improvements required at the local level. Essex County Council has identified a cycling network comprising 20 routes and a walking network comprising 21 routes within the [Chelmsford LCWIP \(September 2024\)](#), which covers the urban area. Work is now being progressed to help prioritise schemes for development along the new cycling and walking routes to develop a pipeline of schemes. ECC will continue to explore and apply for as many funding opportunities as possible to try and secure funding for any of the new schemes. New development should look to either provide contributions to deliver sections of these routes if they are in the vicinity, or provide active travel connections to them. As well as assisting in providing better accessibility these will help to reduce the need for motorised transportation on the roads, helping to reduce emissions. A countywide LCWIP is also being prepared to consider cross boundary corridors and ensure separate related LCWIPs are aligned to ensure improved wider connectivity.

2.28. A countywide LCWIP is being prepared to consider cross boundary corridors and ensure separate related LCWIPs are aligned to improve wider connectivity.

2.29. As part of Tranche 2 of the Government's Active Travel Fund the following projects have been completed in the Chelmsford area:

- Trinity Road Healthy School Street – removed existing bollards and replaced them with pencil-shaped ones; installed temporary street art to alert drivers to slow down and installed "20s Plenty" and "Children Crossing" signage.
- Springfield Park Road / Springfield Park Lane junction alterations - installed on-carriageway cycle markings; refreshed all street lining and the existing roundels and improved the Springfield Park Road and Springfield Park Lane junction and raised table.
- Navigation Road - refreshed all street lining and existing roundels; removed the existing centre line; and replaced signage on the Navigation Road and Hill Road junction.
- Chelmer Road and Sandford Road – pruned existing vegetation and upgraded existing crossing to a Toucan crossing.
- Waterloo Lane – completed the raised table; on-carriageway cycle markings, the segregated cycleway along the Riverside cycle path and refreshed cycle markings.

2.30. Essex County Council have been successful in securing further funding via the 4th Tranche of the Government's Active Travel Fund for a package of works along LCWIP3: City Centre

– Beaulieu Park. However, this funding is for the design stage only at this stage and funding to deliver the scheme is yet to be determined.

2.31. The successful cycle parking initiative, CyclePoint (2018), established around 960 secure spaces at Chelmsford Station and has demonstrated that there is potential to influence travel behaviour to/from rail stations. The new Beaulieu Park Railway Station will provide 500 spaces for cycle parking and storage. The ECC Safer, Greener, Healthier Campaign includes a range of projects to encourage the use of walking, cycling, e-scootering for shorter journeys and the bus for longer journeys. Initiatives include the [Go Jauntly App](#) providing details of walking routes around Chelmsford. It provides simple photo guides for walks and enables walking challenges to be undertaken. 'Walk this Way' provides information on leisure walks. Cycling projects including Essex Cycling Grant, Bikeability, Essex Pedal Power and Love to Ride, can be viewed [here](#). Working with Business for Smarter Travel which can be viewed [here](#) and Healthy School Streets which can be viewed [here](#), where there is an initial scheme in the Chelmsford area at Writtle Infants and Juniors.

Micromobility

2.32. An e-scooter hire trial has been in operation in Chelmsford with Essex County Council and e-scooter company, DOTT. The trial was launched in Chelmsford in February 2021, and there have been over 1.2 million rides so far (January 2025). This represents a clear mode shift, with riders regularly opting to use e-scooters rather than private cars to make some key journeys.

2.33. The trials will help to inform Government policy on whether e-scooters should be legalised for wider use and the safety criteria. No decision has yet been made around legalising e-scooters by the government. However, the Department for Transport have extended the trials, to allow for time to process any legislation. The current trial is due to end in May 2025, but Essex County Council have an option to extend it by 12 months to May 2026.

3. Pre-Submission

Policy Context

3.1. All policies in the Local Plan must be positively prepared, justified, effective and consistent with national policy. The National Planning Policy Framework (NPPF) sets out the overarching planning policy framework, supported by the National Planning Practice Guidance (PPG).

3.2. The adopted Local Plan was examined under the 2012 National Planning Policy Framework (NPPF). There have subsequently been updates to the NPPF and the Review of the Local Plan Pre-Submission Local Plan has been considered against the requirements of more recent national planning policy and guidance including the 2023 December NPPF.

3.3. The revised [National Planning Policy Framework \(NPPF\) published on 12 December 2024](#) provides transitional arrangements for Councils that are well advanced with plan preparation under the previous system. The content and timetable of the Pre-Submission Local Plan can

comply with these transitional arrangements. This means that the Pre-Submission Local Plan would be examined under the December 2023 NPPF. Further detail on these key changes for consideration are set out in the table below, included under the section 'Local Plan Approach'.

National Policy Guidance

- 3.4. Paragraphs 001 Reference ID: 54-001-20141010 to 012 Reference ID: 54-012-20150313 of the PPG set out the transport evidence base required to support plan making and decision taking in full. The following is a summary of the points for consideration.
- 3.5. It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.
- 3.6. The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage, where reasonable to do so; and highlight the infrastructure requirements for inclusion in infrastructure spending plans linked to the Community Infrastructure Levy, section 106 provisions and other funding sources.
- 3.7. Local planning authorities should also refer to the [Department for Transport's Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development](#).
- 3.8. A robust evidence base will enable an assessment of the transport impacts of both existing and proposed development which can help inform sustainable approaches to transport at a plan-making level. This will include consideration of viability and deliverability.
- 3.9. The key issues, which should be considered in developing a transport evidence base, include the need to:
 - assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms
 - assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
 - highlight and promote opportunities to reduce the need for travel where appropriate
 - identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate
 - consider the cumulative impacts of existing and proposed development on transport networks
 - assess the quality and capacity of transport infrastructure and its ability to meet forecast demands
 - identify the short, medium and long-term transport proposals across all modes.
- 3.10. The outcome could include assessing where alternative allocations or mitigation measures would improve the sustainability, viability and deliverability of proposed land allocations (including individual sites) provided these are compliant with national policy as a whole.

- 3.11. An assessment of the transport implications should be undertaken at a number of stages in the preparation of a Local Plan:
- as part of the initial evidence base in terms of issues and opportunities
 - as part of the options testing
 - as part of the preparation of the final submission.
- 3.12. The last of these stages should highlight the scale of and priorities for investment requirements and support infrastructure spending plans. Like a sustainability appraisal, it will be an iterative process and become more refined and detailed as the process concludes.
- 3.13. The following list indicates the key aspects that should be addressed in the transport assessment. This list is not exhaustive, and there may be additional issues that are important to consider locally:
- all current transport issues as they affect all modes and freight covering, for example, accessibility, congestion, mobility, safety, pollution, affordability, carbon reduction across the whole Plan area and, within relevant areas of the Plan, including existing settlements and proposed land allocations
 - the potential options to address the issues identified and any gaps in the networks in the short, medium and longer term covering, for example, accessibility, congestion, mobility, safety, pollution, carbon reduction
 - the locations of proposed land allocations and areas/corridors of development and potential options for the provision of sustainable transport and transport networks to serve them
 - solutions to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
 - the scope and options for maximising travel planning and behavioural change
 - accessibility of transport nodes such as rail/bus stations to facilitate integrated solutions.
- 3.14. The transport assessment should be produced at a Local Plan level in partnership with all relevant transport and planning authorities, transport providers and key stakeholders. It may be appropriate for the transport assessment to cover an area wider than the Local Plan at least initially given the size of some travel to work areas (this would be similar to the Strategic Housing Market Assessment). This process should help to identify any potential measures that may be required to mitigate negative impacts.
- 3.15. Local planning authorities will need to consider the demographics of the area and also the desired or perceived changes likely to take place in the life of the Plan as they might affect the transport network. A number of other considerations that could be included, but are not limited to, are opportunities to change to other forms of transport, parking facilities, including park and ride, and committed network improvements.
- 3.16. Paragraph 007 Reference ID: 54-007-20141010 sets out the detail of how to carry out a transport assessment of the Local Plan and explains that this is likely to be scenario based and in terms of projections look at a range of potential outcomes given a number of assumptions, for example, a movement in the proportion of people using different forms of

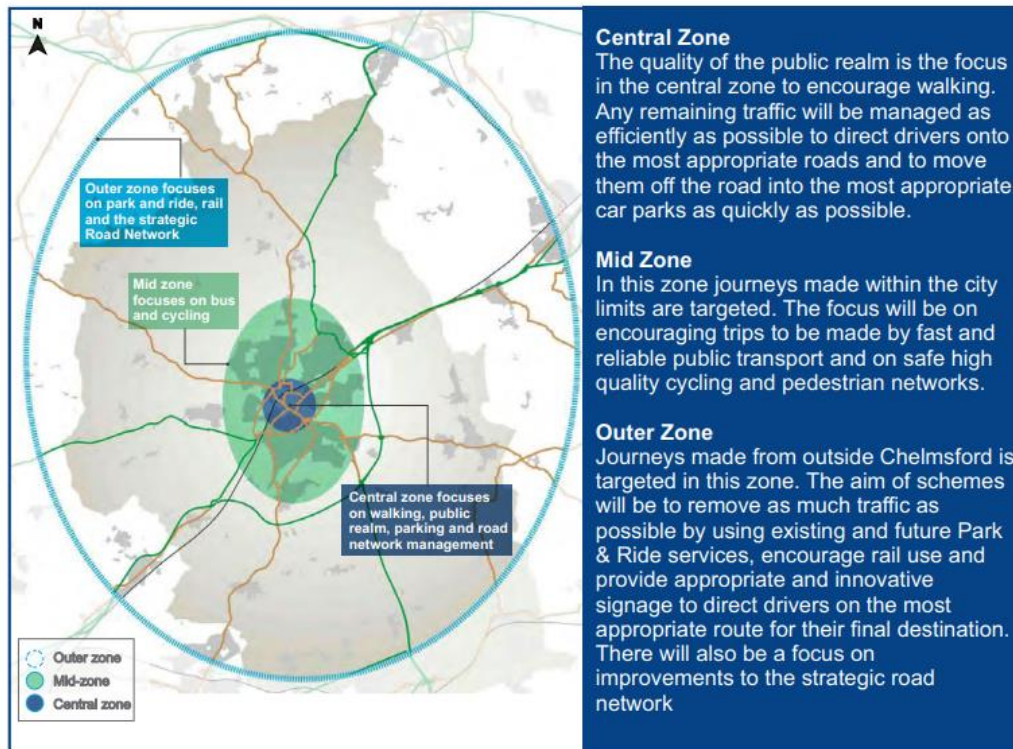
transport consistent with best practice. It goes on to explain the data that should be included in such an assessment, and how to quantify the impact of land allocations in the Local Plan on the transport system in paragraph 008 Reference ID: 54-008-20141010.

- 3.17. The transport assessment should also identify any significant highway safety issues and provide an analysis of the recent accident history of the affected/impacted areas. The extent of the safety issue considerations and accident analysis will depend on the scale and type of developments in the context of the character of the affected Strategic Road Network. The need to minimise conflicts between vehicles and other road user groups should be adequately addressed.
- 3.18. Any proposed land allocation impact should be considered in the context of two alternative scenarios – ‘with development’ and ‘without development’. This will enable a comparative analysis of the transport effects of the proposed allocation.
- The assessment should cover the period of the Local Plan.
 - Other relevant legislation
- 3.19. The national policy backdrop has changed significantly since the adoption of the Local Plan with focus on social equity, health and decarbonisation gaining prominence with a need to grow the economy around sustainable and greener development principles leading a policy transformation and the production of new standards. These are reflected in key policy documents as follows:
- The 2018 [Road to Zero](#), the Government’s carbon reduction strategy for road transport and the publication in July 2021 of the [Transport Decarbonisation Plan](#)
 - The [Future of Mobility: Urban Strategy 2019](#) and the complementary [Rural Strategy](#) (currently in development)
 - Publication of [Gear Change](#), the Government’s vision for walking and cycling, and new guidance on the design of [cycle infrastructure](#) (e.g., Local Transport Note (LTN) 1/20)
 - New approaches to rail and bus service delivery contained within [Bus Back Better](#) and the [Williams-Shapps Plan for Rail](#) published in 2021
 - [Draft revised National Networks National Policy Statement](#) (NPS) (March 2023). This provides an updated framework with measures to protect the environment in new major road, rail and rail freight schemes
 - New guidance for Local Transport Plans (LTPs) and accompanying Quantified Carbon Reduction Guidance (awaited)
 - The publication of a revised Manual for Streets (awaited).
- 3.20. In 2021 the Government published [Decarbonising Transport Plan: A Better Greener Britain](#) which recognised that transport is not just how you get around, it shapes towns, cities, countryside, living standards, health, and quality of life. It commits to embedding transport decarbonisation principles in spatial planning and making public transport, cycling and walking the natural first choice for all.
- 3.21. All relevant national planning policy and guidance have been considered in the Regulation 19 Pre-Submission Local Plan.

Local Policy

Current policy

- 3.22. Chelmsford City Council (CCC) worked in partnership with Essex County Council (ECC), and National Highways (NH) as Highways Authorities to ensure projected development growth in the adopted Chelmsford Local Plan was tested robustly and an appropriate strategy for mitigation formulated.
- 3.23. Good transport provision was considered essential to Chelmsford’s continuing prosperity and improvements to the network are needed to be implemented in ways that are both sustainable and minimise the adverse environmental and social impacts.
- 3.24. Given high levels of commuting, the relative prosperity of Chelmsford and ongoing demand for services and facilities, transport infrastructure was already considered under pressure in the adopted Local Plan. A significant change in how people make their journeys towards more sustainable travel choices was considered necessary.
- 3.25. Therefore, the adopted Local Plan promotes improvements to transport infrastructure to ensure that new development is accessible by sustainable forms of transport and which allows Chelmsford to be well-connected. It also ensures that new development will not unduly exacerbate congestion and will provide appropriate mitigation measures to ameliorate effects on the local road network and maximises and improves the way people move around by sustainable modes of transport.
- 3.26. The adopted Local Plan sets out the following Zonal Approach to Chelmsford’s Transport System:



3.27. This is set out in the adopted Local Plan in the follow ways:

- **Strategic Priorities 5 and 6** - these seek to deliver new and improved strategic and local infrastructure including ensuring the transport network accommodate future growth
- **The Local Plan Vision** – this seeks to maximise opportunities for sustainable transport by providing increased opportunities for walking, cycling and public transport
- **The Spatial Strategy (Strategic Policy S7)** - this focuses new development at well-connected locations (in line with Strategic Policy S1) for example along strategic transport corridors, close to existing local services, in areas with a good level of existing or proposed transport infrastructure including sustainable transport, and where daily needs can be met locally where possible. This helps reduce the need to travel, and maximise opportunities for sustainable travel and modal shift through planned new development
- **Strategic Policy S9** - this recognises that new development can place additional demand upon existing infrastructure and services, and requires new development to be supported by sustainable means of transport to serve its need including walking, cycling and public transport modes. It also sets out how new highway infrastructure should help reduce congestion, link new development and provide connections in the strategic road network. It further lists a number of transport improvement schemes that are proposed across Chelmsford and which will help to relieve congestion and provide connections in the strategic road network, including:
 - New Rail Station
 - Chelmsford North East Bypass
 - An additional new Radial Distributor Road 2 in North East Chelmsford
 - New access road to Broomfield Hospital
 - Safeguard land for the expansion of Chelmer Valley and Sandon Park and Ride sites
 - Additional Park and Ride facilities will be provided in West Chelmsford and North East Chelmsford within the broad locations shown on the Policies Map
 - Improvements to the Army and Navy Junction
 - Improvements to A130 (Essex Regiment Way) and A131
 - Junction improvements on the A12 and other main roads to reduce congestion
 - Capacity improvements to the A132 between the Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements to be brought forward as early as possible in tandem with the delivery of development to mitigate its impact
 - Multi-user crossings across the B1012 in South Woodham Ferrers which may include a bridge or underpass
 - New and improved cycling and walking routes both within development sites and to provide connections to centres and hubs of activity such as transport nodes, City, Town and Neighbourhood Centres, strategic areas of recreation and employment areas
 - Bus Priority schemes and rapid transit measures
 - Improvements to inter-urban public transport
 - Transport links between new neighbourhoods and Chelmsford City Centre and employment areas
 - Improved road infrastructure aimed at reducing congestion and providing more reliable journey times.

- **Strategic Policy S10** – this provides the means to secure necessary infrastructure and mitigate the impact of development. Infrastructure will be secured through the use of planning conditions and/or planning obligations and/or financial contributions through the Community Infrastructure Levy or its successor for both on and off-site provision, including the provision of land.
- **Site allocation policies** - require developments to provide appropriate mitigation, compensation and enhancements to the local and strategic road network as required by the Local Highway Authority and appropriate measures to promote and enhance sustainable modes of transport. In doing so, planned new development will provide physical local highway mitigation measures as well as opportunities for sustainable transport to enable the modal shift of trips away from car borne to sustainable travel modes. All major development will also be encouraged to follow the modal hierarchy with walking, cycling and public transport modes prioritised over private cars (in accordance with Strategic Policy S1)
- **Development Management Policies DM6, DM7 and DM8** set out the circumstances whereby new local transport infrastructure can be provided outside of built-up or allocated areas. **Policy DM20** seeks to ensure that new community facilities are accessible by sustainable modes of transport such as by public transport, cycling, or on foot. Public transport links should be in close proximity to the site and provide an adequate service. Measures to reduce car dependency are also supported. **Policy DM24** requires all new major development to create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above the use of the private car. **Policy DM27** provides standards for parking in all forms of development.

3.28. Essentially, Strategic Policy S11 together with the individual site allocation policies broadly identify what and where new transport infrastructure is required. This was informed by a robust evidence base and through engagement and support from key stakeholders including Essex County Council (ECC), National Highways (NH) and the promoters of the main developments.

3.29. Site specific highway requirements are then also covered in more detail through the masterplan process required for Strategic Site Allocations in the Local Plan and supported by the Development Management policies set out in the adopted Local Plan. Transport Assessments will also be undertaken to support individual planning applications.

3.30. The adopted [Making Places Supplementary Planning Document](#) (SPD) seeks to promote and secure high-quality sustainable new development. It is aimed at all forms of development, from large strategic developments, public spaces and places, to small extensions to individual homes. It sets out detailed guidance for the implementation of the policy requirements set out in the new Local Plan and provides practical advice to help with schemes from single house extensions to strategic sites and their masterplans. It also provides good practice examples on how development can go beyond planning policy requirements to create the most sustainable and environmentally friendly development possible.

- 3.31. The SPD offers further detailed guidance on principles to consider to ensure development offers sustainable travel alternatives to the private car as well as including detailed guidance on parking standards, electric charging points and car clubs. This is expected to be updated to reflect the Review of the Local Plan, once adopted.
- 3.32. The [Council's Planning Obligations SPD](#) was published in January 2021 and has been updated to reflect proposed changes in the Chelmsford Local Plan – Pre-Submission (Regulation 19) Document, as well as changes in national planning policy. It refers to the latest published Infrastructure Delivery Plan and integrates and updates some published Planning Advice Notes. The Consultation Draft Planning Obligations SPD has been published alongside the Pre-Submission Plan and sets out how the Council will seek planning obligations when considering planning applications.
- 3.33. Of relevance to this topic is the need for possible Section 106 Planning contributions towards highways, access and transport. It sets out that all development proposals will be assessed on their own merits in relation to the impact they have upon the highway network. There are no types of development which are exempt from necessary highway infrastructure obligations.
- 3.34. In addition to changes in national planning policy and guidance, the review of the adopted Local Plan has considered the achievability and effectiveness of Transport policies in decision making in the adopted Local Plan (2020), as well as new corporate priorities and strategies of the Council. Collectively these seek to ensure development does not have an unacceptable impact on highway safety, or the residual cumulative impacts on the road network are not severe. In addition to the Local Plan, there are a number of other local and regional strategies or guidance that have informed this topic area.
- 3.35. [Our Chelmsford: Our Plan](#) sets out the Council's priorities which will improve the lives of residents. There are four themes; a fairer and inclusive Chelmsford; a safer and greener place; healthy, active and enjoyable lives and connected Chelmsford.
- 3.36. The City Council [declared a Climate and Ecological Emergency](#) on 16 July 2019. Essentially this Declaration represents a commitment to take appropriate action to make the Council's activities net-zero carbon by 2030.
- 3.37. In January 2020 a [Climate and Ecological Emergency Action Plan](#) with an initial focus on fifteen key areas of activity was agreed by the Council. It is aimed at:
- reducing carbon emissions
 - lowering energy consumption
 - reducing waste and pollution
 - improving air quality
 - greening Chelmsford
 - increasing biodiversity
 - encouraging more sustainable travel choices.

3.38. ECC transport policy is comprised of the following:

- The Local Transport Plan (2011) is the Essex Transport Strategy (LTP3)
- Given policy evolution since the adoption of LTP3, due consideration should be given to more recent documents such as Net Zero: Making Essex Carbon Neutral (ECAC) and the Transport East: Transport Strategy. These place a greater emphasis upon the provision and use of sustainable transport and the decarbonisation of the transport network.

3.39. ECC is preparing a new Local Transport Plan 4 (LTP4) to cover the period to 2050. LTP4 will reflect and formally incorporate the revised policy framework contained within Net Zero: Making Essex Carbon Neutral (ECAC) and the Transport East: Transport Strategy. These place a greater emphasis upon the provision and use of sustainable transport and the decarbonisation of the transport network. LTP4 will be based on three key themes of; Supporting People: Health, Wellbeing & Independence; Creating Sustainable Places and Communities; and Connecting People, Places and Businesses. To achieve the outcomes a staged approach will be applied. Firstly, managing and maintaining the existing network will be prioritised, then minor improvements and changes will be considered. After this, significant improvements and transformation will be considered. All of which will have a key focus on prioritising and promoting sustainable transport options.

3.40. LTP4 will follow the ECAC recommendations to implement an Avoid, Shift and Improve approach:

- Avoid – avoid or reduce unnecessary private car journeys trips, particularly over short distances;
- Shift - deliver a behaviour change to encourage residents to shift to more sustainable modes, such as walking, cycling, and public transport or train; and
- Improve - where road journeys are essential improve vehicle efficiency by reducing the reliance on fossil fuelled vehicles and encouraging electric vehicles.

3.41. LTP4 will comprise supporting Implementation Plans (area based) covering both the longer-term pipeline of projects and a shorter-term transport programme and the Place and Movement Approach. It will also comprise a number of activity-based documents including the Bus Service Improvement Plan (BSIP); Sustainable Travel Planning; EV Charging Strategy; Local Cycling and Walking Infrastructure Plans (LCWIPs); Transport Technology Strategy; Network Management Plans and Maintenance Strategies.

3.42. ECC is consulting on a draft [Essex Air Quality Strategy](#) until 2 March 2025. The Strategy sets the aims and a shared vision to improve air quality including an [Action Plan](#). The Air Quality Consortium (including the City Council) plans to take to tackle air pollution and improve people's health. This Strategy will also help inform LTP4, setting out the current baseline position in Essex, identify and prioritise areas of concern and set out actions to be taken to improve air quality.

3.43. Transport East adopted its Transport Strategy to 2050 in July 2022. The Strategy sets a single regional voice for transport investment and supports the acceleration of regional transport priorities.

- 3.44. The Strategy identifies four key priorities for the East that strongly reflect the views captured from across the region including Essex:
- Decarbonising to Net Zero
 - Connecting growing places
 - Energise coastal and rural communities
 - Unlocking international gateways.
- 3.45. The regional Transport Strategy is accompanied by an Investment and Delivery Plan which includes six corridor programmes, of which the London – Chelmsford – Colchester – Ipswich – Norwich and Suffolk Coast connecting the fastest growing cities and towns and gateway ports is relevant to Chelmsford. Strategic schemes relevant to Chelmsford include:
- Great Eastern Mainline strategic package (improvements in London, Essex, Suffolk, Norfolk);
 - A12 strategic package South (Colchester to M25); and
 - Chelmsford strategic package NE bypass, Army and Navy, Beaulieu Park).
- 3.46. ECC, as the Local Transportation and Highways Authority, formally endorsed the Transport East strategy in July 2022. The Strategy, its priorities for transport and delivery goals will be reflected in the future LTP4.
- 3.47. ECC has published its Bus Service Improvement Plan (2021 - 2026) (BSIP) outlining that ECC is to follow the Enhanced Partnership (EP) approach between the Local Transport Authority (LTA) and Bus Operators to provide a new, high quality and reliable bus network. The periodic reviews of the ECC Bus Service Improvement Plan 2021 can be viewed [here](#). A Bus Network review has been undertaken for Chelmsford City and can be viewed [here](#). It identifies the key characteristics of the existing bus network services and its supporting infrastructure; identify the issues creating barriers to passenger growth, connectivity or accessibility; identify measures to over-come the barriers and promote bus passenger. The Review documents are 'live' documents listing schemes to be considered for progression but are not a prescriptive list of actions/projects that will be progressed and already have secured funding.
- 3.48. ECC has undertaken a number of projects and reviews with regards highway and transportation policy for existing and for new communities, which will feed into the new Local Transport Plan 4. The following have been completed:
- Essex Planning Officers Association (EPOA) Parking Guidance;
 - [Part 1](#) – for most development applications across Essex. It also provides the foundations for part 2. The general guidance section looks at calculation of parking requirements, introduces the zonal approach, relationship to transport assessments and travel plans, enforcement and car park management plans.
 - [Part 2](#) – the role of parking in Garden Communities and Large Scale Developments – this part is focused on outcomes for sustainable growth to create quality places. This guidance is accompanied by a [connectivity tool spreadsheet](#)

- [A new development model for Essex](#) seeks to assist achieving net zero carbon transport emissions by 2050, the report seeks to demonstrate how delivering more walkable neighbourhoods have wider place-making benefits that go beyond the immediate value of reducing car use, such as increased biodiversity, more usable public open space, better air quality, lowering embodied carbon as well as commercial viability benefits through the potential to increase the number of dwellings within a well-planned, legible and cohesive development.
- [Electric Vehicle Charge Point Strategy](#) to deliver 'the Right Charger in the Right Place' so that by 2030, residents, businesses and visitors in Essex, where car travel is necessary, will be able to use electric vehicles and be assured there is an accessible, reliable, easy-to-use, safe and fairly priced charging network.
- [Chelmsford LCWIP \(September 2024\)](#), which covers the urban area identifying a cycling network comprising 20 routes and a walking network comprising 21 routes.

3.49. Further guidance is also being prepared with regards the following:

- Review of Essex Development Management Policies
- Revision to the Essex Cycling Strategy has been subject to public consultation in June 2024 This strategy will help ECC secure funding to improve and maintain cycling facilities and infrastructure across the county
- Travel Plan Guide for Large-Scale Developments and Garden Communities: A Guide for Developers – will provide the necessary tools and guidance to develop, monitor and manage Travel Plans for large-scale developments across Essex
- Transport Assessment Guide for Large-Scale Developments and Garden Communities: A Guide for Developers – will provide the necessary tools and guidance to develop, monitor and manage TAs for large-scale developments across Essex
- Mobility Hubs in large scale developments
- Operational Model for Future Rapid Transit Schemes.

3.50. [Safer, Greener, Healthier](#) is an Essex Highways' on-going campaign aiming to make it as easy as possible for people to travel more sustainably, especially for shorter journeys by walking, cycling, e-scooting or taking the bus or train for longer journeys. The vision is to deliver and enable safer, greener and healthier travel for current and future users of the transport network in Essex. Please refer to paragraph 2.31 above for further details.

3.51. The Essex Walking Strategy (2021) has been prepared to increase walking across the County, particularly for shorter journeys and as part of longer ones and connecting to other forms of sustainable travel. Local Plans should include policies that seek to provide for high-quality walking and cycling networks designed to provide safe and accessible routes to key facilities and services. Planning policies should also identify places where new walking routes can be delivered by new developments, and ensure the protection of alignments for future planned cycling and walking routes.

Duty to Co-operate

- 3.52. The Council is committed to co-operating with other bodies on strategic planning matters. The Duty to Co-operate Strategy was reviewed and adopted in January 2022.
- 3.53. The Council has made every effort to seek co-operation on cross-boundary and strategic planning matters in a focused, positive and structured way. These discussions have helped to formulate the Pre-Submission plan, and we will continue to engage positively with the prescribed bodies as the plan progresses and on its implementation once adopted.
- 3.54. We will also continue to work constructively with nearby planning authorities on their own local plan preparation. Early engagement and demonstrating co-operation both with neighbours and the prescribed bodies through Statements of Common Ground are key to meeting the legal duty to co-operate.
- 3.55. The strategic matters for the Review of the Adopted Local Plan are identified as follows:
- Delivering homes for all including Gypsy and Traveller accommodation
 - Jobs and economy including green employment and regeneration
 - Retail, leisure, and cultural development
 - Sustainable transport, highways and active travel
 - Climate change action and mitigation including flood risk and zero carbon
 - Natural and historic environment including increased biodiversity and green/blue/wild spaces and connectivity of ecological networks
 - Community infrastructure including education, health and community facilities
 - Utility infrastructure including communications, waste, water and energy
 - London Stansted Airport future airspace redesign.
- 3.56. In some cases, discussion on strategic matters will continue through existing joint working arrangements. We will also arrange further joint Officer and Member meetings, technical stakeholder meetings and keep Statements of Common Ground up to date as the plan progresses. Details of ongoing activity is contained in the Pre-Submission Duty to Co-operate Position Statement, available at www.chelmsford.gov.uk/lp-review.
- 3.57. The following issues raised by key bodies to the Preferred Options Local Plan have been taken into account in formulating the policy approach towards transport in the Pre-Submission Local Plan.
- 3.58. We have engaged with National Highways throughout the review of the Local Plan, with discussions and formal consultation feedback being used to refine the Transport modelling at each stage of the review process. The Pre-Submission modelling has sought to address the additional modelling requests set out by National Highways in their response to the Preferred Options consultation available to view via the Council's consultation Portal, www.chelmsford.gov.uk/planningpolicyconsult

- 3.59. We continue to engage with National Highways to prepare a Statement of Common Ground to demonstrate and agree how these modelling requests have been met as part of the overall transport modelling to support the Local Plan.
- 3.60. As the Highways and Transportation Authority, Essex County Council (ECC) have been fully engaged with all aspects of transport modelling and related policy preparation. As a result, a number of amendments have been made in response to their response to the Preferred Options consultation. A signed Statement of Common Ground with ECC ([SOCG006](#)) sets out the relevant amendments made to the Pre-Submission plan, with no areas without agreement or unresolved strategic matters.
- 3.61. Maldon District Council raised some concerns over the potential impact of SGS16a (Hammonds Farm) on the road network in their response to the Preferred Options consultation. Following further engagement with Maldon District Council a signed Statement of Common Ground ([SOCG002](#)) sets out there are no areas without agreement or unresolved strategic matters, including traffic issues.

Integrated Impact Assessment

- 3.62. The Council is carrying out an ongoing Integrated Impact Assessment (IIA) as the Review of the Local Plan develops.
- 3.63. The IIA will assess the following aspects of sustainable development:
- Sustainability Appraisal (SA)
 - Strategic Environmental Assessment (SEA)
 - Habitats Regulations Assessment (HRA)
 - Health Impact Assessment (HIA)
 - Equality Impact Assessment (EqIA)
- 3.64. The SA, SEA and HRA are a requirement of national policy. The HIA and EqIA are voluntary, but the Council believes they will help to provide a complete picture of the sustainability of the Review of the Adopted Local Plan.

SA/SEA

- 3.65. The IIA identifies the key sustainability issues for the Review of the Local Plan, which feed into a framework against which proposals are assessed. It covers the potential environmental, social, economic and health performance of the Local Plan and any reasonable alternatives. It has been used at each stage of the Review, and been subject to separate consultation, as follows:
- Scoping Report
 - Issues and Options
 - Preferred Options
 - Pre-Submission – Current Stage
 - Adoption.

3.66. The key sustainability issues and Appraisal Framework Objectives relating to this Topic Paper are:

Key sustainability issue	Appraisal Framework Objective
Population and community	4. Sustainable Living and Revitalisation: To promote urban renaissance and support the vitality of rural centres, tackle deprivation and promote sustainable living.
Health and wellbeing	5. Health and Wellbeing: To improve the health and wellbeing of those living and working in the Chelmsford City area.
Transport and accessibility	6. Transport: To reduce the need to travel, promote more sustainable modes of transport and align investment in infrastructure with growth.
Air quality	10. Air: To improve air quality.
Climate change	11. Climate Change: To minimise greenhouse gas emissions and adapt to the effects of climate change.

3.67. Table 7.1 in chapter 7 of the Pre-Submission IIA presents the appraisal of the cumulative effects of the Pre-Submission Local Plan. In relation to IIA Objective 4 (Sustainable Living and Revitalisation) the Pre-Submission IIA concludes the proposed Spatial Strategy, allied with the provision of community facilities, services and employment land on many of the proposed site allocations (including developments using garden community principles), will help to ensure that new development is accessible to key services, facilities and employment opportunities, stimulates urban regeneration, tackles deprivation and promotes community inclusion. Overall, the Pre-Submission Local Plan/ has been assessed as having a cumulative significant positive effect on this objective.

3.68. In relation to IIA Objective 5 (Health and Wellbeing) the Pre-Submission IIA notes that focusing the majority of new residential and employment development in and adjacent to the Chelmsford Urban Area and to the North of South Woodham Ferrers, promoting mixed use schemes and the adoption of Garden Community principles at strategic sites are together likely to encourage walking/cycling as services and employment opportunities would be physically accessible. Allied with proposed improvements to highway circulation, public transport and walking and cycling as well as the protection of existing green infrastructure including open space and recreational facilities and new provision, this is expected to generate a positive effect in relation to the promotion of healthy lifestyles. In light of this, overall, the Pre-Submission Local Plan has been assessed as having a cumulative significant positive effect on IIA Objective 5 (Health and Wellbeing).

- 3.69. The Pre-Submission IIA notes that growth over the plan period will result in increased vehicle movements which could have adverse effects on the highways network, notably increased pressure on the local and strategic road network and public transport infrastructure with congestion on key trunk roads including the A12, A130 and A414 east and west of Chelmsford (a number of junctions on the strategic highway network have capacity constraints and pinch points). However, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network are all likely to reduce the need to travel by car and encourage walking/cycling (as services and employment opportunities would be physically accessible). New development should also be well connected to the existing public transport network (including existing planned infrastructure such as the new rail station and transport hub to the north east of Chelmsford as part of the Beaulieu development).
- 3.70. The Pre-Submission Local Plan identifies a number of transport infrastructure improvements including a proposed new Chelmsford North-East Bypass, highways improvements (including at the Army and Navy Junction and to the A132) and two potential park and ride schemes (one located to the south west of Chelmsford around the A414 and the other located to the north east of Chelmsford around the A12 and A138). These measures, together with the development requirements for proposed site allocations contained in Section 7, are expected to help mitigate adverse impacts associated with new development and enhance the City Area's transport network. Overall, the Pre-Submission Local Plan has been assessed as having a cumulative mixed significant positive and minor negative effect on IIA Objective 6 (Transport).
- 3.71. In relation to Air (IIA Objective 10) growth over the plan period will result in increased emissions to air during both the construction of new development and once development is complete. However, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of strategic mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network (including through the Green Wedge) are all likely to reduce the need to travel by car and associated emissions to air. Investment in transportation infrastructure may also help to address air quality issues. Overall, the Pre-Submission Local Plan has been assessed as having a cumulative mixed positive and negative effect on IIA Objective 10 (Air).
- 3.72. In relation to Climate Change (IIA Objective 11), as noted above, the Pre-Submission IIA notes that new development will result in increased energy use and associated greenhouse gas emissions. However, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of strategic mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network (including through the Green Wedge) are all likely to reduce the need to travel by car and associated emissions of greenhouse gases. Overall, the Pre-Submission Local Plan has been assessed as having a cumulative mixed positive and negative effect on this objective.

3.73. Section 5 and Appendix H of the IIA Report assesses Local Plan policies. Findings in relation to IIA Objectives 4 (Sustainable Living and Revitalisation), 5 (Health and Wellbeing), 6 (Transport), 10 (Air), 11 (Climate Change) include:

- Overall, the Spatial Principles, Policy S1, and Strategic Policies S2-S5 and S14-S15 have a significant positive effect on all five objectives
- The Spatial Strategy is likely to have a mixed significant positive and negative effect on objective 4, 5 and 6, and a mixed positive and negative effect on objective 10, with a positive effect on objective 11
- Strategic Policy S9 (Infrastructure Requirements) has been assessed as having a significant positive effect on objective 4, 6, 10, and 11, and a mixed significant positive and minor negative effect on objective 5
- Strategic Policy S16 (Connectivity and Travel) has been assessed as having a significant positive effect on objective 4, 5, 6, a mixed minor positive and minor negative effect on objective 10, and a positive effect on objective 11.

3.74. Section 8 of the Pre-Submission IIA includes recommendations for Local Plan content and implementation and suggests measures to be considered by Council as part of the further refinement of the Local Plan prior to its publication for Examination. There are no further recommendations relating to Transport.

EqIA

3.75. The EqIA results suggest that policies will help to secure development that will contribute to a range of positive effects across the topics considered in the EqIA (notably in relation to housing, service, employment and greenspace provision) and no recommendations for changes or additions to policy are identified at this stage.

HIA

3.76. The HIA results suggest that policies will help to secure development that will contribute to a range of positive effects across the topics considered in the HIA and no recommendations for changes or additions to policy are identified at this stage.

HRA

3.77. Overall, the HRA has concluded that most aspects of the plan will have no significant effects on any European sites, alone or in combination due to the absence of effect pathways.

3.78. Appropriate assessments have been undertaken for those aspects where effect pathways are present (in combination water quality, air quality and visitor pressure effects, and effects on species away from the sites), taking into account specific and cross-cutting policy-based mitigation and avoidance measures that have been incorporated into the plan. These appropriate assessments have employed additional analyses and data to resolve uncertainties present at the initial screening, and have concluded that (as currently drafted) the Pre-Submission Local Plan will have no adverse effects on the integrity of any European sites, alone or in combination.

Evidence base

- 3.79. In accordance with the requirements of the NPPF, policies and their requirements should be based on up-to-date evidence.
- 3.80. In addition to the IIA, the following documents are of particular relevance to (insert topic) and support the review of the Adopted Local Plan. Evidence base documents are available online via www.chelmsford.gov.uk/lp-review

Document	Summary
IIA001 Integrated Impact Assessment Scoping Report 2022 IIA002: Integrated Impact Assessment Issues and Options 2022 IIA005: Integrated Impact Assessment Preferred Options (May 2024)	<p>The Integrated Impact Assessment (IIA) brings together a Sustainability Appraisal (SA), a Strategic Environmental Assessment (SEA), a Health Impact Assessment (HIA), an Equalities Impact Assessment (EqIA) and a Habitats Regulations Assessment (HRA) to assess the socio-economic and environmental effects of the Local Plan. The first stage of the IIA process involved consultation on a Scoping Report. The Scoping Report set out the proposed approach to the assessment of the Review of the Adopted Local Plan. The Issues and Options stage and the Preferred Options stage of the Local Plan were both subject to public consultation and accompanied by IIA Reports. The findings of the IIA Reports, together with consultation responses and other evidence base work, have been used to help refine the preferred approach to be taken forward as part of the Review of the Adopted Local Plan.</p>
IIA004: Integrated Impact Assessment Feedback Report Issues and Options 2023	<p>This report provides a record of the responses received to the IIA Report including the approach to the HRA. The responses were taken into account by the Council in preparing the next stage (Preferred Options) of the Local Plan Review and undertaking the associated IIA.</p>
IIA006: Integrated Impact Assessment Preferred Options Feedback Report 2024	<p>This report provides a record of the responses received to the IIA Report and associated HRA. The responses were taken into account by the Council in preparing the next stage (Pre-Submission) of the Local Plan Review and undertaking the IIA and associated HRA.</p>
IO003: Issues and Options Consultation Document You Said We Did Feedback Report, May 2024	<p>This report sets out the consultation feedback received on the Issues and Options consultation document and how the comments have been taken into consideration alongside the plan evidence base when preparing the Preferred Options Local Plan.</p>
PO005: Preferred Options You Said We Did Feedback Report	<p>This report sets out a summary of the Preferred Options consultation and representations received. It also summarises how the Pre-Submission Local Plan has been informed by</p>

	recent evidence base studies and representations received.
PS001: Pre-Submission Policies Map Position Statement, February 2025	Sets out the proposed changes to the adopted Chelmsford Local Plan Policies Map, to be made in association with the Chelmsford Local Plan Pre-Submission (Regulation 19) Document (2025).
INF001: Infrastructure Delivery Plan Stage 1 Report (February 2024)	A high-level assessment of the Issues and Options Spatial Approaches and overview of the infrastructure issues and opportunities associated with these spatial approaches, including any significant infrastructure constraints that should be taken into account.
INF005: Chelmsford City Council IDP Stage 2 Report (November 2024)	This Report updates the findings from the Stage 1 baseline and provides further analysis associated with the preferred Spatial Strategy including infrastructure delivery schedules of planned projects across the administrative area of Chelmsford City Council.
T003: Sustainable Accessibility Mapping and Appraisal July 2022	The study assesses the existing level of sustainable accessibility at 25 'settlement areas' identified across the five Spatial Approaches set out in the Issues and Options.
T001: Transport Impact Appraisal of Spatial Approaches December 2023	This report documents the modelling methodology, results, and findings of the traffic impact appraisal of three selected hybrid spatial approaches, identified following the Issues and Options consultation.
T002: Transport Impact of Preferred Spatial Approach March 2024	This report documents the modelling methodology, results, and findings of the traffic impact appraisal of development identified in the Preferred Options Local Plan.
T002-A: Preferred Spatial Approach Local Junction Modelling – Technical note May 2024	Assess the impact of the Spatial Strategy identified in the Preferred Options Local Plan on specific local junctions on the highway network.
T004: Chelmsford VISUM Model Local Validation Report (LMVR) 2021	This report documents the improvements made to the 2019 Chelmsford VISUM Forecast Model and the subsequent recalibration and validation process to the strategic model used in the Local Plan transport modelling.
T005: Chelmsford VISUM Model Army and Navy Forecasting Report 2022	This report documents the development and infrastructure assumptions for Chelmsford included in a 2026 and 2041 forecast year for the purposes of assessing the future-year performance of the Army & Navy junction proposals. This has informed the strategic model used in the Local Plan transport modelling.
T006 Transport Impact Appraisal of Local Plan Review Pre-Submission (December 2024)	This report documents the modelling methodology, results, and findings of the traffic impact appraisal of development identified in the Pre-Submission (Regulation 19) Local Plan.
V001: Chelmsford Local Plan Viability Update	This viability work assesses the cumulative impact of policies on planned development

	(including site specific requirements relating to transport infrastructure). The assessment models various levels of policy requirements on several different typologies of development.
V002 Chelmsford Local Plan Viability Update Note (November 2024)	Updates the above viability report (V002) to reflect latest available costs.

Previous Consultation Feedback

3.81. The Pre-Submission Local Plan has been prepared following two public consultations - the Issues and Options consultation in 2022 and the Preferred Options consultation in 2024. The Issues and Options 'You Said We Did' Feedback Report and the Preferred Options 'You Said We Did' Feedback Report set out the main issues raised in the representations received and a summary of how the subsequent plan has been informed by the comments and the plan evidence base. Main issues raised in the consultation responses to the Issues and Options Local Plan and the Preferred Options Local Plan Consultation Documents include:

- Support the need for greater emphasis on promoting active and sustainable transport, including walkable neighbourhoods
- Development should be focused near existing strategic transport corridors such as the A12, A130 and rail stations
- Need to ensure enough EV charging points are included in development
- Opposition expressed to Hammonds Farm allocation on the basis of the impact on the Local and Strategic highway networks.

3.82. The Council commissioned Essex Highways to review and consider the key issues raised in the highway and transportation responses received to the Preferred Options consultation. This report entitled Preferred Spatial Approach - Response to Representations (November 2024) is given in Appendix 1 of this Topic Paper and includes a review of the Transport Technical Note, prepared by Stomor (June 2024) on behalf of Little Baddow, Danbury, Boreham Parish Councils. The Preferred Spatial Approach - Response to Representations (November 2024) report has been used by CCC to understand and respond to matters of concern raised at the Preferred Options Stage, and to inform the Pre-Submission Local Plan.

3.83. Please see the 'You Said We Did' Feedback Reports for more details, available via www.chelmsford.gov.uk/lp-review.

Local Plan Approach

3.84. The approach in the Local Plan takes account a number of considerations including national planning policy and guidance, new corporate priorities, an updated evidence base and the Issues and Options, and Preferred Options comments. The Local Plan approach and key changes are described below.

- 3.85. The need for active and sustainable travel are covered throughout the Pre-Submission Local Plan. They are included within new and updated Strategic Priority 1 (Addressing Climate Change and Ecological Emergency), 2 (Promoting smart, active travel and sustainable transport), 3 (Protecting and enhancing the Natural and Historic Environment, and support an increase in biodiversity and ecological networks), 7 (Creating well designed and attractive places, and promoting the health and social wellbeing of communities), and 8 (Delivering new and improved strategic and local infrastructure). They also feed into an updated Vision and Strategic Policy S1 (Spatial Principles).
- 3.86. The need for active and sustainable transport to be included in development is then required in new and updated Strategic Policies S2 (Addressing Climate Change and Flood Risk), S14 (Health and Wellbeing), S5 (Protecting and Enhancing Community Assets), S16 (Connectivity and Travel), S9 (Infrastructure Requirements), S11 (The Role of the Countryside), S17 (Future of Chelmsford City Centre), through site allocation policies, and through Development Management Policies DM4 (Employment Areas and Rural Employment Areas), DM7 (New Buildings and Structures in the Green Wedge, DM10 (Change of Use (land and buildings) and Engineering Operations), DM20 (Delivering Community Facilities), DM24 (Design and Place Shaping Principles in Major Developments, and DM27 (Parking Standards).
- 3.87. Relevant proposed site allocation policies provide requirements for new or improved active travel routes, as well as the need for other transport infrastructure to be provided on site, or to mitigate a sites impact.
- 3.88. New Strategic Policy S16 (Connectivity and Travel) and Development Management Policies DM7 (New Buildings and Structures in the Green Wedge), and DM10 (Change of Use (land and buildings) and Engineering Operations) introduce the role and function of Green Wedges to include infrastructure to support active travel. This policy also includes reference to the Local Cycling and Walking Infrastructure Plan (LCWIP). The City Council rely on Essex County Council to produce these as the Highways and Transportation Authority.
- 3.89. New Strategic Policy S16 (Connectivity and Travel) also seeks to create sustainable places which promote connectivity for all, by providing better access to modes of active and sustainable travel, including supporting development and infrastructure. It also includes new strategic scale developments to ensure they have considered how walkable neighbourhoods can be achieved, as well as achieve a significant modal shift to active and sustainable modes of travel.
- 3.90. Strategic Policy S9 (Infrastructure Requirements) includes reference to the existing Essex County Council Local Transport Plan (LTP) and the need to continue to work with Essex County Council on the emerging LTP4 and include any further infrastructure requirements as they emerge. It also includes the requirement for new development to be supported by active and sustainable transport and new highway infrastructure which will help reduce congestion, link new development and provide connections to the strategic road network.

- 3.91. New Strategic Policy S14 (Health and Wellbeing) includes the need for developments to create opportunities for active travel, including the provision of safe and attractive pedestrian and cycle routes. It also requires strategic scale development to incorporate Sport England and National Design Guide Active Design principles.
- 3.92. Development Management Policy DM25 (Sustainable Buildings) includes updated requirements for Electric Vehicle charging points. These are based on the [EPOA Parking Guidance Part 1](#).
- 3.93. Specific traffic modelling to assess the potential impact of the Local Plan has been carried out at each stage of plan preparation and has been used to inform the Spatial Strategy included in the Pre-Submission (Regulation 19) Consultation. Full details on how the Council have arrived at the Spatial Strategy included in the Pre-Submission plan is set out in the Spatial Strategy and Strategic Sites Topic Paper. However, a full summary of the traffic modelling carried out is set out below.
- 3.94. A summary note outlining the traffic modelling approach to be undertaken throughout the Review of the Local Plan was included in the Issues and Options Topic Paper, included as an appendix to Appendix 2 of this Topic Paper. This was based largely on the approach used for the adopted Local Plan modelling and has evolved based on the identification of the locations for development in the Pre-Submission Local Plan.
- 3.95. The Sustainable Accessibility Mapping and Appraisal of Sites 2022 (T003) assessed 25 settlement areas identified across the five spatial approaches in the Issues and Options consultation document on their level of sustainable connectivity to key urban centres, employment, rail stations, bus services and bus stops, healthcare and education. They were also assessed on their digital connectivity highlighting the ability for residents to work from home thereby reducing peak hour journey trips on the local transport network. It should be noted that the appraisal assessed the current accessibility and connectivity of the locations and at that stage did not take into account future uncommitted infrastructure improvements which might come forward to support new development.
- 3.96. The Transport Impact Appraisal of Spatial Approaches 2023 (T001) sets out the modelling methodology, results, and findings of the traffic impact appraisal of three selected Spatial Strategy options, identified following the Issues and Options consultation. The evidence showed that, in terms of overall network impact (severity and breadth) and without considering the scope for mitigation, Approach 2 (New Settlement /Employment) was modelled as having the smallest impact, and Approach 3 (Transport Corridors) as having the largest. Approach 1 (Existing Strategy) was characterised as having a broader, but less pronounced impact on the road network. The wider cross boundary impacts are included in the relevant assessments.
- 3.97. The Transport Impact Appraisal of the Preferred Spatial Approach 2024 (T002) assessed the impact of the Spatial Strategy included within the Preferred Options Local Plan. The appraisal considered the potential traffic impact of the Preferred Options Spatial Strategy and insight into the likely effectiveness of proposed infrastructure and/or sustainable measures to mitigate the impact of development traffic growth. The forecast model was updated to reflect the latest position regarding the layout of the proposed Chelmsford North-

East Bypass and the schemes delivery timescales. Specifically, only the southern section of the bypass (Section 1a) between the proposed Northern Radial Distributor Road and Beaulieu Parkway being delivered.

3.98. The Transport Impact Appraisal of the Preferred Spatial Approach 2024 (T002), undertaken by Essex Highways, concludes that by maximising the potential for sustainable accessibility to and from the sites along the A12 corridor, the impact on the strategic highway network should not be considered severe. However, continued discussions with National Highways are necessary to best ensure that future development growth in Chelmsford can be supported by the strategic highway network over the long-term.

3.99. In addition to the main Transport Impact Appraisal of the Preferred Spatial Approach (T002), more detailed Junction modelling work was included as an addendum (T002-A) which supports the above conclusions.

3.100. Following the Preferred Options consultation the Council also commissioned Essex Highways to review and consider the key issues raised in the highway and transportation responses received to the Preferred Options consultation. This report entitled Preferred Spatial Approach - Response to Representations (November 2024) is given in Appendix 1 of this Topic Paper and includes a review of the Transport Technical Note, prepared by Stomor (June 2024) on behalf of Little Baddow, Danbury, Boreham Parish Councils. The Preferred Spatial Approach - Response to Representations (November 2024) report has been used by CCC to understand and respond to matters of concern raised at the Preferred Options Stage, and to inform the Pre-Submission Local Plan.

3.101. Following the Preferred Options consultation CCC also continued to engage with Essex County Council and National Highways to agree the methodology for further modelling to be undertaken which sought to address any further modelling requirements that had been raised. As a result, the Transport Impact Appraisal of the Local Plan Review Pre-Submission (T006) modelling includes the following amendments/additions:

- Additional local capacity modelling of A12 Junctions 15 and 16 using up-to-date (2024) count data for base model build
- Updated local capacity modelling of A12 Junctions 17 and 18 using 2024 count data and improved calibration to journey time delays
- An alternative appraisal of A12 Junction 19 (Boreham Interchange) referencing modelling work undertaken by National Highways for the A12 widening Development Consent Order (DCO)
- Merge/Diverge appraisal of junction on/off slips along the A12 corridor
- A sensitivity test assessment of Local Plan development impact with and without the A12 widening DCO proposals
- In contrast to the earlier stages of the Plan appraisal, Variable Demand Modelling (VDM) was incorporated into the Pre-Submission modelling work, to provide a robust appraisal of development impact along the A12 corridor
- The 2041 forecast modelling incorporates recent proposed infrastructure in Chelmsford, including the expansion of the Sandon and Chelmer Valley P&R sites, which was granted permission on 22nd November 2024

- The forecast modelling also includes the latest National Highways long term design proposals for the Boreham Interchange as per the DCO granted in January 2024
- Early concept development accesses onto the wider road network are also included in the latest Local Plan Pre-Submission modelling, based on outline developer proposals.

3.102. The objective of the Transport Impact Appraisal of the Local Plan Review Pre-Submission (T006) was to provide sufficient transport modelling evidence with which to inform CCC of the potential traffic impact of the Pre-Submission plan proposals and insight into the likely effectiveness of proposed infrastructure and/or active and sustainable measures to mitigate the impact of development traffic growth. The study specifically looks at the following:

- The impact of additional Local Plan Review Pre-Submission document (LPRPS) development traffic on the future capacity of links and junctions on the strategic and local road network, at key junctions and across neighbouring authority boundaries.
- The effectiveness of mitigation measures proposed by developers of large, proposed development sites in Chelmsford – specifically SGS6 – North East Chelmsford (Chelmsford Garden Community) and SGS16a – East Chelmsford Garden Community (Hammonds Farm).
- The impact of forecast traffic flows on the accessibility of passenger transport services and the network of bus priority infrastructure in Chelmsford.

3.103. The Pre-Submission modelling concludes that, with a focus on development along the A12 corridor, the modelled traffic impact of the Pre-Submission plan is largely limited to the A12 trunk road, the junctions along it and, to a lesser extent, the A414 east of the A12, and the A1114 and A138 corridors into Chelmsford City Centre. The minor quantum of development allocated in rural areas of Chelmsford is of insufficient size to likely impact the local road network.

3.104. Overall, the allocation of development in the Pre-Submission plan provides the opportunity to make good use of existing and potential active and sustainable modes of transport to and from proposed sites. However, this will be dependent on the delivery of the bus, cycling and walking infrastructure proposed by developers, as well as additional measures required to provide the necessary connectivity to the wider sustainable transport network to achieve 60% modal shift targets. This will be crucial to ensure that the growth in trips associated with the proposed development is managed and does not have a significant impact on the surrounding local area.

3.105. With PM peak traffic congestion along Parkway in the City Centre shown to worsen with LPRPS development trips added, it would therefore be appropriate for all developers to contribute towards public transport measures to mitigate the impact on the City Centre.

3.106. Trips from proposed development in the vicinity of A12 Junctions 18 (Sandon) and 19 (Boreham Interchange) are modelled to have a direct impact on the capacity of these junctions, and it should be expected that developers of sites including; Chelmsford Garden Community, Hammonds Farm and Land Adjacent to A12 Junction 18, identify and make provision for the potential funding and delivery of necessary junction capacity improvements

alongside provision of sustainable and active mode infrastructure and services. Junction capacity improvements will be required in the event that development impact cannot be reasonably mitigated through bus, cycling and walking measures alone. The design and delivery of such capacity improvements would require collaboration with National Highways from an early planning stage.

- 3.107. Modelling suggests that the delivery of Boreham Interchange improvements associated with the A12 widening DCO proposals is required as a minimum to help ensure that the junction has the capacity to accommodate proposed development across Chelmsford. Should funding for the DCO proposals be withheld following central government review in Spring 2025, modelling suggests that capacity improvements will require funding by alternative means and ECC and CCC will jointly lobby for funding for the provision of necessary infrastructure at the junction. Forecast modelling suggests that the impact of traffic flows associated with the LPRPS will have a minor impact along the A12 trunk road – relative to background traffic growth. At the same time however, the volume of development trips modelled on A12 junction on and off-slips may exacerbate potential safety issues in the future associated with carriageway merging.
- 3.108. With forecast-year modelling suggesting that sections of the A414 east of the A12 will operate close to, or at capacity; developers of LPRPS sites located off the A414 should be required to consider journey time impact along the route in the vicinity of A12 Junction 18, and through Danbury, and ensure that traffic conditions are sufficiently managed with the addition of development trips.
- 3.109. By maximising the potential for sustainable accessibility to and from the sites along the A12 corridor, the impact on the strategic highway network should not be considered severe. However, continued discussions with National Highways will be necessary to best ensure that future development growth in Chelmsford can be supported by the strategic highway network over the long-term.
- 3.110. It should be noted that the highways modelling undertaken for the Local Plan is strategic and area-wide in nature. More detailed modelling to assess the impact of proposed development on the local road network and the detailed mitigation required to accommodate new trips associated with it, will be required and undertaken as part of the planning application process for allocated sites in the Local Plan.
- 3.111. While it is not within the practical scope of the Local Plan highways modelling to assess the scale of mitigation required along alternative sustainable corridors into the city centre from the Hammonds Farm site. The Local Plan transport modelling evidence base does recognise the need for a city centre sustainable access corridor study to be undertaken as part of the Hammonds Farm planning application, should proposals for a bus service to Beaulieu Rail Station be compromised by access difficulties at the Boreham Interchange.

Draft Policies Map

- 3.112. Following updated evidence and feedback from the Preferred Options consultation the description for the notation for the ‘Proposed RDR2 Detailed Design within New Garden Community Masterplan Area’ has been amended to read ‘Proposed Northern RDR2 Detailed Design within New Garden Community Masterplan Area’.
- 3.113. The previous notation name ‘Park and Ride Area of Search’ has also been amended to read ‘Area considered for additional park and ride facilities’.
- 3.114. The Policies Map has also seen the following amends relating to the notation for ‘Proposed Bridge’:
- Removed proposed bridge on SGS10 as not part of the planning permission on that site
 - Remove proposed bridge in Central Park (Bell Meadow) as this has been implemented
 - Proposed bridges on SGS6 and SGS16a have been added
 - Removed proposed bridge from CW1c
 - Added two bridges from SGS1w to link with CW1a.

NPPF December 2023 Checklist

- 3.115. The Council has reviewed the Pre-Submission Local Plan against the requirements of the 2023 December NPPF. The table below shows that the plan meets all the requirements in respect to Transport. The full Pre-Submission Local Plan Form and Contents Checklist (February 2025) is available at www.chelmsford.gov.uk/lp-review

Commentary key:

Pre-Submission Local Plan meets December 2023 NPPF requirement
Pre-Submission Local Plan partially meets December 2023 NPPF requirement
Pre-Submission Local Plan does not meet December 2023 NPPF requirement

NPPF Requirement	NPPF Paragraph	Approach in Pre-Submission Local Plan
<i>Transport</i>		
Actively manage patterns of growth. Significant development should be focused on locations which are/can be made sustainable. Opportunities to maximise sustainable transport solutions will vary between urban and rural areas - this should be taken into account in plan-making.	109	These considerations have been considered in the Spatial Strategy (Strategic Policy S7) which is informed by the wider plan evidence base including the 2024 Parish Audit and Integrated Impact Assessment.

NPPF Requirement	NPPF Paragraph	Approach in Pre-Submission Local Plan
Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities.	110	The plan provides for a variety of site types and uses to minimise journeys. The plan includes proposals and policies which seek to reduce the need to travel including Strategic Policies S2 and S16 and site allocations policies. It has also been prepared with the active involvement of local highways authorities.
Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development.	110	The plan safeguards a corridor for the North East Chelmsford Bypass and identifies locations for proposed key transport infrastructure including bridges and areas for additional park and ride facilities to support new development growth.
Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans).	110	The plan provides for attractive walking and cycling networks drawing on the Chelmsford Cycling and Walking Infrastructure Plan as set out in Strategic Policy S16 and site allocation policies.
Provide for any large-scale transport facilities that need to be located in the area and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. Such facilities include ports, airports, interchanges for rail freight, public transport projects and roadside services.	110	A new roadside facility is identified as a possible complementary employment generating use/service in Strategic Site Allocation 16b.
Recognise the importance of maintaining a national network of general aviation airfields.	110	Not relevant as no airfields within the plan area.
Provide adequate overnight lorry parking facilities, taking into account any local shortages.	113	Not currently required in the adopted Local Plan and not aware of any current identified needs.
In assessing sites that may be allocated for development in plans, it should be ensured that: appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; safe and suitable access to the site can be achieved for all users, the	114	Provision is set out in plan site allocations including requirements to promote sustainable travel provision and ensure suitable site access. Site policies are supported by other policies including Strategic Policies S1 and S16, the masterplan process and Making Places SPD. The site allocations are also supported by the

NPPF Requirement	NPPF Paragraph	Approach in Pre-Submission Local Plan
design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance including the National Design Guide and the National Model Design Code; and any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.		Transport/Highways Modelling and Infrastructure Delivery Plan.
Development should only be prevented on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.	115	The plan site allocations are supported by updated Transport/Highways Modelling. The adopted Local Plan was not found to have an unacceptable impact on highway safety, and the residual cumulative impacts on the road network was not found to be severe.

Alternative Considered

3.116. The Local Plan review has considered a number of alternative policy approaches and options including different development quantum and spatial strategy options. Each policy in the Preferred Options Local Plan Consultation Document included ‘Alternatives considered’ which were tested in the Preferred Options Integrated Impact Assessment (IIA), alongside the proposed policies, to help ensure that the final version of the plan is justified and an appropriate strategy, when considered against the alternatives and other available and proportionate evidence. Alternative spatial strategy options have also been tested in other evidence base reports such as the Water Cycle Study Scoping Report and Preferred Options Traffic Modelling Report. Furthermore, the Pre-Submission IIA has considered different spatial strategy and development site options for growth. More detail is set out in each evidence base report and the Pre-Submission Spatial Strategy and Strategic Sites Topic Paper.

3.117. In summary, key alternatives considered during the plan review in relation to Transport include:

- **No Strategic Policy for Connectivity and Travel but rely on NPPF.** The policy follows the requirements of the NPPF. However, the NPPF does not provide detailed guidance on the Council's expectations for new development. It is considered that the policy is required to give clarity to developers and local communities. Therefore, this is not a reasonable alternative.

- **No Strategic Policy for overall infrastructure requirements but rely on NPPF or the Essex Local Transport Plan.** Relying on the NPPF alone would risk required infrastructure improvements not being delivered. The Essex Local Transport Plan predates the Local Plan, therefore it does not address specific infrastructure requirements from Chelmsford's projected growth.
- **No Strategic Policy covering how infrastructure requirements will be delivered but rely on NPPF.** Relying on the NPPF alone would result in uncertainty regarding how developer contributions will be secured.

4. Conclusion

- 4.1. The rationale for the City Council's approach to Transport to support the Local Plan is clear, compliant with national policy and well informed.
- 4.2. The relevant supporting evidence base studies and documents set out that while Chelmsford faces some constraints there are suitable means to ensure the impact on the highway network is not severe, and that there are opportunities to secure suitable active and sustainable alternative means of travel to residents to support the required development in the Local Plan. The Council's approach is to:
 - Locate development in sustainable locations
 - Encourage a modal shift of 60% to active and sustainable travel
 - Ensure active and sustainable modes of travel support development
 - Mitigation the impact of development on the highway network
 - Provide greener alternatives on developments to support sustainable travel e.g. EV charging points required to be provided.

5. Next Steps

- 5.1. This Topic Paper will be updated following feedback to the Pre-Submission consultation and form part of the evidence base alongside submission of the plan for Independent Examination.

Appendix 1 – Preferred Spatial Approach - Response to Representations (November 2024)

Appendix 2 – PO TP: Transport (August 2024)

The Issues and Options Topic Paper can be found in Appendix 1.

Document Control Sheet

Essex Highways

Transport Planning
Victoria House
Chelmsford
CM1 1JR

W

www.essex.gov.uk/highways

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Preferred Spatial Approach – Response to Representations

The following table documents a summary of key representations made during the summer 2024 consultation on the transport modelling evidence base for Chelmsford City Council’s Local Plan Review Preferred Spatial Approach, along with Essex Highways’ response to queries raised.

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
Comment by: Wates Developments and Hammonds Estates LLP – Comment ID: PO24-4653			
1.	Clarity needed on the requirement for CNEB contributions	It is unclear currently from the council’s current transport evidence base why contributions to the CNEB are required, as this is not indicated by the results of the Transport Testing of the Preferred Option to 2041 (dated March 2024) and the Local Junction Capacity Assessment Modelling (dated May 2024); rather, the March 2024 document concludes that the completion of the CNEB is only required once capacity issues along the A12 mainline are addressed. On this basis, the requirement for the CNEB is associated primarily with background increases in traffic using the A12, rather than development trips at East Chelmsford Garden Community (Hammonds Farm). Clarification of this point, and therefore the robustness of this the policy requirement for S106 contributions towards this infrastructure, are sought and should be addressed more fully in the next iteration of the Plan.	Essex Highways understand that CCC and ECC are reviewing the funding options for delivery of the CNEB. Whilst the strategic modelling undertaken to support the Local Plan transport evidence base suggests that the distribution of trips between Hammonds Farm and the CNEB will be small (<10%), approximately one third of development trips to/from Hammonds Farm are shown in the forecast modelling to access the A12 Junction 19 Boreham Interchange, at the southern end of the CNEB.
Comment by: Wates Developments and Hammonds Estates LLP – Comment ID: PO24-4743			
2.	Disagreement on early conclusions regarding requirements for Hammonds Farm	Do not agree with some of the early conclusions about the requirements for the East Chelmsford Garden Community (Hammonds Farm). The executive summary on Page 11 of the Transport Appraisal of the Preferred Option (March 2024) states that: “Critical to the planning application process should be a requirement to ensure that background traffic flows along the A414 are not unreasonably delayed by the addition of development trips. This may well require significant highway measures in the vicinity of the site access”.	The wording used in the Transport Appraisal of the Preferred Spatial Approach does not state that highway measures should be implemented to ensure a nil detriment impact of development at Hammonds Farm. Rather, that there is an expectation that sustainable and active mode measures, along with potential highway capacity improvements will be identified as part of the planning application process to mitigate against “unreasonable delays” to these modes –

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
		<p>We disagree with this statement as it is not consistent with NPPF Paragraph 115, where the key test relates to severity of impact, and not to protecting against “unreasonable delays” or providing “nil detriment” to motorists. Even if subsequent modelling evidence shows an increased period over which drivers would experience delay, it is not the aim of national or local policy to protect the convenience of commuting car drivers.</p>	<p>which could ‘help to achieve’ a nil detriment impact.</p> <p>By “unreasonable delays” we (Essex Highways) mean, for example, a notable increase in journey times for background traffic flows - including buses and emergency service vehicles and/or delays that lead to a notable worsening of noise and air quality along the A414 corridor.</p>
Comment by: Walshingham Planning, on behalf of Little Baddow, Sandon, Boreham & Danbury Parish Councils – Comment ID: PO24-8576			
3.	5.1.10 Uncertainty in Hammonds Farm forecast beyond 2041	<p>Both December 2023 and March 2024 evidence documents refer to uncertainty in forecasting forward beyond 2041 and therefore do not test more than 3,000 dwellings at East Chelmsford Garden Community (Hammonds Farm). There will always be uncertainty which requires addressing in forecasting, and whilst development locations beyond this Local Plan Review to 2041 are not known, it is considered that a sensitivity assessment of the East Chelmsford Garden Community in 2041 with 4,500 dwellings could provide an initial indication of the scale of impacts and mitigation required and may be helpful during the next stage of Local Plan evidence and formulation of the council’s IDP.</p> <p>Trip Generation: The Strategic Growth Site Policy 16a (Hammonds Farm) includes residential proposals for up to 4,500 dwellings to the period 2048. The Chelmsford VISUM model is only forecast to 2041 and allows for only 3,000 dwellings at the Hammonds Farm site. Again, the impact on the local highway network and at key junctions is likely to be far greater than is currently predicted as a result of the additional trips generated by the extra 1,500 dwellings.</p>	<p>Alongside the challenges of forecasting background levels of demand and road infrastructure 20+ years into the future and beyond the current Local Plan period, an assessment of an additional 1,500 dwellings at Hammonds Farm would require an assumption to be made on the mitigation already in place to support a 3,000 dwelling development by 2041. The scope and delivery timeframes for this mitigation have yet to be agreed between developers and ECC/CCC.</p> <p>Observations from the strategic modelling suggest that without capacity improvements, additional development traffic added to the A12 corridor would result in a wider dispersal of background traffic and/or reductions in peak hour trips being modelled. Therefore, the scale of impact from a further 1,500 dwellings, and the mitigation required, would be difficult</p>

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
			<p>to assess using the modelling methodology adopted for the Local Plan evidence base.</p> <p>It is, however, expected that any capacity improvement measures identified as part of the planning application process would be tested with a full 4,500 dwelling build-out, with assumptions to be agreed with developers on the volume of background growth to be applied.</p>
4.	3.4.3 - 3.4.7 Lack of detailed modelling of site accesses at Hammonds Farm	No work has been undertaken to determine the location, type or scale of the Site access onto A414 Maldon Road required to accommodate the vehicle trips predicted to be generated by the Site.	<p>The modelling undertaken for the appraisal of the Local Plan Preferred Approach, is strategic and area-wide in nature and further local/detailed modelling will be required and undertaken as part of the planning application process for the Hammonds Farm development.</p> <p>Whilst access proposals for Hammonds Farm have yet to be fully designed and assessed, the location of accesses onto the wider road network will be included in the Local Plan Pre-Submission modelling, based on outline developer proposals at this stage.</p>
5.	3.4.8 Lack of detailed modelling of junction 19	Whilst it is also proposed to provide an additional access to serve Strategic Growth Site Policy 16a via the A12 Junction 19 to the north, the modelling undertaken in support of the Preferred Spatial Approach does not include detailed analysis of Junction 19 with Local Plan Review development trips and it is therefore unclear if such an access can be accommodated at this junction to serve the Site.	Outputs from a VISSIM microsimulation model of A12 Junction 19, built to assess National Highways' A12 widening DCO proposals, will be referenced and evaluated within the context of the Local Plan appraisal as part of the next stage of modelling.

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
			<p>Early concept development accesses onto the wider road network will be included in the latest Local Plan Pre-Submission strategic modelling, based on outline developer proposals.</p>
6.	<p>3.4.11 – 3.4.13 Future impact on approach to Beaulieu Station not properly assessed</p>	<p>The ‘Transport Impact Appraisal of Spatial Approaches’ (December 2023) report suggests that delays along the approach to the Beaulieu Rail Station should be monitored over time to determine the long-term viability of the route as a bus access link between the proposed allocated Site at Hammonds Farm and the railway station. Whilst this is typical for new developments as part of travel plan monitoring, proposing such a measure once infrastructure is already provided may be short sighted.</p> <p>The report goes on to say that “should future journey times to Beaulieu Station via the Boreham Interchange increase substantially, consideration should be given to placing additional focus on enhancing the provision of sustainable transport links to the existing rail station in Chelmsford city centre. Services could make use of the existing bus lane along the A1114 Essex Yeomanry Way (Baddow Bypass) and improved access through the redesigned Army and Navy Roundabout. However, PM peak traffic congestion along Parkway in the city centre would need to be managed to help improve travel times for buses heading out of the city centre.”</p> <p>These statements and worded solutions do not appear to fully address likely issues of congestion on the local highway network. This highlights the fact that further modelling work would be required to assess this scenario.</p>	<p>It is expected that analysis of outputs from the VISSIM microsimulation model of A12 Junction 19 will help to infer the level of future bus accessibility between Beaulieu Station and the proposed Hammonds Farm development.</p> <p>It is not within the practical scope of the Local Plan appraisal to assess the scale of mitigation required along alternative sustainable corridors into the city centre from the Hammonds Farm site. However, the Local Plan transport modelling evidence base does recognise the need for a city centre sustainable access corridor study to be undertaken as part of the Hammonds Farm planning application – should proposals for a bus service to Beaulieu Rail Station be compromised by access difficulties at the Boreham Interchange.</p>

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
7.	3.4.16 – 3.4.17 Evidence does not demonstrate suitable access to Hammonds can be provided	<p>Given that the proposed bus, walking, and cycling infrastructure improvements appear unlikely to achieve the necessary mode shift away from car use as set out above, there is concern as to the ability of appropriate Site access junctions to be provided to accommodate the likely vehicle trips generated by the proposed allocated Sites.</p> <p>The transport modelling evidence base does not clearly demonstrate suitable access can be provided to serve Strategic Growth Site Policy 16a at Hammonds Farm and Strategic Growth Site 16b to the south.</p>	<p>The modelling undertaken for the appraisal of the Local Plan Preferred Approach, is strategic in nature, but where available, early-stage access proposals provided by developers of Local Plan sites will be modelled as part of the Local Plan Pre-Submission appraisal.</p> <p>More detailed modelling to assess the impact of proposed development on the local road network and the detailed mitigation required to accommodate new trips associated with it, will be required and undertaken as part of the planning application process for developments identified as allocated sites in the Local Plan.</p>
8.	4.2.2 - 4.2.8 Use of 2019 model and historic traffic surveys	<p>Modelling for the critical A12 Junctions 18 and 19 are based upon 2019 traffic surveys that were used to support the strategic VISUM traffic model, which notably, has not been calibrated to turning movements at junctions.</p> <p>Traffic flows for modelling of the A12 Junction 18 have been based upon traffic surveys undertaken just prior to the Covid-19 pandemic. Whilst turning movement proportions have been checked against historic 2016 data, travel behaviour and patterns have changed since the pandemic and thus utilising data from this period may be unrepresentative of current conditions.</p> <p>Traffic survey data is typically valid for a period of three years and when considering the significance and scale of the proposed site allocations, use of recent and up to date traffic</p>	<p>The appendices of the 'T002 - Transport Impact Appraisal of Preferred Spatial Approach – March 2024' report contain the findings of a study undertaken to look at the differences in traffic flow patterns around Chelmsford in the years post-Covid-19. Whilst it is accepted that there are statistical differences between pre and post Covid-19 traffic flows at individual locations on the road network, at an aggregate level, there is no significant difference in either the AM or PM peak. This supports DfT findings that overall volumes are still at pre-pandemic levels and have not yet stabilised. Given that the VISUM model uses count data at an aggregate level, the 2019 validation is considered to still be</p>

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
		<p>survey data would be more appropriate for creating a base scenario for junction assessment.</p> <p>The base traffic survey data used to create the Chelmsford VISUM and local junction models requires updating to reflect current travel behaviour and patterns</p> <p>Significant manipulation of historic pre-Covid-19 pandemic traffic survey data has been undertaken to create baseline survey data to support junction assessments. The base traffic survey data used to create the VISUM and local junction models is therefore questionable and requires updating to reflect current travel behaviour and patterns.</p>	<p>appropriate for use and provides a reliable, stable base for the modelling.</p> <p>Additional junction modelling will be undertaken as part of the Pre-Submission Local Plan appraisal which will use traffic data collected in September 2024 along the A12 corridor to improve base junction model validation/calibration in post-Covid conditions.</p> <p>It should be noted that calibration/validation to turning flows at junctions would not be expected for a strategic assignment model of the size developed for Chelmsford. Nevertheless, effort has been made to ensure that turning flows appear reasonable at key junctions, and where differences are noted, findings have been caveated in the analysis.</p>
9.	4.3.1 - 4.3.13 Using 'Low' trip rates underestimates the volume of development trips	<p>It is suggested that the trip rates used in the forecast modelling are low as a result of internalisation and sustainable and active travel mode-share, however, these vehicle trip rate reducing factors would already be accounted for in the trip rates determined from the TRICS database. As such, these low vehicle trip rates used would in fact be a double counting of sustainable and active travel mode-share trips and thus significantly underestimate the vehicle trip generation of the proposed allocated sites.</p> <p>Given that it has already been identified that the proposed bus, walking, and cycling infrastructure improvements proposed as part of the Strategic Growth Area Policy 16a are</p>	<p>The Local Plan appraisal makes use of the core trip rates already found within the VISUM forecast model, which have been used across several studies in Chelmsford. These include; the appraisal of Army & Navy junction design options (the modelling of which has been approved by DfT), the appraisal of the Chelmsford North-East Bypass, and the impact appraisal of the proposed Chelmsford Garden Community to the north of the city centre. It was considered appropriate to use the same trip rate assumptions to maintain consistency in approach across these studies.</p>

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
		<p>unlikely to achieve the necessary mode shift away from car use, and the fact that a development proposal at Northeast Chelmsford of very similar nature to that proposed as part of the Site allocation at Hammonds Farm uses far higher, and as expected vehicle trip rates, for determining development vehicle trips suggests that vehicle trip rates used in the Chelmsford forecast model is significantly underestimated.</p> <p>Residential vehicle trip rates for the Local Plan Review Preferred Spatial Approach that are used in the Chelmsford forecast model appear to be significantly underestimated and the impact on the local highway network and at key junctions is likely to be far greater than is currently predicted</p>	<p>It is recognised that the trip rates used are representative of an aspirational approach to development planning and the levels of trip generation that could be achieved with the successful implementation and uptake of sustainable and active mode infrastructure through travel plan monitoring, penalties for failing to meet targets, monitor and manage practices etc. The trip rates are, however, not considered ‘unrealistic’, and are aligned with latest NPPF guidelines for Local Plan development.</p>
10.	4.4.4 - 4.4.15 Impact on A12 J18 & lack of mitigation measures	<p>The impact of a Site Access along A414 Maldon Road to serve Strategic Growth Site Policy 16a and Strategic Growth Site 16b is unknown and may cause additional delay and queuing along the A414 Maldon Road approach to the A12 Junction 18. The existing model only assesses the impact of the additional vehicle trips on the A12 Junction 18 without understanding how vehicles queued back along A414 Maldon Road may block or impact on the operation of a Site access junction.</p> <p>The ‘Transport Impact Appraisal of Preferred Spatial Approach’ (March 2024) document suggests that initial proposals to mitigate the impact on the A12 Junction 18 are contained in the October 2022 Stantec report ‘Hammonds Farm Transport Technical Report’. These proposals will be refined through the ongoing Local Plan master planning and planning application process.</p> <p>A review of the Stantec report does not identify any other mitigation measures beyond those already proposed as part</p>	<p>Where available, early-stage access proposals provided by the Hammonds Farm developer will be modelled as part of the Local Plan Pre-Submission appraisal.</p> <p>However, the modelling undertaken for the appraisal of the Local Plan Preferred Approach, is strategic in nature, with a focus on the wider patterns of impact across the road network in Chelmsford. This is understood to be commensurate with the typical scope of modelling required for a Local Plan transport appraisal. More detailed modelling will be undertaken to assess the impact of development and access proposals on the local road network, and the detailed mitigation required, through developer Transport Assessments as part of the planning</p>

Preferred Spatial Approach – Response to Representations

Table Item ID:	Summary Point:	Summary of detailed representation made:	Essex Highways Modelling Response:
		of the Site allocation requirements, which include the sustainable and active travel bridge over the A12 and bus priority link to the north at the A12 Junction 19.	application process for the Hammonds Farm development.
11.	4.4.21 – 4.4.29 A12 J19 Boreham Interchange, insufficient evidence to demonstrate access at Hammonds can be accommodated	<p>In order to demonstrate that the A12 Junction 19 can be considered a suitable option for providing access to the Hammonds Farm site, further modelling work is required</p> <p>Whilst the VISUM strategic forecast model incorporates the latest Junction 19 designs and signal timings published as part of the A12 Chelmsford to A120 widening scheme DCO, it does not allow for the Site access to the Strategic Growth Site Policy 16a at Hammonds Farm.</p> <p>It should also be noted that all modelled junctions except for two, one of which is the A12 Junction 19, were built using demand flows taken directly from the 2041 Chelmsford VISUM forecast model for scenarios with and without Local Plan Review development trips.</p> <p>Current modelling results related to the A12 Junction 19 that are presented in the evidence base in support of the Preferred Spatial Approach cannot be relied on and do not demonstrate that at this stage, an additional access from the A12 Junction 19 to serve the allocation of development at Hammonds Farm can be accommodated.</p>	Updated junction modelling will be undertaken as part of the Pre-Submission Local Plan appraisal, including the use of outputs from a VISSIM microsimulation model of A12 Junction 19, built to assess National Highways' A12 widening DCO proposals. Where available, early-stage access proposals provided by the Hammonds Farm developer will be modelled at A12 Junctions 18 and 19.

Appendix 2

Chelmsford Local Plan

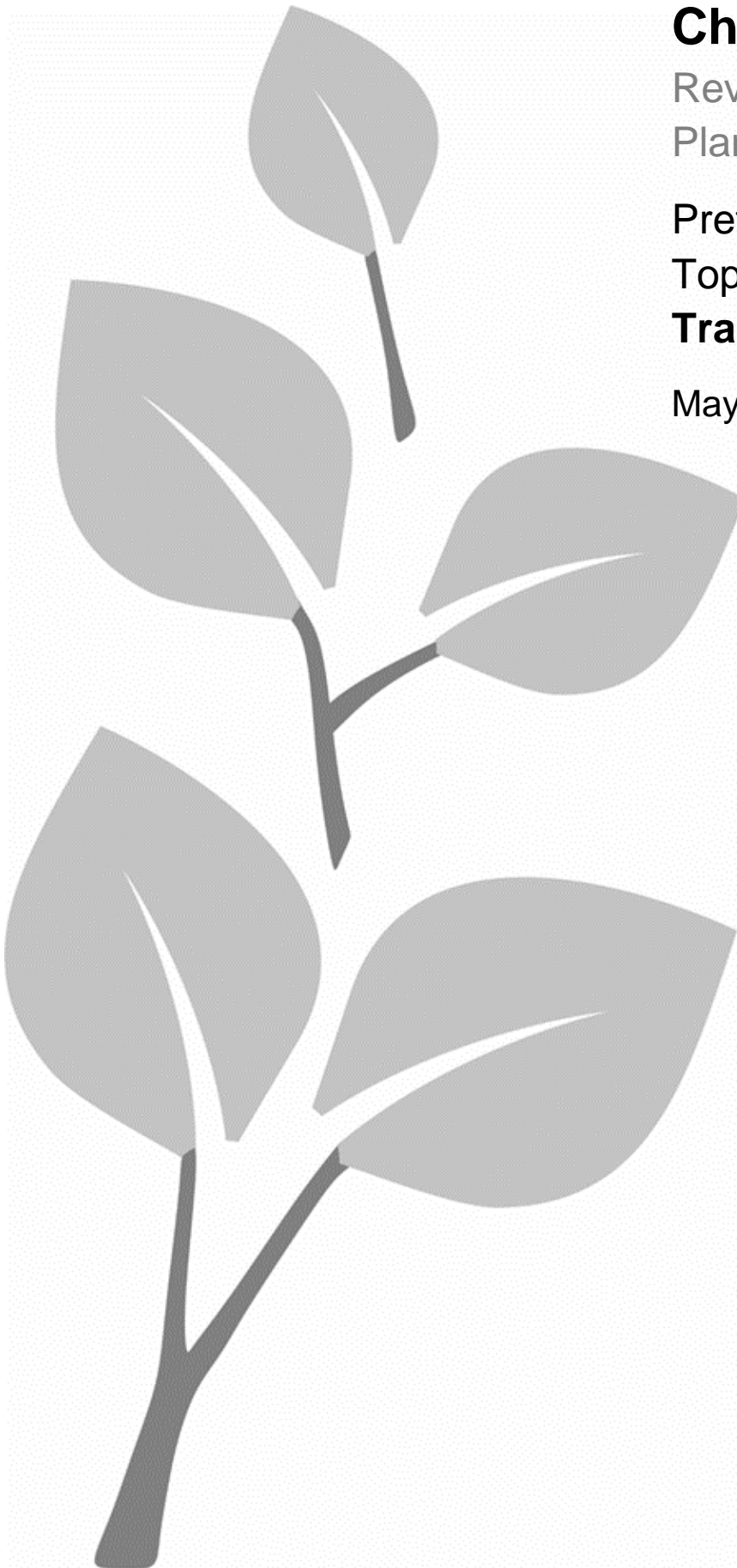
Review of the adopted Local Plan

Preferred Options

Topic Paper:

Transport

May 2024



1. Purpose

- 1.1. This Topic Paper is one of a number produced by Chelmsford City Council to set out how the review of the adopted Local Plan has been developed. Topic papers will be refreshed and updated at each stage of the Local Plan Review process to ensure the latest information/position is available. The previous Transport Issues and Options Topic Paper is given in Appendix 1. As such, this topic paper supersedes previous versions.
- 1.2. The intention of the topic papers is to provide background information; they do not contain any policies, proposals or site allocations. Topic papers form part of the Local Plan evidence base which will be submitted alongside the Local Plan for independent examination.
- 1.3. This paper covers how transport matters and transport impacts have been considered when preparing the review of the adopted Local Plan and how the Review will seek to provide a development strategy compatible with sustainable movement objectives.
- 1.4. The Topic Paper provides background information and provides context of how the Local Plan has been formulated. This Topic Paper should be read alongside the other Preferred Options Topic Papers produced, in particular:
 - Spatial Strategy and Strategic Sites
 - Infrastructure.
- 1.5. The main issues covered by this Topic Paper relate to:
 - Policy proposals to assist in increasing active and sustainable travel
 - The proposed approach to highway modelling
 - Relevant Strategic Priorities and Policies related to transport including Strategic Priority 1 and 2, Strategic Policies S1, S14 and S16.

2. Background

- 2.1. Chelmsford is located in the heart of Essex, 30 miles north-east of London and consists of the principal settlements of Chelmsford and South Woodham Ferrers, surrounded by villages set within countryside and Green Belt, which generally follows the A130 in the south of the district to the administrative boundary and westwards along the A1060.
- 2.2. An improved transport network can bring about much-needed change connecting people to opportunities for work, education and leisure, and supporting local economies. Enhanced transport links between and within growing places and business clusters will enable an area to function as a coherent economy and improve productivity. Government has clear commitments to cut transport related carbon emissions to net zero through the decarbonisation of transport. Dependence on the private car causes other problems beyond carbon emissions. Many urban areas are heavily congested at peak times and a behavioural change is necessary to prioritise walking, cycling and public transport movements particularly for short trips.

Transport in Chelmsford

- 2.3. High car ownership and high levels of vehicle movements and commuting cause traffic congestion on main roads across Chelmsford at peak times. The high cost of local housing also results in some workers living a significant distance from their workplace.
- 2.4. Chelmsford has a wide influence on its surrounding area. The principal roads that connect Chelmsford to the rest of the strategic road network are the A12, A131, A130, A132 and A414. These roads together with the rail network are heavily used, particularly given the proximity to and connectivity with London. The transport modelling evidence base reveals that all the principal roads and many local roads through Chelmsford are at, or near to, capacity during peak periods. The first phase of the Chelmsford North East Bypass (CNEB) is programmed for delivery in Spring 2026. The CNEB has a safeguarded corridor and will provide when fully complete a new 4.6km single carriageway bypass from the A12 in the south to Braintree, and London Stanstead Airport in the north.
- 2.5. Chelmsford is well served by a range of urban and inter urban bus services between key centres in Essex. Chelmsford also has two Park and Ride facilities (Chelmer Valley and Sandon) with frequent connections to the City Centre for commuters and shoppers. North Chelmsford is also served by a bus-based rapid transit (ChART) connecting the new neighbourhood in north east Chelmsford with the City Centre and rail station.
- 2.6. The Great Eastern Main Line provides rail services between London Liverpool Street and the East of England, including Chelmsford. It also carries freight traffic to and from Freeport East (Harwich), which handles container ships and freight transport to the rest of the UK. Freeport East (Harwich) works in conjunction with Harwich International and Port of Felixstowe operating as a ports and logistics hub for offshore and green energy projects. The Elizabeth Line (Crossrail) provides services commencing just south of Chelmsford in Shenfield providing additional capacity and quicker journeys to a wider choice of destinations through central London towards Reading. Beaulieu Park Rail Station will provide Chelmsford with an additional railway station and access with regular connections to London, with services taking around 40 minutes. The new station is programmed to be operational from the end of 2025. The Elizabeth Line and the new main line rail station at Beaulieu Park in north east Chelmsford will contribute to the continued attractiveness of Chelmsford as a place to live and to do business. Chelmsford also has good connections to London Stansted and Southend airports, as illustrated below:



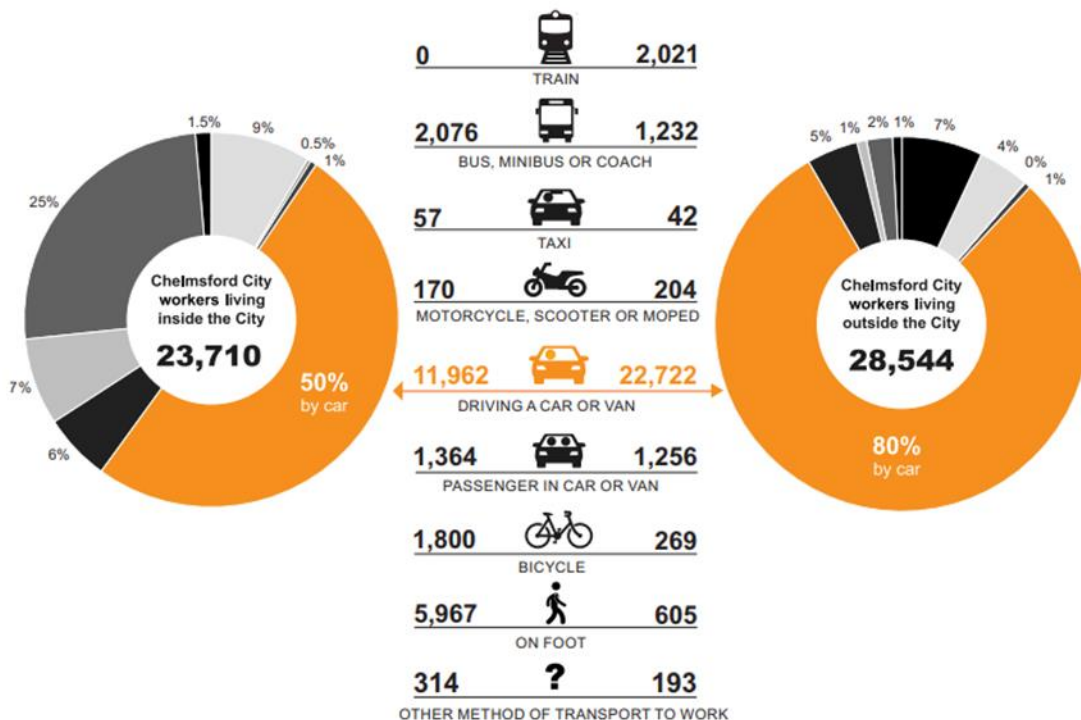
- 2.7. Chelmsford's relative affluence combined with good access to the local and strategic road network means that there are high levels of car ownership. This contributes towards heavy use of Chelmsford's road network with some main roads through the City Centre at, or near to operating at 96% capacity during peak periods. This includes peak time congestion into and within Chelmsford City Centre, notably around the Army and Navy Junction and along Baddow Road and also along Broomfield Road, Springfield Road and Waterhouse Lane. There are also congestion 'hotspots' on the strategic road network for example, the A12 between junctions 15 and 19, and the A414 east of the A12 can be heavily congested during peak hours, particularly if there are issues on the A12.
- 2.8. In determining the locations for future growth, consideration will be given as to how they can take advantage of any additional capacity or help secure the funding towards any necessary transportation infrastructure be it highway or active and sustainable modes. For example, the Housing Infrastructure Fund in combination with developer contributions from site allocations in the adopted and emerging Chelmsford Local Plan and adopted Braintree Local Plan is helping to fund the new rail station and Chelmsford North East Bypass (CNEB), rather than the provision of new roads in the existing built-up areas. The CNEB was granted approval by Essex County Council (ECC) in March 2022. The first phase of a new bypass to the north east of Chelmsford will connect with Beaulieu Parkway in the south, providing access to the A12 at the Boreham Interchange via the new Beaulieu Parkway bridge. To the north, it will join with a Northern Radial Distributor Road, to be built by developers as part of the Chelmsford Garden Community, to the Wheelers Hill roundabout on the A131 Essex Regiment Way. The future phases (Sections 1B and 2) will link the Northern Radial Distributor Road junction via a new dual carriageway on the A131 between Chatham Green and the Deres Bridge roundabout. Sections 1B and 2 will take place in the future when alternative funding has been secured, including future developer contributions. The CNEB will provide easier access to the A12 and new station for people travelling from Braintree and

surrounding areas helping to relieve congestion on local roads and enable existing routes into Chelmsford city centre, such as Broomfield Road and Essex Regiment Way to become sustainable transport corridors.

- 2.9. Essex Highways (EH) has undertaken further traffic modelling consistent with, and following on from, the modelling undertaken for the development of the 2020 Local Plan transport evidence base (see Evidence Base section below). This modelling will continue through the Local Plan process and will assess the likely need for infrastructure by 2041 to inform the Pre-Submission Plan. The assessment uses the forecast model developed to assess redesign options for the Army and Navy junction and updated infrastructure assumptions for a 2041 future year, including the latest National Highways A12 widening proposals (DCO granted), Chelmsford NE Bypass proposals and capacity assumptions at Beaulieu rail station.
- 2.10. Chelmsford's wider sub-regional economic, transport and community functions means that significant levels of trips to Chelmsford originate from outside the City Council's area. For example, the neighbouring town of Maldon has no railway station and pre Covid-19 many residents commuted to London as well as employment locations in Chelmsford via the A414. The Council expects that this pressure will return on both the road network and public parking within the City. Some 7,000 commuters also travel to Chelmsford from the Braintree area via the A131 for employment purposes.
- 2.11. Likewise, Chelmsford's second largest town, South Woodham Ferrers, is served by the Southminster branch line without direct access to Chelmsford. Although there are bus links, many residents travel by car to Chelmsford along the A130 via Howe Green (A12, junction 17) and into the City Centre via the Army and Navy junction. Similarly, some villages have poor public transport links and are sufficiently far from the City Centre to make walking or cycling impractical or less desirable. The Sustainable Accessibility Mapping and Appraisal: Technical Note (T003) assessed the existing level of sustainable accessibility at 25 'settlement areas' currently identified across the five draft Spatial Approaches included in the Issues and Options consultation.
- 2.12. There are 24 public car parks that the City Council operates providing a mixture of short, medium and long stay car spaces. The majority of these are located within or on the edge of the City Centre.
- 2.13. ECC has developed a Strategic Zonal Approach to the Chelmsford transport system which seeks to remove as much traffic as possible from the outskirts of the city and reducing the need for city centre car parks. Park and Ride is a key means of achieving this. Chelmsford has two existing Park and Ride sites at Chelmer Valley to the north and Sandon to the east, which presently have 1,000 and 1,410 car spaces respectively. Buses run approximately every 10-15 minutes during the day into Chelmsford city centre. Patronage was steadily increasing before the COVID-19 pandemic. The pandemic has changed people's travelling behaviour. However, the Park and Rides are still a key component of the long term strategy and there is further scope for their expansion to increase usage. As such, land was safeguarded at both Park and Ride sites for their expansion in the adopted Local Plan along with an additional site to serve west Chelmsford being identified for consideration.

2.14. In March 2022, ECC approved the Army and Navy Sustainable Transport Package which included the further 350 space expansion of Sandon Park and Ride to total 1,760 spaces and 500 spaces at Chelmer Valley park and ride to total 1,500 spaces. In October 2022, Essex County Council submitted an Outline Business Case to the Department for Transport (DfT) for the proposed package – the next stage of the bidding process for Major Road Network (MRN) funding. The £81million project is also progressing with part funding by the county council and Chelmsford City Council. In October 2023, the Department for Transport approved the Outline Business Case and agreed to contribute £68.75million of MRN funding towards the £81m project, subject to certain conditions being met. The scheme is also being part funded by ECC and the City Council. In January 2024, three separate planning applications – one for the Army and Navy junction and one each for the Park and Ride expansions – were submitted for the project. The applications are likely to be determined in Spring 2024. A final business case will be submitted to the Department for Transport in Autumn 2024, with construction scheduled to start in Spring 2025 and be completed in early 2028. The sequencing of the construction of the different elements of the package is yet to be agreed.

2.15. ECC’s Chelmsford's Future Network Strategy highlights that the network is under significant strain with only 4% highway capacity in the city centre available during peak periods. This leads to queuing, unreliable journey times, poor air quality and increased traffic on unsuitable residential streets. It also impacts bus users, and the quality of journeys made by walking and cycling as well as health issues such as obesity levels which may be worsened by children being unable to walk or cycle to school because of safety concerns. The Chelmsford's Future Network study 2017 showed that 80% of those working in Chelmsford but living outside the City drove to work in cars, but still 50% who live in the City still drove to work.



- 2.16. A different approach is required to ensure that future travel demands are managed in the most sustainable way. This includes managing public car parking which allows people to access local services and support local businesses without causing significant traffic congestion or environmental impacts.

Rail

- 2.17. Chelmsford has regular main line rail services that connect the city with London Liverpool Street (with up to ten trains per hour), Ipswich and Norwich. The network also carries freight traffic to and from Freeport East (Felixstowe, Harwich and Ipswich), which handle container ships and freight transport to the rest of the UK. Although services are more limited, the Southminster branch line provides train services to London every 40 minutes with some all-through trains at peak hours passing through the town of South Woodham Ferrers and the small settlement of Battlesbridge in the Chelmsford administrative area. New trains provide significant additional passenger seating capacity of some 66% in the off peak and at peak times a new 10 car train has about 12% additional seating capacity than the old 12 car train. However, given the imposed speed limits and number of crossings on the line the one train every 40 minutes is the best timetable that can presently be offered. Any improvement to provide 2 trains per hour would require significant investment in the track and platforms. Other issues include connectivity issues at Wickford and onwards via Bow Junction to London Liverpool Street.
- 2.18. Chelmsford's rail network is heavily used, particularly given the proximity to and connectivity with London. Chelmsford rail station is one of the busiest in the East of England, accommodating up to 8 million passenger trips per year. The new rail station in North East Chelmsford will improve rail infrastructure from the mid-2020s onwards and help to relieve pressure on the existing congested station and reduce the need for people commuting into London to travel into Chelmsford by car. By locating new development within acceptable public transport travel distances (cycle, walk, bus) of the existing and proposed rail station in North East Chelmsford, there will be greater potential for residents to make their journeys by rail.
- 2.19. The new railway station in North East Chelmsford will provide access to the Great Eastern Main Line (GEML) with a central loop line and new tracks to enable stopping services while allowing fast trains to pass through unimpeded to make the whole line more reliable. It will relieve crowding at Chelmsford railway station and act as a transport interchange to encourage sustainable travel by bus, cycle, electric vehicles and on foot to strategic and local housing development, including the new Chelmsford Garden Community. In June 2022, plans to deliver the station were granted detailed planning by the City Council, paving the way to finalise the technical design work before starting on site in March 2023 and scheduled to be open by the end of 2025. Separate applications will be submitted regarding sustainable access to the station by a bus link and the pedestrian and cycle access.

Bus

- 2.20. Bus services are concentrated within the centre of Chelmsford, linking the city centre, railway station and the surrounding areas. The majority of services run through Chelmsford bus station, and therefore the city centre is well served by existing bus services. Chelmsford Area Bus Based Rapid Transit (ChART) is a direct, frequent bus service that connects development in North East Chelmsford with the City Centre. When the new railway station in North East Chelmsford opens by the end of 2025 phases of ChART will create a link to serve the station from Chelmsford Garden Community and onwards into the city centre. It is critical for enabling local, frequent travel without reliance on the private car.
- 2.21. Further out from the centre, the number of buses serving the local area decreases although South Woodham Ferrers and larger villages have a good service particularly during the peak period to Chelmsford and other larger settlements such as Braintree and Basildon, but are more limited in the evenings and at weekends. A new bus service 16, operated by First Essex, has been introduced, connecting the large new residential-led development at St Luke's, Runwell with Wickford rail station (approximately two buses per hour) and is initially funded through the S106 agreement. Travel by bus offers a main alternative to journeys made by private car. By locating new development adjacent to urban areas and their high frequency reliable bus services there will be greater potential for residents to make their journeys by public transport.

Cycling and Walking

- 2.22. Chelmsford has an extensive 61 mile well used cycle network which includes National Cycle Route 1 which provides east / west connectivity through the city centre and provides access to Writtle and Chelmer Village alongside the river and in parks, with on-road routes provided on quieter roads. Significant investment has been made by ECC in the Chelmsford walking and cycling network through the £15M Chelmsford City Growth Package. This included 11 schemes, of which 7 related to cycling, and all but one has been completed, and involved upgrades to existing cycle links, signage, surfacing and lighting improvements. The Chelmsford Cycling Action Plan, March 2017 sets out a review of the existing network provision, identifies barriers and sets out opportunities to develop and promote cycling in Chelmsford through improved infrastructure. There are opportunities to further enhance cycle routes along Chelmsford's Green Wedges by creating multifunctional greenways, whose design will depend on their location and function (recreational, commuting), and need to balance sustainable and active travel movements and biodiversity enhancement. Most should be designed with a hard, permeable surface which is accessible in all weathers and for people with mobility impairments, those in wheelchairs, use for leisure and fitness pursuits such as skateboarding and rollerblading, for commuting journeys to work and to school and to provide new leisure opportunities from development into the countryside. Where possible these routes should be funded by developers where they directly relate to development. Any design of new routes should be consistent with LTN 1/20 – Cycling infrastructure design (2020). Any new cycle route will need to consider the following key principles in that they are:

- Coherent - allow people to reach day to day destinations easily in a way that is easy to navigate, avoiding arrangements that are unintuitive or taking cyclists away from the obvious route;
- Direct – to be as direct, if not more direct, than the routes available to motor vehicles;
- Safe - as well as being safe, emphasis is given to the need for infrastructure to feel safe;
- Comfortable - quality maintained surfaces, proper widths and favourable gradients are crucial; and
- Attractive - should contribute positively to the urban realm, and naturally be attractive to use.

2.23. Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the Government's Cycling and Walking Investment Strategy provide a strategic approach to identifying cycling and walking improvements required at the local level. Essex County Council previously identified 9 strategic corridors within the Chelmsford LCWIP within the urban area and these have been reviewed as part of the Chelmsford LCWIP refresh.

2.24. A consultation with a wide range of stakeholders was undertaken between August – October 2023 to seek views on the shape and extent of proposed routes, along with identifying routes not shown, any secondary routes that should be primary routes and any views on the suggested networks. The consultation responses have been reviewed and the following potential routes are being assessed using a Route Prioritisation Tool, which seeks to balance local need and value for money. These routes have not yet been subject to any route feasibility or design:

- Route 1 – Moulsham Street to Great Baddow
- Route 1A - Chelmsford City Centre – Moulsham
- Route 2 - Chelmsford Rail Station – Chelmer Village
- Route 3 – Chelmsford City Centre – Beaulieu Park
- Route 3A- Chelmsford City Centre via Bunny Walk – Chelmer Valley Riverside LNR
- Route 3B – Beaulieu Park School – New Future Housing (Garden Community)
- Route 4 - Central Park – Westlands
- Route 4A – Admirals Park LNR – Writtle Road
- Route 5 – Chelmsford Rail Station – Broomfield
- Route 5A – Broomfield Hospital – Anglia Ruskin University
- Route 5B – Broomfield Road – Melbourne Park – New Future Housing (West Chelmsford)
- Route 6 – Central Park – Writtle
- Route 6A – Anglia Ruskin Writtle Campus
- Route 7 – City Centre Circular Route
- Route 7A – Frank Whitmore Green – Moulsham Street
- Route 8 – Chelmsford City Centre via A1060 - New Future Housing (West Chelmsford)
- Route 9 – Moulsham - Galleywood
- Route 10 - Odeon Roundabout – New Future Housing (Maldon Road)

- Route 11 – Springfield Road – Lockside Marina Developments – Chelmer Village Retail Park
- Route 12 – Chelmer Valley Riverside LNR - Boreham

- 2.25. Following route prioritisation the LCWIP will be published and its content used to inform future funding bids for their design and subsequent delivery.
- 2.26. A countywide LCWIP is being prepared to develop routes connecting further out to more rural areas and connecting cities and towns across the whole of Essex.
- 2.27. A further consultation was undertaken between October – November 2023 to inform the design of a walking and cycling route between New Street and New Nabbotts Way where it meets the A130 White Hart Lane roundabout at Beaulieu Park passing through Anglia Ruskin University and the Chelmer Valley Nature Reserve. Funding for construction of any route is still to be secured.
- 2.28. ECC secured £7m from the Government’s Active Travel Fund for schemes in Braintree, Brentwood, Chelmsford, Colchester and Wickford to help make it easier and safer for residents to walk or cycle, reduce traffic congestion, cut air pollution and improve residents’ physical and mental wellbeing. As part of this funding improvements are already being implemented to selected routes in the Chelmsford Area. The following projects have been completed:
- Trinity Road Healthy School Street - existing bollards have been replaced; installed temporary street art to alert drivers to slow down and installed "20s Plenty" and "Children Crossing" signage.
 - Springfield Park Road / Springfield Park Lane junction alterations - installed on-carriageway cycle markings; refreshed all street lining and the existing roundels and improved the Springfield Park Road and Springfield Park Lane junction and raised table.
 - Navigation Road - refreshed all street lining and existing roundels and replaced signage on the Navigation Road and Hill Road junction.
 - Chelmer Road and Sandford Road - upgraded existing crossing to a Toucan crossing.
 - Waterloo Lane – completed the raised table; on-carriageway cycle markings and the segregated cycleway along the Riverside cycle path. Cycle markings will be actioned in Spring 2024.
- 2.29. The successful cycle parking initiative, CyclePoint (2018), established around 960 secure spaces at Chelmsford Station and has demonstrated that there is potential to influence travel behaviour to/from rail stations. The new Beaulieu Park Railway Station will provide 500 spaces for cycle parking and storage. Other measures are also encouraging people to use the improved walking and cycling network including promotional incentives and residential, business and personalised travel planning. For example, ECC introduced the ‘Stop, Swap, Go’ campaign in July 2021 to make it easier and more motivating for Essex residents to switch from car to more sustainable travel choices in the future through sharing their own sustainable travel stories and tips on social media, find further information on local cycle and walking routes, and tapping in to initiatives and resources. The [Go Jauntly App](#) provides

details of walking routes around Chelmsford, provides simple photo guides for walks and enables walking challenges to be undertaken.

Micromobility

- 2.30. An e-scooter hire trial has been in operation in Chelmsford with Essex County Council and e-scooter company, TIER. The trial was launched in Chelmsford in February 2021, and there have been close to 1,000,000 rides so far (April 2024). This represents a clear mode shift, with riders regularly opting to use e-scooters rather than private cars to make some key journeys.
- 2.31. The trials will help to inform Government policy on whether e-scooters should be legalised for wider use and the safety criteria. No decision has yet been made, but the current trial is due to end in May 2025 but Essex County Council have an option to extend it by 12 months to May 2026.

3. Preferred Options

Policy Context

National Policy

- 3.1. All policies in the Local Plan must be positively prepared, justified, effective and consistent with national policy. The National Planning Policy Framework (NPPF) sets out the overarching planning policy framework, supported by the National Planning Practice Guidance (PPG).
- 3.2. The adopted Local Plan was examined under the 2012 National Planning Policy Framework (NPPF). There have subsequently been updates to the NPPF and the Preferred Options Local Plan has been considered against the requirements of the more recent national planning policy and guidance including the 2023 NPPF. Where possible, changes to the NPPF affecting plan-making have been reflected in the Preferred Options Local Plan.
- 3.3. Further detail on these key changes for consideration are set out in the table below, included under the section 'Local Plan Approach'.

National Policy Guidance

- 3.4. Paragraphs 001 Reference ID: 54-001-20141010 to 012 Reference ID: 54-012-20150313 of the PPG set out the transport evidence base required to support plan making and decision taking in full. The following is a summary of the points for consideration.
- 3.5. It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.

- 3.6. The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage, where reasonable to do so; and highlight the infrastructure requirements for inclusion in infrastructure spending plans linked to the Community Infrastructure Levy, section 106 provisions and other funding sources.
- 3.7. Local planning authorities should also refer to the [Department for Transport's Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development](#).
- 3.8. A robust evidence base will enable an assessment of the transport impacts of both existing and proposed development which can help inform sustainable approaches to transport at a plan-making level. This will include consideration of viability and deliverability.
- 3.9. The key issues, which should be considered in developing a transport evidence base, include the need to:
- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms
 - assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
 - highlight and promote opportunities to reduce the need for travel where appropriate
 - identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate
 - consider the cumulative impacts of existing and proposed development on transport networks
 - assess the quality and capacity of transport infrastructure and its ability to meet forecast demands
 - identify the short, medium and long-term transport proposals across all modes.
- 3.10. The outcome could include assessing where alternative allocations or mitigation measures would improve the sustainability, viability and deliverability of proposed land allocations (including individual sites) provided these are compliant with national policy as a whole.
- 3.11. An assessment of the transport implications should be undertaken at a number of stages in the preparation of a Local Plan:
- as part of the initial evidence base in terms of issues and opportunities
 - as part of the options testing
 - as part of the preparation of the final submission.
- 3.12. The last of these stages should highlight the scale of and priorities for investment requirements and support infrastructure spending plans. Like a sustainability appraisal, it will be an iterative process and become more refined and detailed as the process concludes.
- 3.13. The following list indicates the key aspects that should be addressed in the transport assessment. This list is not exhaustive, and there may be additional issues that are important to consider locally:

- all current transport issues as they affect all modes and freight covering, for example, accessibility, congestion, mobility, safety, pollution, affordability, carbon reduction across the whole Plan area and, within relevant areas of the Plan, including existing settlements and proposed land allocations
- the potential options to address the issues identified and any gaps in the networks in the short, medium and longer term covering, for example, accessibility, congestion, mobility, safety, pollution, carbon reduction
- the locations of proposed land allocations and areas/corridors of development and potential options for the provision of sustainable transport and transport networks to serve them
- solutions to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
- the scope and options for maximising travel planning and behavioural change
- accessibility of transport nodes such as rail/bus stations to facilitate integrated solutions.

3.14. The transport assessment should be produced at a Local Plan level in partnership with all relevant transport and planning authorities, transport providers and key stakeholders. It may be appropriate for the transport assessment to cover an area wider than the Local Plan at least initially given the size of some travel to work areas (this would be similar to the Strategic Housing Market Assessment). This process should help to identify any potential measures that may be required to mitigate negative impacts.

3.15. Local planning authorities will need to consider the demographics of the area and also the desired or perceived changes likely to take place in the life of the Plan as they might affect the transport network. A number of other considerations that could be included, but are not limited to, are opportunities to change to other forms of transport, parking facilities, including park and ride, and committed network improvements.

3.16. Paragraph 007 Reference ID: 54-007-20141010 sets out the detail of how to carry out a transport assessment of the Local Plan and explains that this is likely to be scenario based and in terms of projections look at a range of potential outcomes given a number of assumptions, for example, a movement in the proportion of people using different forms of transport consistent with best practice. It goes on to explain the data that should be included in such an assessment, and how to quantify the impact of land allocations in the Local Plan on the transport system in paragraph 008 Reference ID: 54-008-20141010.

3.17. The transport assessment should also identify any significant highway safety issues and provide an analysis of the recent accident history of the affected/impacted areas. The extent of the safety issue considerations and accident analysis will depend on the scale and type of developments in the context of the character of the affected Strategic Road Network. The need to minimise conflicts between vehicles and other road user groups should be adequately addressed.

3.18. Any proposed land allocation impact should be considered in the context of two alternative scenarios – ‘with development’ and ‘without development’. This will enable a comparative analysis of the transport effects of the proposed allocation.

3.19. The assessment should cover the period of the Local Plan.

Other relevant legislation

3.20. The national policy backdrop has changed significantly since the adoption of the Local Plan with focus on social equity, health and decarbonisation gaining prominence with a need to grow the economy around sustainable and greener development principles leading a policy transformation and the production of new standards. These are reflected in key policy documents as follows:

- The 2018 [Road to Zero](#), the Government's carbon reduction strategy for road transport and the publication in July 2021 of the [Transport Decarbonisation Plan](#)
- The [Future of Mobility: Urban Strategy 2019](#) and the complementary [Rural Strategy](#) (currently in development)
- Publication of [Gear Change](#), the Government's vision for walking and cycling, and new guidance on the design of [cycle infrastructure](#) (e.g., Local Transport Note (LTN) 1/20).
- New approaches to rail and bus service delivery contained within [Bus Back Better](#) and the [Williams-Shapps Plan for Rail](#) published in 2021
- [Draft revised National Networks National Policy Statement](#) (NPS) (March 2023). This provides an updated framework with measures to protect the environment in new major road, rail and rail freight schemes
- New guidance for Local Transport Plans (LTPs) and accompanying Quantified Carbon Reduction Guidance (awaited)
- The publication of a revised Manual for Streets (awaited).

3.21. In 2021 the Government published [Decarbonising Transport Plan: A Better Greener Britain](#) which recognised that transport is not just how you get around, it shapes towns, cities, countryside, living standards, health, and quality of life. It commits to embedding transport decarbonisation principles in spatial planning and making public transport, cycling and walking the natural first choice for all.

Local Policy

Current policy

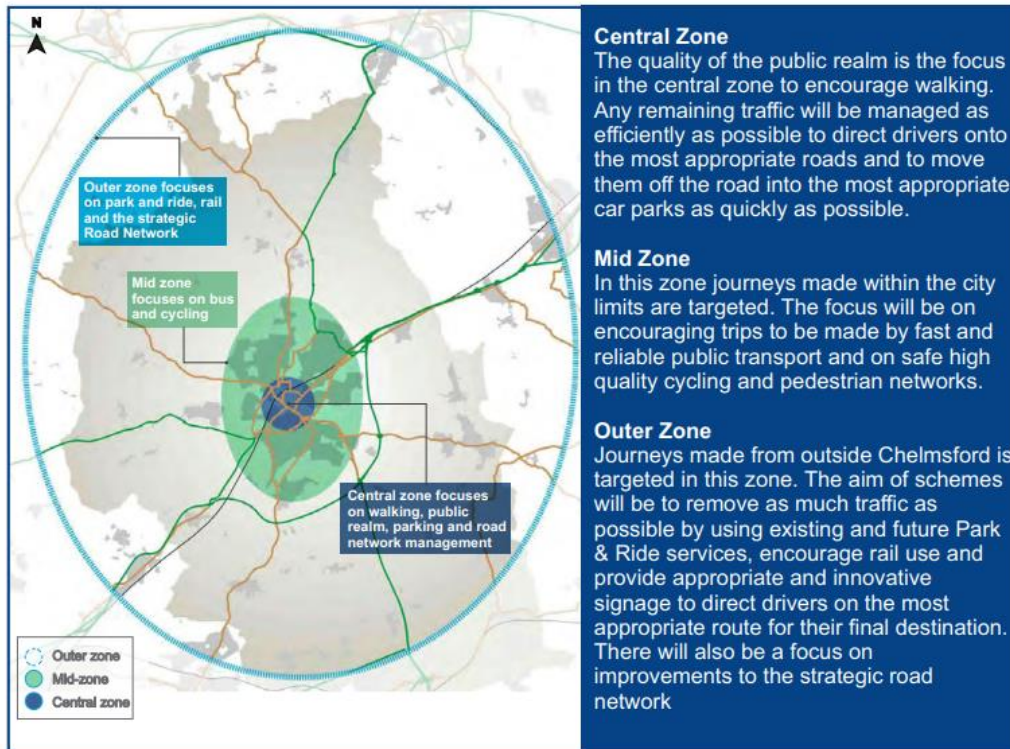
3.22. Chelmsford City Council (CCC) worked in partnership with Essex County Council (ECC), and National Highways (NH) as Highways Authorities to ensure projected development growth in the adopted Chelmsford Local Plan was tested robustly and an appropriate strategy for mitigation formulated.

3.23. Good transport provision was considered essential to Chelmsford's continuing prosperity and improvements to the network are needed to be implemented in ways that are both sustainable and minimise the adverse environmental and social impacts.

3.24. Given high levels of commuting, the relative prosperity of Chelmsford and ongoing demand for services and facilities, transport infrastructure was already considered under pressure in the adopted Local Plan. A significant change in how people make their journeys towards more sustainable travel choices was considered necessary.

3.25. Therefore, the adopted Local Plan promotes improvements to transport infrastructure to ensure that new development is accessible by sustainable forms of transport and which allows Chelmsford to be well-connected. It also ensures that new development will not unduly exacerbate congestion and will provide appropriate mitigation measures to ameliorate effects on the local road network and maximises and improves the way people move around by sustainable modes of transport.

3.26. The adopted Local Plan sets out the following Zonal Approach to Chelmsford’s Transport System:



3.27. This is set out in the adopted Local Plan in the follow ways:

- **Strategic Priorities 5 and 6** - these seek to deliver new and improved strategic and local infrastructure including ensuring the transport network accommodate future growth
- **The Local Plan Vision** – this seeks to maximise opportunities for sustainable transport by providing increased opportunities for walking, cycling and public transport
- **The Spatial Strategy (Strategic Policy S7)** - this focuses new development at well-connected locations (in line with Strategic Policy S1) for example along strategic transport corridors, close to existing local services, in areas with a good level of existing or proposed transport infrastructure including sustainable transport, and where daily needs can be met locally where possible. This helps reduce the need to travel, and maximise opportunities for sustainable travel and modal shift through planned new development
- **Strategic Policy S9** - this recognises that new development can place additional demand upon existing infrastructure and services, and requires new development to be supported by sustainable means of transport to serve its need including walking, cycling

and public transport modes. It also sets out how new highway infrastructure should help reduce congestion, link new development and provide connections in the strategic road network. It further lists a number of transport improvement schemes that are proposed across Chelmsford and which will help to relieve congestion and provide connections in the strategic road network, including:

- New Rail Station
 - Chelmsford North East Bypass
 - An additional new Radial Distributor Road 2 in North East Chelmsford
 - New access road to Broomfield Hospital
 - Safeguard land for the expansion of Chelmer Valley and Sandon Park and Ride sites
 - Additional Park and Ride facilities will be provided in West Chelmsford and North East Chelmsford within the broad locations shown on the Policies Map
 - Improvements to the Army and Navy Junction
 - Improvements to A130 (Essex Regiment Way) and A131
 - Junction improvements on the A12 and other main roads to reduce congestion
 - Capacity improvements to the A132 between the Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements to be brought forward as early as possible in tandem with the delivery of development to mitigate its impact
 - Multi-user crossings across the B1012 in South Woodham Ferrers which may include a bridge or underpass
 - New and improved cycling and walking routes both within development sites and to provide connections to centres and hubs of activity such as transport nodes, City, Town and Neighbourhood Centres, strategic areas of recreation and employment areas
 - Bus Priority schemes and rapid transit measures
 - Improvements to inter-urban public transport
 - Transport links between new neighbourhoods and Chelmsford City Centre and employment areas
 - Improved road infrastructure aimed at reducing congestion and providing more reliable journey times.
- **Strategic Policy S10** – this provides the means to secure necessary infrastructure and mitigate the impact of development. Infrastructure will be secured through the use of planning conditions and/or planning obligations and/or financial contributions through the Community Infrastructure Levy or its successor for both on and off-site provision, including the provision of land.
 - **Site allocation policies** - require developments to provide appropriate mitigation, compensation and enhancements to the local and strategic road network as required by the Local Highway Authority and appropriate measures to promote and enhance sustainable modes of transport. In doing so, planned new development will provide physical local highway mitigation measures as well as opportunities for sustainable transport to enable the modal shift of trips away from car borne to sustainable travel modes. All major development will also be encouraged to follow the modal hierarchy with walking, cycling and public transport modes prioritised over private cars (in accordance with Strategic Policy S1)

- **Development Management Policies DM6, DM7 and DM8** set out the circumstances whereby new local transport infrastructure can be provided outside of built-up or allocated areas. **Policy DM20** seeks to ensure that new community facilities are accessible by sustainable modes of transport such as by public transport, cycling, or on foot. Public transport links should be in close proximity to the site and provide an adequate service. Measures to reduce car dependency are also supported. **Policy DM24** requires all new major development to create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above the use of the private car. **Policy DM27** provides standards for parking in all forms of development.
- 3.28. Essentially, Strategic Policy S11 together with the individual site allocation policies broadly identify what and where new transport infrastructure is required. This was informed by a robust evidence base and through engagement and support from key stakeholders including Essex County Council (ECC), National Highways (NH) and the promoters of the main developments.
- 3.29. Site specific highway requirements are then also covered in more detail through the masterplan process required for Strategic Site Allocations in the Local Plan and supported by the Development Management policies set out in the adopted Local Plan. Transport Assessments will also be undertaken to support individual planning applications.
- 3.30. The adopted [Making Places Supplementary Planning Document](#) (SPD) seeks to promote and secure high-quality sustainable new development. It is aimed at all forms of development, from large strategic developments, public spaces and places, to small extensions to individual homes. It sets out detailed guidance for the implementation of the policy requirements set out in the new Local Plan and provides practical advice to help with schemes from single house extensions to strategic sites and their masterplans. It also provides good practice examples on how development can go beyond planning policy requirements to create the most sustainable and environmentally friendly development possible.
- 3.31. The SPD offers further detailed guidance on principles to consider development offers sustainable travel alternatives to the private car as well as include detailed guidance on parking standards, electric charging points and car clubs.
- 3.32. The [Council's Planning Obligations SPD](#) (January 2021) sets out the Council's approach to seeking planning obligations needed to make sure development is acceptable in planning terms. Of relevance to this topic is the need for possible Section 106 Planning contributions towards highways, access and transport. It sets out that all development proposals will be assessed on their own merits in relation to the impact they have upon the highway network. There are no types of development which are exempt from necessary highway infrastructure obligations.
- 3.33. Collectively these seek to ensure development does not have an unacceptable impact on highway safety, or the residual cumulative impacts on the road network are not severe. In addition to the Local Plan, there are a number of other local and regional strategies or guidance that inform this topic area.

- 3.34. [Our Chelmsford: Our Plan](#) sets out the Council's priorities which will improve the lives of residents. There are four themes; a fairer and inclusive Chelmsford; a safer and greener place; healthy, active and enjoyable lives and connected Chelmsford.
- 3.35. The City Council [declared a Climate and Ecological Emergency](#) on 16 July 2019. Essentially this Declaration represents a commitment to take appropriate action to make the Council's activities net-zero carbon by 2030.
- 3.36. In January 2020 a [Climate and Ecological Emergency Action Plan](#) with an initial focus on fifteen key areas of activity was agreed by the Council. It is aimed at:
- reducing carbon emissions
 - lowering energy consumption
 - reducing waste and pollution
 - improving air quality
 - greening Chelmsford
 - increasing biodiversity
 - encouraging more sustainable travel choices.
- 3.37. ECC transport policy is comprised of the following:
- The Local Transport Plan (2011) is the Essex Transport Strategy (LTP3)
 - Given policy evolution since the adoption of LTP3, due consideration should be given to more recent documents such as Net Zero: Making Essex Carbon Neutral (ECAC) and the Transport East: Transport Strategy. These place a greater emphasis upon the provision and use of sustainable transport and the decarbonisation of the transport network.
- 3.38. ECC is preparing a new Local Transport Plan 4 (LTP4) to cover the period to 2050. LTP4 will reflect and formally incorporate the revised policy framework contained within Net Zero: Making Essex Carbon Neutral (ECAC) and the Transport East: Transport Strategy. These place a greater emphasis upon the provision and use of sustainable transport and the decarbonisation of the transport network. LTP4 will be based on three key themes of; Supporting People: Health, Wellbeing & Independence; Creating Sustainable Places and Communities; and Connecting People, Places and Businesses. LTP4 will follow the ECAC recommendations to implement an Avoid, Shift and Improve approach:
- Avoid – avoid or reduce unnecessary private car journeys trips, particularly over short distances;
 - Shift - deliver a behaviour change to encourage residents to shift to more sustainable modes, such as walking, cycling, and public transport or train; and
 - Improve - where road journeys are essential improve vehicle efficiency by reducing the reliance on fossil fuelled vehicles and encouraging electric vehicles.
- 3.39. LTP4 will comprise supporting Implementation Plans (area based) covering both the longer-term pipeline of projects and a shorter-term transport programme. It will also comprise a number of activity-based documents including the Bus Service Improvement Plan (BSIP); Sustainable Travel Planning; EV Charging Strategy; Local Cycling and Walking Infrastructure Plans (LCWIPs); Transport Technology Strategy; Network Management Plans and Maintenance Strategies.

- 3.40. Transport East adopted its Transport Strategy to 2050 in July 2022. The Strategy sets a single regional voice for transport investment and supports the acceleration of regional transport priorities.
- 3.41. The Strategy identifies four key priorities for the East that strongly reflect the views captured from across the region including Essex:
- Decarbonising to Net Zero
 - Connecting growing places
 - Energise coastal and rural communities
 - Unlocking international gateways.
- 3.42. The regional Transport Strategy is accompanied by an Investment and Delivery Plan which includes six corridor programmes, of which the London – Chelmsford – Colchester – Ipswich – Norwich and Suffolk Coast connecting the fastest growing cities and towns and gateway ports is relevant to Chelmsford. Strategic schemes relevant to Chelmsford include:
- Great Eastern Mainline strategic package (improvements in London, Essex, Suffolk, Norfolk);
 - A12 strategic package South (Colchester to M25); and
 - Chelmsford strategic package NE bypass, Army and Navy, Beaulieu Park).
- 3.43. ECC, as the Local Transportation and Highways Authority, formally endorsed the Transport East strategy in July 2022. The Strategy, its priorities for transport and delivery goals will be reflected in the future LTP4.
- 3.44. ECC has published its Bus Service Improvement Plan (2021 - 2026) (BSIP) outlining that ECC is to follow the Enhanced Partnership (EP) approach between the Local Transport Authority (LTA) and Bus Operators to provide a new, high quality and reliable bus network. The periodic reviews of the ECC Bus Service Improvement Plan 2021 can be viewed [here](#). A Bus Network review has been undertaken for Chelmsford City and can be viewed [here](#). It identifies the key characteristics of the existing bus network services and its supporting infrastructure; identify the issues creating barriers to passenger growth, connectivity or accessibility; identify measures to over-come the barriers and promote bus passenger. The Review documents are 'live' documents listing schemes to be considered for progression but are not a prescriptive list of actions/projects that will be progressed and already have secured funding.
- 3.45. ECC is undertaking a number of projects and reviews with regards highway and transportation policy for existing and for new communities in the county, which will all feed into the revised Local Transport Plan 4. Workstreams include replacing the existing Functional Route Hierarchy with a Place and Movement Approach; two Parking Standards guidance for developments and large scale and Garden Communities, a new development model for Essex investigating the concept of walkable neighbourhoods; a Travel Plan toolkit; [Electric Vehicle Charge Point Strategy](#) and Mobility Hubs. A Local Cycling and Walking Implementation Plan is being developed for Chelmsford City and a countywide LCWIP. In terms of operation of future transport services, ECC is also creating an operational model for future Rapid Transit Schemes which could be delivered through new

development. This work is being done in partnership with local planning authorities. As these workstreams progress they will need to be considered as evidence base to support the Local Plan Review.

- 3.46. [Safer, Greener, Healthier](#) is an Essex Highways' on-going campaign aiming to make it as easy as possible for people to travel more sustainably, especially for shorter journeys by walking, cycling, e-scooting or taking the bus or train for longer journeys. The vision is to deliver and enable safer, greener and healthier travel for current and future users of the transport network in Essex.
- 3.47. The Essex Walking Strategy (2021) has been prepared to increase walking across the County, particularly for shorter journeys and as part of longer ones and connecting to other forms of sustainable travel. Local Plans should include policies that seek to provide for high-quality walking and cycling networks designed to provide safe and accessible routes to key facilities and services. Planning policies should also identify places where new walking routes can be delivered by new developments, and ensure the protection of alignments for future planned cycling and walking routes.

Duty to Co-operate

- 3.48. The Council is committed to co-operating with other bodies on strategic planning matters. The Duty to Co-operate Strategy was reviewed and adopted in January 2022.
- 3.49. The Council will make every effort to seek co-operation on cross-boundary and strategic planning matters in a focused, positive and structured way. We will continue to discuss the Review of the Adopted Local Plan with neighbouring planning authorities and the prescribed bodies at stages which align with and inform the stages of the Review of the Adopted Local Plan. These discussions will help to determine the quantum and distribution of Chelmsford's future growth, which will be supported by updated evidence.
- 3.50. At the same time, we continue to work constructively with nearby planning authorities on their own local plan preparation. Early engagement and demonstrating co-operation both with neighbours and the prescribed bodies through Statements of Common Ground are key to meeting the legal duty to co-operate.
- 3.51. In some cases, discussion on strategic matters continue through existing joint working arrangements. We will also arrange further joint Officer and Member meetings, technical stakeholder meetings, focused workshops, and prepare Statements of Common Ground.
- 3.52. The strategic matters for the Review of the Adopted Local Plan are identified as follows:
- Delivering homes for all including Gypsy and Traveller accommodation
 - Jobs and economy including green employment and regeneration
 - Retail, leisure, and cultural development
 - Sustainable transport, highways and active travel
 - Climate change action and mitigation including flood risk and zero carbon

- Natural and historic environment including increased biodiversity and green/blue/wild spaces and connectivity of ecological networks
- Community infrastructure including education, health and community facilities
- Utility infrastructure including communications, waste, water and energy
- London Stansted Airport future airspace redesign.

3.53. In preparing the Preferred Options Consultation Document we have worked with Essex County Council, as the local Highway and Transportation Authority, to prepare appropriate evidence to support the document by way of the Sustainable Accessibility Mapping and Appraisal, followed by a transport assessment of five hybrid Spatial Approaches, before assessing the transport impact of the Preferred Options Spatial Approach itself. Full details of these documents is set out below in the 'Local Plan Approach' section. These documents have also been informed by discussions with National Highways. Joint working also led to the preparation of a summary note outlining the traffic modelling approach to be undertaken throughout the Review of the Local Plan, included in Appendix 1.

3.54. Discussions with National Highways and Essex County Council, as the local Highway and Transportation Authority, continue and will inform further modelling work to be undertaken at the Pre-Submission (Regulation 19) stage of the Local Plan.

3.55. As part of on-going Duty to Co-operate relevant to this topic, CCC has attended relevant meetings and provides updates on our plan review such as through the Essex Planning Officers Association (EPOA). We've approached other LPAs, Essex County Council (as the Local Highways and Transportation Authority) and National Highways. Details of ongoing activity are contained in the Duty to Co-operate Statement, published as an interim report to accompany the Preferred Options consultation (available via www.chelmsford.gov.uk/lp-review).

3.56. As part of the Preferred Options consultation we will be having meetings with neighbouring Local Planning Authorities as well as other relevant Duty to Co-operate bodies. Any strategic cross boundary issues relating to transport raised through these meetings and the consultation will be further considered and any further engagement undertaken if required.

Integrated Impact Assessment

3.57. The Council is carrying out an ongoing Integrated Impact Assessment (IIA) as the Review of the Local Plan develops.

3.58. The IIA will assess the following aspects of sustainable development:

- Sustainability Appraisal (SA)
- Strategic Environmental Assessment (SEA)
- Habitats Regulations Assessment (HRA)
- Health Impact Assessment (HIA)
- Equality Impact Assessment (EqIA).

3.59. The SA, SEA and HRA are a requirement of national policy. The HIA and EqIA are voluntary, but the Council believes they will help to provide a complete picture of the sustainability of the Review of the Adopted Local Plan.

3.60. The IIA identifies the key sustainability issues for the review of the adopted Local Plan, which feed into a framework against which proposals are assessed. It covers the potential environmental, social, economic and health performance of the proposed changes to the adopted Local Plan and any reasonable alternatives. It will be used at each stage of reviewing the Plan, and be subject to separate consultation, as follows:

- Scoping Report
- Issues and Options
- Preferred Options – Current Stage
- Submission
- Adoption.

3.61. The key sustainability issues and Appraisal Framework Objectives relating to this Topic Paper are:

Key sustainability issue	Appraisal Framework Objective
Population and community	4. Sustainable Living and Revitalisation: To promote urban renaissance and support the vitality of rural centres, tackle deprivation and promote sustainable living.
Health and wellbeing	5. Health and Wellbeing: To improve the health and wellbeing of those living and working in the Chelmsford City area.
Transport and accessibility	6. Transport: To reduce the need to travel, promote more sustainable modes of transport and align investment in infrastructure with growth.
Air quality	10. Air: To improve air quality.
Climate change	11. Climate Change: To minimise greenhouse gas emissions and adapt to the effects of climate change.

3.62. In relation to IIA Objective 4 (Sustainable Living and Revitalisation) the Preferred Options IIA concludes the proposed Spatial Strategy, allied with the provision of community facilities, services and employment land on many of the proposed site allocations (including developments using garden community principles), will help to ensure that new development is accessible to key services, facilities and employment opportunities, stimulates urban regeneration, tackles deprivation and promotes community inclusion. Overall, the Preferred Options Consultation Document has been assessed as having a cumulative significant positive effect on this objective.

3.63. In relation to IIA Objective 5 (Health and Wellbeing) the Preferred Options IIA notes that focusing the majority of new residential and employment development in and adjacent to the

Chelmsford Urban Area and to the North of South Woodham Ferrers, promoting mixed use schemes and the adoption of Garden Community principles at strategic sites are together likely to encourage walking/cycling as services and employment opportunities would be physically accessible. Allied with proposed improvements to highway circulation, public transport and walking and cycling as well as the protection of existing green infrastructure including open space and recreational facilities and new provision, this is expected to generate a positive effect in relation to the promotion of healthy lifestyles.

- 3.64. In light of this, overall, the Preferred Options Consultation Document has been assessed as having a cumulative significant positive effect on IIA Objective 5 (Health and Wellbeing).
- 3.65. The Preferred Options IIA notes that growth over the plan period will result in increased vehicle movements which could have adverse effects on the highways network, notably increased pressure on the local and strategic road network and public transport infrastructure with congestion on key trunk roads including the A12, A130 and A414 east and west of Chelmsford (a number of junctions on the strategic highway network have capacity constraints and pinch points). However, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network are all likely to reduce the need to travel by car and encourage walking/cycling (as services and employment opportunities would be physically accessible). New development should also be well connected to the existing public transport network (including existing planned infrastructure such as the new rail station and transport hub to the north east of Chelmsford as part of the Beaulieu development).
- 3.66. The Preferred Options Consultation Document identifies a number of transport infrastructure improvements including a proposed new Chelmsford North-East Bypass, highways improvements (including at the Army and Navy Junction and to the A132) and two park and ride schemes (one located to the south west of Chelmsford around the A414 and the other located to the north east of Chelmsford around the A12 and A138). These measures, together with the development requirements for proposed site allocations contained in Section 7, are expected to help mitigate adverse impacts associated with new development and enhance the City Area's transport network. Overall, the Preferred Options Consultation Document has been assessed as having a cumulative mixed significant positive and minor negative effect on IIA Objective 6 (Transport).
- 3.67. The Preferred Options IIA notes that growth over the plan period will result in increased emissions to air during both the construction of new development and once development is complete. However, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of strategic mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network (including through the Green Wedge) are all likely to reduce the need to travel by car and associated emissions to air. Investment in transportation infrastructure may also help to address air quality issues. Overall, the Preferred Options Consultation Document has been assessed as having a cumulative mixed positive and negative effect on IIA Objective 10 (Air).

3.68. In relation to IIA Objective 11 (Climate Change), as noted above, the concentration of new residential and employment development in and adjacent to urban areas, the promotion of strategic mixed use sustainable urban extensions that reflect Garden Community principles and the delivery of strategic improvements to the walking/cycling network (including through the Green Wedge) are all likely to reduce the need to travel by car and associated emissions of greenhouse gases. Overall, the Preferred Options Consultation Document has been assessed as having a cumulative mixed positive and negative effect on this objective.

Evidence base

3.69. In accordance with the requirements of the NPPF, policies and their requirements should be based on up-to-date evidence.

3.70. In addition to the IIA, the following documents are of particular relevance to transport and are supporting the Review of the Local Plan. Evidence base documents are available via: www.chelmsford.gov.uk/lp-review:

Document	Summary	Status
INF001: Infrastructure Delivery Plan Stage 1 Report February 2024	This report involves a high-level assessment of the five spatial approaches set out in the Issues and Options consultation document. It focuses on the level of growth and the broad locations identified within the five spatial approaches in the Issues and Option Local Plan consultation document and provides a high-level overview of the infrastructure issues and opportunities associated with these spatial approaches. To undertake this assessment, the existing infrastructure capacity has been assessed to establish a baseline position.	Published
Infrastructure Delivery Plan Preferred Options Report	A full assessment of the infrastructure requirements associated with the new and existing pre-site-specific allocations in the Preferred Option Local Plan. This full assessment will include modelling and scenario testing of the cumulative impact of the infrastructure requirements in the Preferred Option Local Plan.	Underway. To be published alongside Pre-Submission Local Plan

Document	Summary	Status
T001: Transport Impact Appraisal of Spatial Approaches December 2023	This report documents the modelling methodology, results, and findings of the traffic impact appraisal of three selected hybrid spatial approaches, identified following the Issues and Options consultation.	Published
T002: Transport Impact of Preferred Spatial Approach March 2024	This report documents the modelling methodology, results, and findings of the traffic impact appraisal of development identified in the Preferred Options Local Plan.	Published
T003: Sustainable Accessibility Mapping and Appraisal July 2022	The study assesses the existing level of sustainable accessibility at 25 'settlement areas' identified across the five Spatial Approaches set out in the Issues and Options.	Published
T002-A: Preferred Spatial Approach Local Junction Modelling – Technical note May 2024	Assess the impact of the Spatial Strategy identified in the Preferred Options consultation document on specific local junctions on the highway network.	Published

Issues and Options Consultation Feedback

3.93. The Review of the Local Plan Issues and Options document was published for consultation between August and October 2022. A total of 1,178 responses were received from 711 respondents. The 'You Said We Did' (YSWD) Feedback Report, available via [Local Plan Review \(chelmsford.gov.uk\)](https://www.chelmsford.gov.uk), sets out the main issues raised in the representations received, a summary of how the Preferred Options Local Plan has been informed by the comments and the plan evidence base. Main issues raised in the consultation responses include:

- Support the need for greater emphasis on promoting active and sustainable transport, including walkable neighbourhoods
- Development should be focused near existing strategic transport corridors such as the A12, A130 and rail stations
- Need to ensure enough EV charging points are included in development.

Local Plan Approach

3.94. Changes have been made to the Preferred Options document taking into account a number of considerations including national planning policy and guidance, new corporate priorities, an updated evidence base and the Issues and Options comments. Key changes are described below.

- 3.95. The need for active and sustainable travel are covered throughout the Preferred Options Local Plan. They are included within new and updated Strategic Priority 1 (Addressing Climate Change and Ecological Emergency), 2 (Promoting smart, active travel and sustainable transport), 3 (Protecting and enhancing the Natural and Historic Environment, and support an increase in biodiversity and ecological networks), 7 (Creating well designed and attractive places, and promoting the health and social wellbeing of communities), and 8 (Delivering new and improved strategic and local infrastructure). They also feed into an updated Vision and Strategic Policy S1 (Spatial Principles).
- 3.96. The need for active and sustainable transport to be included in development is then required in new and updated Strategic Policies S2 (Addressing Climate Change and Flood Risk), S14 (Health and Wellbeing), S5 (Protecting and Enhancing Community Assets), S16 (Connectivity and Travel), S9 (Infrastructure Requirements), S11 (The Role of the Countryside), S17 (Future of Chelmsford City Centre), through site allocation policies, and through Development Management Policies DM4 (Employment Areas and Rural Employment Areas), DM7 (New Buildings and Structures in the Green Wedge, DM10 (Change of Use (land and buildings) and Engineering Operations), DM20 (Delivering Community Facilities), DM24 (Design and Place Shaping Principles in Major Developments, and DM27 (Parking Standards).
- 3.97. Relevant proposed site allocation policies provide requirements for new or improved active travel routes, as well as the need for other transport infrastructure to be provided on site, or to mitigate a sites impact.
- 3.98. New Strategic Policy S16 (Connectivity and Travel) and Development Management Policies DM7 (New Buildings and Structures in the Green Wedge), and DM10 (Change of Use (land and buildings) and Engineering Operations) introduce the role and function of Green Wedges to include infrastructure to support active travel. This policy also includes reference to the Local Cycling and Walking Infrastructure Plan (LCWIP). The City Council rely on Essex County Council to produce these as the Highways and Transportation Authority.
- 3.99. New Strategic Policy S16 (Connectivity and Travel) also seeks to create sustainable places which promote connectivity for all, by providing better access to modes of active and sustainable travel, including supporting development and infrastructure. It also includes new strategic scale developments to ensure they have considered how walkable neighbourhoods can be achieved, as well as achieve a significant modal shift to active and sustainable modes of travel.
- 3.100. Strategic Policy S9 (Infrastructure Requirements) includes reference to the existing Essex County Council Local Transport Plan (LTP) and the need to continue to work with Essex County Council on the emerging LTP4 and include any further infrastructure requirements as they emerge. It also includes the requirement for new development to be supported by active and sustainable transport and new highway infrastructure which will help reduce congestion, link new development and provide connections to the strategic road network.
- 3.101. New Strategic Policy S14 (Health and Wellbeing) includes the need for developments to create opportunities for active travel, including the provision of safe and attractive

pedestrian and cycle routes. It also requires strategic scale development to incorporate Sport England and National Design Guide Active Design principles.

- 3.102. Development Management Policy DM25 (Sustainable Buildings) includes updated requirements for Electric Vehicle charging points. These are based on the Essex Part 1 Parking Guidance.
- 3.103. Specific traffic modelling to assess the potential impact of the Local Plan has been carried out at each stage of Plan preparation and has been used to inform the Spatial Strategy included in the Preferred Options Consultation. Full details on how the Council have arrived at the Preferred Options Spatial Strategy is set out in the Spatial Strategy and Strategic Sites Topic Paper. However, a full summary of the traffic modelling carried out is set out below.
- 3.104. A summary note outlining the traffic modelling approach to be undertaken throughout the Review of the Local Plan was included in the Issues and Options Topic Paper at Appendix 1. This was based largely on the approach used for the adopted Local Plan modelling and has evolved based on the identification of the locations for development in the Preferred Options Local Plan.
- 3.105. The Sustainable Accessibility Mapping and Appraisal of Sites 2022 (T003) assessed 25 settlement areas identified across the five spatial approaches in the Issues and Options consultation document on their level of sustainable connectivity to key urban centres, employment, rail stations, bus services and bus stops, healthcare and education. They were also assessed on their digital connectivity highlighting the ability for residents to work from home thereby reducing peak hour journey trips on the local transport network. It should be noted that the appraisal assessed the current accessibility and connectivity of the locations and at that stage did not take into account future uncommitted infrastructure improvements which might come forward to support new development.
- 3.106. The Transport Impact Appraisal of Spatial Approaches 2023 (T001) sets out the modelling methodology, results, and findings of the traffic impact appraisal of three selected Spatial Strategy options, identified following the Issues and Options consultation. The evidence shows that, in terms of overall network impact (severity and breadth) and without considering the scope for mitigation, Approach 2 (New Settlement /Employment) is modelled as having the smallest impact, and Approach 3 (Transport Corridors) as having the largest. Approach 1 (Existing Strategy) is characterised as having a broader, but less pronounced impact on the road network. The wider cross boundary impacts are included in the relevant assessments.
- 3.107. The Transport Impact Appraisal of the Preferred Spatial Approach 2024 (T002) assessed the impact of the Spatial Strategy included within the Preferred Options Consultation document. The appraisal considers the potential traffic impact of the Preferred Options Spatial Strategy and insight into the likely effectiveness of proposed infrastructure and/or sustainable measures to mitigate the impact of development traffic growth.
- 3.108. The full methodology is set out in the Transport Impact Appraisal of the Preferred Spatial Approach (T002). The appraisal specifically looks at the following:

- The impact of additional development traffic on the future capacity of links and junctions on the strategic and local road network, at key junctions and across neighbouring authority boundaries
- The effectiveness of mitigation measures proposed by developers of large, allocated development sites in Chelmsford – specifically Chelmsford Garden Community and Hammonds Farm
- The impact of forecast traffic flows on the accessibility of passenger transport services and the network of bus priority infrastructure in Chelmsford.

3.109. The Transport Impact Appraisal of the Preferred Spatial Approach (T002) concluded that, with a focus on development along the A12 corridor, the modelled traffic impact of the Spatial Strategy included in the Preferred Options consultation document is largely limited to the A12 corridor, the junctions along it and, to a lesser extent, the A1114 and A138 corridors into Chelmsford City Centre. The minor quantum of development allocated in rural areas of Chelmsford is of insufficient size to likely impact the local road network.

3.110. Overall, the allocation of development in the Preferred Options consultation document provides the opportunity to make good use of existing and potential sustainable accessibility to and from proposed sites. However, this will be dependent on the delivery of the bus, cycling and walking infrastructure proposed by developers, as well as additional measures required to provide the necessary connectivity to the wider sustainable transport network. This will be crucial to ensure that the growth in trips associated with the proposed development is managed and does not have a negative impact on the surrounding local area.

3.111. Forecast modelling suggests that traffic flows associated with the Spatial Strategy included in the Preferred Options consultation document will have a minor impact along the A12 corridor – relative to background traffic growth. By maximising the potential for sustainable accessibility to and from the sites along the A12 corridor, the impact on the strategic highway network should not be considered severe. However, continued discussions with National Highways will be necessary to best ensure that future development growth in Chelmsford can be supported by the strategic highway network over the long-term.

3.112. In addition to the main Transport Impact Appraisal of the Preferred Spatial Approach (T002) there is also a more detailed Junction modelling addendum (T002-A) which supports the above conclusions.

NPPF 2023 Checklist

3.113. The Council has reviewed the Preferred Options Local Plan against the requirements of the latest 2023 NPPF. The table below shows that the plan meets all requirements in respect to Transport. The full Preferred Options Local Plan Form and Contents Checklist (March 2024) is available at www.chelmsford.gov.uk/lp-review

Preferred Options Local Plan meets NPPF requirement
Preferred Options Local Plan partially meets NPPF requirement
Preferred Options Local Plan does not meet NPPF requirement

NPPF Requirement	NPPF Paragraph	Approach in Preferred Options Local Plan
<i>Transport</i>		
Actively manage patterns of growth. Significant development should be focused on locations which are/can be made sustainable. Opportunities to maximise sustainable transport solutions will vary between urban and rural areas - this should be taken into account in plan-making.	109	These considerations have been considered in the preferred Spatial Strategy (Strategic Policy S7) which is informed by the wider plan evidence base including the 2024 Parish Audit and Integrated Impact Assessment.
Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities.	110	The plan provides for a variety of site types and uses to minimise journeys. The plan includes proposals and policies which seek to reduce the need to travel including Strategic Policies S2 and S16 and site allocations policies. It has also been prepared with the active involvement of local highways authorities.
Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development.	110	The plan safeguards a corridor for the North East Chelmsford Bypass and identifies locations for proposed key transport infrastructure including bridges and areas for additional park and ride facilities to support new development growth.
Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans).	110	The plan provides for attractive walking and cycling networks drawing on the Chelmsford Cycling and Walking Infrastructure Plan as set out in Strategic Policy S16 and site allocation policies.
Provide for any large-scale transport facilities that need to be located in the area and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. Such facilities include ports, airports, interchanges for rail freight, public transport projects and roadside services.	110	A new roadside facility is identified as a possible complementary employment generating use/service in Strategic Site Allocation 16b.
Recognise the importance of maintaining a national network of general aviation airfields.	110	Not relevant as no airfields within the plan area.
Provide adequate overnight lorry	113	Not currently required in the adopted

NPPF Requirement	NPPF Paragraph	Approach in Preferred Options Local Plan
parking facilities, taking into account any local shortages.		Local Plan and not aware of any current identified needs.
In assessing sites that may be allocated for development in plans, it should be ensured that: appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; safe and suitable access to the site can be achieved for all users, the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance including the National Design Guide and the National Model Design Code; and any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.	114	Provision is set out in plan site allocations including requirements to promote sustainable travel provision and ensure suitable site access. Site policies are supported by other policies including Strategic Policies S1 and S16, the masterplan process and Making Places SPD. The site allocations are also supported by the Transport/Highways Modelling and Infrastructure Delivery Plan.
Development should only be prevented on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.	115	The plan site allocations are supported by updated Transport/Highways Modelling. The adopted Local Plan was not found to have an unacceptable impact on highway safety, and the residual cumulative impacts on the road network was not found to be severe.

Additional alternative approaches considered

3.114. Throughout the Preferred Options Local Plan each policy includes any 'Alternatives considered'. National Planning Practice Guidance (NPPG) makes it clear that a Local Plan reflects sustainability objectives and has considered reasonable alternatives. The alternatives considered have been tested by the Preferred Options Integrated Impact Assessment (IIA), alongside the proposed policies, to help ensure that the Preferred Options plan is justified and is an appropriate strategy, when considered against the alternatives and other available and proportionate evidence. Key alternatives considered in relation to transport include:

- **No Strategic Policy for Connectivity and Travel but rely on NPPF.** The policy follows the requirements of the NPPF. However, the NPPF does not provide detailed guidance on the Council's expectations for new development. It is considered that the policy is required to give clarity to developers and local communities. Therefore, this is not a reasonable alternative.
- **No Strategic Policy for overall infrastructure requirements but rely on NPPF or the Essex Local Transport Plan.** Relying on the NPPF alone would risk required infrastructure improvements not being delivered. The Essex Local Transport Plan predates the Local Plan, therefore it does not address specific infrastructure requirements from Chelmsford's projected growth.
- **No Strategic Policy covering how infrastructure requirements will be delivered but rely on NPPF.** Relying on the NPPF alone would result in uncertainty regarding how developer contributions will be secured.

4. Next Steps

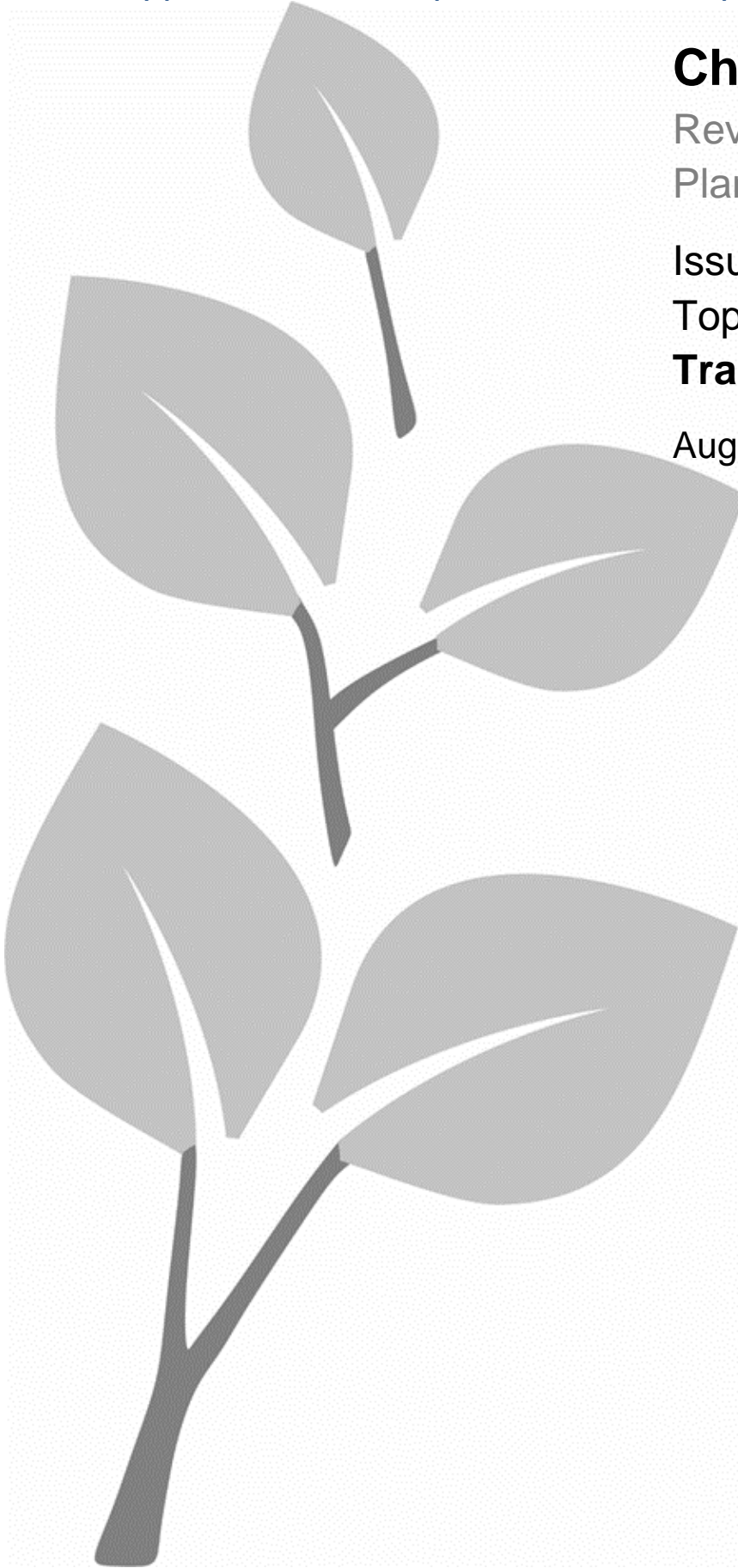
- 4.1. Further traffic modelling will be undertaken following a review of representations made to the Preferred Options Consultation. This further modelling will assess the proposed Spatial Strategy set out in the Pre-submission Local Plan, including the potential consideration of further site mitigation measures where feasible.
- 4.2. Discussions will continue with National Highways to best ensure that future development growth in Chelmsford can be supported by the strategic highway network over the long-term, particularly with regards to A12 junctions 17,18 and 19 and improvements to the A12 carriageway.
- 4.3. This Topic Paper will be updated and expanded on following feedback to the Preferred Options consultation and progress of further evidence-based documents. An updated version will be published at the next stage of Local Plan Consultation (Pre-Submission) setting out the progress made and the reasoning behind the proposals in the Pre-Submission Consultation Document.

Chelmsford Local Plan

Review of the adopted Local Plan

Issues and Options
Topic Paper:
Transport

August 2022



1. Purpose

- 1.1. This Topic Paper is one of a number produced by Chelmsford City Council to set out how the review of the adopted Local Plan has been developed. Topic papers will be refreshed and updated at each stage of the Local Plan Review process to ensure the latest information/position is available. This will avoid confusion and duplication and the latest topic paper will supersede any previous versions.
- 1.2. The intention of the topic papers is to provide background information; they do not contain any policies, proposals or site allocations. Topic papers will form part of the Local Plan evidence base which will be submitted alongside the Local Plan for independent examination.
- 1.3. This paper covers how transport matters and transport impacts have been considered when preparing the review of the adopted Local Plan and how the Review will seek to provide a development strategy compatible with sustainable movement objectives.
- 1.4. The Topic Paper provides background information and provides context of how the Local Plan has been formulated. This Topic Paper should be read alongside the other Topic Papers produced, in particular:
 - Infrastructure
- 1.5. The main issues covered by this Topic Paper are:
 - Policy proposals to assist in increasing sustainable and active transport
 - The proposed approach to highway modelling

2. Background

- 2.1. Chelmsford is located in the heart of Essex, 30 miles north-east of London and consists of the principal settlements of Chelmsford and South Woodham Ferrers, surrounded by villages set within countryside and Green Belt, which generally follows the A130 in the south of the district to the administrative boundary and westwards along the A1060.
- 2.2. An improved transport network can bring about much-needed change connecting people to opportunities for work, education and leisure, and supporting local economies. Enhanced transport links between and within growing places and business clusters will enable an area to function as a coherent economy and improve productivity. Government has clear commitments to cut transport related carbon emissions to net zero through the decarbonisation of transport. Dependence on the private car causes other problems beyond carbon emissions. Many urban areas are heavily congested at peak times and a behavioural change is necessary to prioritise walking, cycling and public transport movements particularly for short trips.

Local Road Network

- 2.3. Chelmsford benefits from good road accessibility to London and the wider region including Braintree, Cambridge and South Essex. The principal roads that connect Chelmsford to the rest of the strategic road network are the A12, which connects Chelmsford to the M25 and London, Colchester and Ipswich; the A131 to Braintree, the A130 which runs north-south across Essex to the A13 in the south; the A132 towards Wickford and Basildon and A414 corridors linking Maldon and Harlow. Chelmsford also has good connections to London Stansted and Southend airports. Chelmsford's key connectivity routes are illustrated below:

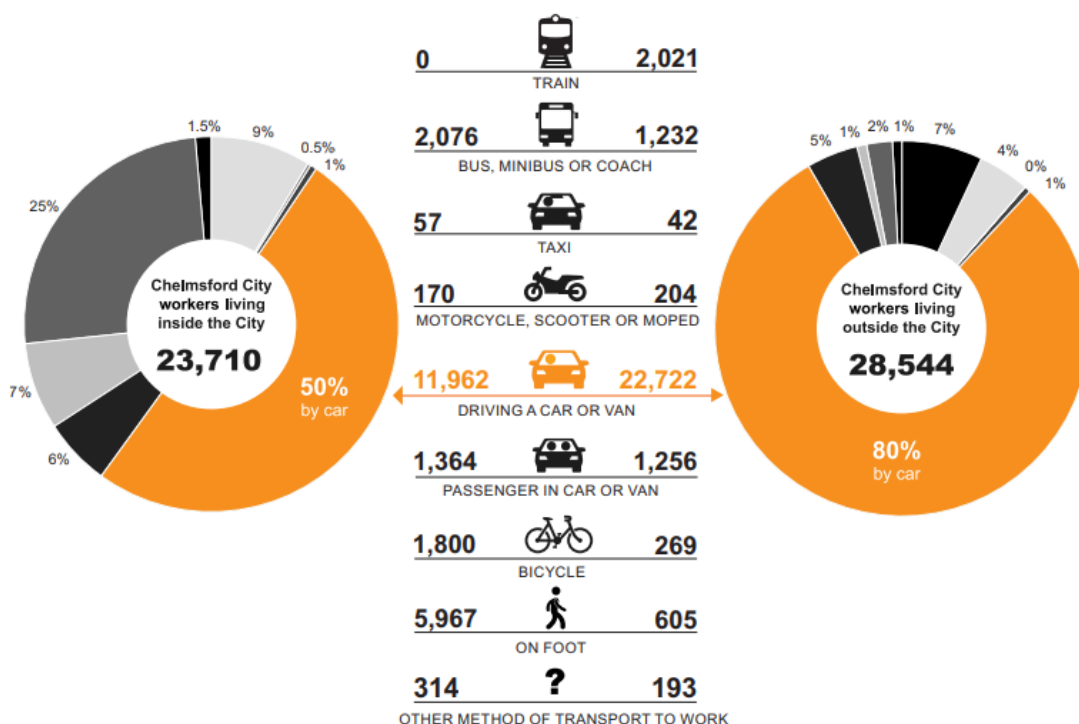


- 2.4. Chelmsford's relative affluence combined with good access to the local and strategic road network means that there are high levels of car ownership. This contributes towards heavy use of Chelmsford's road network with some main roads through the City Centre at, or near to operating at 96% capacity during peak periods. This includes peak time congestion into and within Chelmsford City Centre, notably around the Army and Navy Junction and along Baddow Road and also along Broomfield Road, Springfield Road and Waterhouse Lane. There are also congestion 'hotspots' on the strategic road network for example, the A12 between junctions 15 and 19, and the A414 east of the A12 can be heavily congested during peak hours, particularly if there are issues on the A12.
- 2.5. There are two road transport related designated Air Quality Management Area (AQMA) in Chelmsford; the area around the Army & Navy Junction and Baddow Road Roundabout and the A414 in Danbury around Gay Bowers Lane and Danbury Village Green, adjacent to Eves Corner. Chelmsford City Council and Essex County Council have taken forward a number of direct measures during 2021 in pursuit of improving local air quality, including the Chelmsford Growth Package (inner, mid and outer zones) and the Army and Navy Sustainable Transport Package.

- 2.6. In determining the locations for future growth, consideration will be given as to how they can take advantage of any additional capacity or help secure the funding towards any necessary transportation infrastructure be it highway or sustainable modes. For example, development within the adopted Chelmsford and Braintree Local Plans are providing contributions to the Chelmsford North East Bypass (CNEB), rather than the provision of new roads in the existing built-up areas. Phase 1 of the CNEB was granted approval by Essex County Council (ECC) in March 2022 and will provide a single carriageway road between Roundabout 4 of the Beaulieu Park Radial Distributor Road (RDR1) and a new roundabout on the A131 at Chatham Green plus dualling of the existing A131 between Chatham Green and Deres Bridge Roundabout. Construction is to commence in 2023, and phase 1 scheduled to be open for traffic in 2024, which will meet the traffic demands for the next 15 years. Phase 2 is anticipated to be constructed beyond the life of the current Local Plan (2013 to 2036). Works would include adding an additional carriageway to the single carriageway delivered in Phase 1 to form a dual carriageway for the entire length and include a new stretch of dual carriageway south of the RDR Roundabout 4 providing at grade connection to Junction 19 of the A12 (Boreham Interchange). Phase 2 would be subject to a further planning application if that scheme were to be taken forward in the future. The CNEB will relieve congestion on local roads and enable existing routes into Chelmsford city centre, such as Broomfield Road and Essex Regiment Way to become sustainable transport corridors.
- 2.7. Essex Highways (EH) are undertaking further traffic modelling consistent with, and following on from, the modelling undertaken for the development of the 2020 Local Plan transport evidence base. This modelling support will assess the likely trigger points for the required dualling of the Chelmsford NE Bypass beyond the current Plan period (2036). The assessment will use the forecast model developed to assess redesign options for the Army and Navy junction and contains updated infrastructure assumptions for a 2041 future year, including the latest National Highways A12 widening proposals, Chelmsford NE Bypass proposals and capacity assumptions at Beaulieu rail station.
- 2.8. Chelmsford's wider sub-regional economic, transport and community functions means that significant levels of trips to Chelmsford originate from outside the City Council's area. For example, the neighbouring town of Maldon has no railway station and pre Covid-19 many residents commuted to London as well employment locations in Chelmsford via the A414. The Council expects that this pressure will return on both the road network and public parking within the City. Some 7,000 commuters also travel to Chelmsford from the Braintree area for employment purposes.
- 2.9. Likewise, Chelmsford's second largest town, South Woodham Ferrers, is served by the Southminster branch line without direct access to Chelmsford. Although there are bus links, many residents travel by car to Chelmsford along the A130 via Howe Green and into the City Centre via the Army and Navy junction. Similarly, some villages have poor public transport links and are sufficiently far from the City Centre to make walking or cycling impractical or less desirable.
- 2.10. There are 24 public car parks that the City Council operates providing a mixture of short, medium and long stay car spaces. The majority of these are located within or on the edge of the City Centre.

2.11. ECC has developed a Strategic Zonal Approach to the Chelmsford transport system which seeks to remove as much traffic as possible from the outskirts of the city and reducing the need for city centre car parks. Park and Ride is a key means of achieving this. Chelmsford has two existing Park and Ride sites at Chelmer Valley to the north and Sandon to the east, which presently have 1,000 and 1,410 car spaces respectively. Buses run approximately every 10-15 minutes during the day into Chelmsford city centre. Patronage was steadily increasing before the COVID-19 pandemic. The pandemic has changed people’s travelling behaviour. However, the Park and Rides are still a key component of the long term strategy and there is further scope for their expansion to increase usage. As such, land is safeguarded at both Park and Ride sites for their expansion in the adopted Local Plan along with an additional site to serve west Chelmsford. In March 2022, ECC approved the Army and Navy Sustainable Transport Package which included the further 350 space expansion of Sandon Park and Ride to total 1,760 spaces and 500 spaces at Chelmer Valley park and ride to total 1,500 spaces. Based on the current programme, a planning application will be submitted in early 2023 and a final business case to the Department for Transport in Summer 2024, with construction scheduled to start in early 2025. Proposals for a third Park and Ride at Widford will continue to form part of the longer term strategy for Chelmsford and will be evaluated through the review of the adopted Local Plan.

2.12. ECC’s Chelmsford's Future Network Strategy highlights that the network is under significant strain with only 4% highway capacity in the city centre available during peak periods. This leads to queuing, unreliable journey times, poor air quality and increased traffic on unsuitable residential streets. It also impacts bus users, and the quality of journeys made by walking and cycling as well as health issues such as obesity levels which may be worsened by children being unable to walk or cycle to school because of safety concerns. The Chelmsford's Future Network study 2017 showed that 80% of those working in Chelmsford but living outside the City drove to work in cars, but still 50% who live in the City still drove to work.



- 2.13. As a different approach is required to ensure that future travel demands are managed in the most sustainable way. This includes managing public car parking which allows people to access local services and support local businesses without causing significant traffic congestion or environmental impacts.

Rail

Chelmsford has regular main line rail services that connect the city with London Liverpool Street (with up to ten trains per hour), Ipswich and Norwich. The network also carries freight traffic to and from the Haven Ports (Felixstowe, Harwich and Ipswich), which handle container ships and freight transport to the rest of the UK. Although services are more limited, the Southminster branch line provides train services to London every 40 minutes with some all-through trains at peak hours passing through the town of South Woodham Ferrers and the small settlement of Battlesbridge in the Chelmsford administrative area. New trains provide significant additional passenger seating capacity of some 66% in the off peak and at peak times a new 10 car train has about 12% additional seating capacity than the old 12 car train. However, given the imposed speed limits and number of crossings on the line the one train every 40 minutes is the best timetable that can presently be offered. Any improvement to provide 2 trains per hour would require significant investment in the track and platforms. Other issues include connectivity issues at Wickford and onwards via Bow Junction to London Liverpool Street.

- 2.14. Chelmsford's rail network is heavily used, particularly given the proximity to and connectivity with London. Chelmsford rail station is one of the busiest in the East of England, accommodating up to 8 million passenger trips per year. The new rail station in north east Chelmsford will improve rail infrastructure from the mid-2020s onwards and help to relieve pressure on the existing congested station and reduce the need for people commuting into London to travel into Chelmsford by car. By locating new development within acceptable public transport travel distances (cycle, walk, bus) of the existing and proposed rail station in North East Chelmsford, there will be greater potential for residents to make their journeys by rail.
- 2.15. The new railway station in North East Chelmsford will provide access to the Great Eastern Main Line (GEML) with a central loop line and new tracks to enable stopping services while allowing fast trains to pass through unimpeded to make the whole line more reliable. It will relieve crowding at Chelmsford railway station and act as a transport interchange to encourage sustainable travel by bus, cycle, electric vehicles and on foot to strategic and local housing development, including the new Chelmsford Garden Community. In June 2022, plans to deliver the station were granted detailed planning by the City Council, paving the way to finalise the technical design work before starting on site in early Spring 2023 and scheduled to be open in 2025/26. Separate applications will be submitted regarding sustainable access to the station by a bus link and the pedestrian and cycle access.

Bus

- 2.16. Bus services are concentrated within the centre of Chelmsford, linking the city centre, railway station and the surrounding areas. The majority of services run through Chelmsford bus station, and therefore the city centre is well served by existing bus services. Chelmsford Area Bus Based Rapid Transit (ChART) is a direct, frequent bus service that connects development in North East Chelmsford with the City Centre. When the new railway station in North east Chelmsford opens in 2024/2025 phases of ChART will create a link to serve the station from Chelmsford Garden Community and onwards into the city centre. It is critical for enabling local, frequent travel without reliance on the private car.
- 2.17. Further out from the centre, the number of buses serving the local area decreases although South Woodham Ferrers and larger villages have a good service particularly during the peak period to Chelmsford and other larger settlements such as Braintree and Basildon, but are more limited in the evenings and at weekends. A new bus service 16, operated by First Essex, has been introduced, connecting the large new residential-led development at St Luke's, Runwell with Wickford rail station (approximately two buses per hour) and is initially funded through the S106 agreement. Travel by bus offers a main alternative to journeys made by private car. By locating new development adjacent to urban areas and their high frequency reliable bus services there will be greater potential for residents to make their journeys by public transport.

Cycling and Walking

- 2.18. Chelmsford has an extensive 61 mile well used cycle network which includes National Cycle Route 1 which provides east / west connectivity through the city centre and provides access to Writtle and Chelmer Village alongside the river and in parks, with on-road routes provided on quieter roads. Significant investment has been made by ECC in the Chelmsford walking and cycling network through the £15M Chelmsford City Growth Package , This included 11 schemes, of which 7 related to cycling, and all but one has been completed, and involved upgrades to existing cycle links, signage, surfacing and lighting improvements. The Chelmsford Cycling Action Plan, March 2017 sets out a review of the existing network provision, identifies barriers and sets out opportunities to develop and promote cycling in Chelmsford through improved infrastructure. There are opportunities to further enhance cycle routes along Chelmsford's Green Wedges by creating multifunctional greenways, whose design will depend on their location and function (recreational, commuting), and need to balance sustainable and active travel movements and biodiversity enhancement. Most should be designed with a hard, permeable surface which is accessible in all weathers and for people with mobility impairments, those in wheelchairs, use for leisure and fitness pursuits such as skateboarding and rollerblading, for commuting journeys to work and to school and to provide new leisure opportunities from development into the countryside. Where possible these routes should be funded by developers where they directly relate to development. Any design of new routes should be consistent with LTN 1/20 – Cycling infrastructure design (2020). Any new cycle route will need to consider the following key principles in that they are:

- Coherent - allow people to reach day to day destinations easily in a way that is easy to navigate, avoiding arrangements that are unintuitive or taking cyclists away from the obvious route;
- Direct – to be as direct, if not more direct, than the routes available to motor vehicles;
- Safe - as well as being safe, emphasis is given to the need for infrastructure to feel safe;
- Comfortable - quality maintained surfaces, proper widths and favourable gradients are crucial; and
- Attractive - should contribute positively to the urban realm, and naturally be attractive to use.

2.19. Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the Government's Cycling and Walking Investment Strategy, are a new, strategic approach to identifying cycling and walking improvements required at the local level. Essex County Council has identified 9 strategic corridors within the [Chelmsford LCWIP](#) within the urban area, which is to be updated within the timescales of the plan review. The strategic corridors are designed to be integrated into local planning and transport policies, strategies and delivery plans. They are iterative and will be updated to reflect emerging policies and programme objectives to provide a longer term framework to secure funding. The nine corridors are:

- 1A – Central Park to Great Baddow
- 1B – Chelmsford City Centre – Moulsham
- 2 – Chelmsford Rail Station – Chelmer Village
- 3 – Chelmsford City Centre – Beaulieu Park
- 4 – Central Park – Writtle Road
- 5A – Chelmsford Rail Station – Broomfield
- 5B – Broomfield Road – Melbourne Park
- 6 – Chelmsford Central Park – Writtle
- 7 – City Centre Circular Route

2.20. ECC secured £7m from the Government's Active Travel Fund for schemes in Braintree, Brentwood, Chelmsford and Wickford to help make it easier and safer for residents to walk or cycle, reduce traffic congestion, cut air pollution and improve residents' physical and mental wellbeing. As part of this funding improvements are already being implemented to selected routes in the Chelmsford Area, namely:

- Improvements to riverside cycle routes from Victoria Road to Waterloo Lane
- Raised table and on-carriageway cycle markings along Waterloo Lane
- Tindal Square improvements to walking and cycling via Chelmsford Growth Package
- Market Road contraflow cycle lane eastbound and on-carriageway cycle markings along Market Road westbound
- Trinity Road School Street measures
- 20mph zone refresh and extension to Queen Street and Navigation Road
- Springfield Park Road / Springfield Park Lane junction alterations (with no net loss of parking on Springfield Road)
- Chelmer Road / Sandford Road junction improvements

2.21. The successful cycle parking initiative, CyclePoint (2018), established over 1,000 secure spaces at Chelmsford Station, has also demonstrated that there is potential to influence travel behaviour to/from rail stations. The new North East Chelmsford Railway Station will provide 500 spaces for cycle parking and storage. Other measures are also encouraging people to use the improved walking and cycling network including promotional incentives and personalised travel planning. For example, ECC introduced the 'Stop, Swap, Go!' campaign in July 2021 to make it easier and more motivating for Essex residents to switch from car to more sustainable travel choices in the future through sharing their own sustainable travel stories and tips on social media, find further information on local cycle and walking routes, and tapping in to initiatives and resources. The [Go Jauntly App](#) has been launched which provides details of walking routes around Chelmsford, provides simple photo guides for walks and enables walking challenges to be undertaken.

Micromobility

2.22. An e-scooter hire trial has been in operation in Chelmsford with Essex County Council and e-scooter company, TIER. The trial was launched in Chelmsford in February 2021, and there have been around 400,000 rides so far (August 2022). This represents a clear mode shift, with riders regularly opting to use e-scooters rather than private cars to make some key journeys.

2.23. The trials will help to inform Government policy on whether e-scooters should be legalised for wider use and the safety criteria. No decision has yet been made, but the current trial is currently proposed to be extended until May 2024.

3. Issues and Options

Policy Context

National Policy

- 3.1. All policies in the Local Plan must be positively prepared, justified, effective and consistent with national policy. The National Planning Policy Framework (NPPF) sets out the overarching planning policy framework, supported by the National Planning Practice Guidance (PPG).
- 3.2. The adopted Local Plan was examined under the 2012 National Planning Policy Framework (NPPF). There have subsequently been updates to the NPPF and the review of the adopted Local Plan needs to be considered against the requirements of the 2021 NPPF.
- 3.3. The national policy backdrop has changed dramatically over the last few years with focus on social equity, health and decarbonisation gaining prominence. Covid, Brexit and a need to grow the economy around sustainable and greener development principles has accelerated radical policy transformation and the production of new standards.
- 3.4. Although large areas of the NPPF remain unchanged in respect of transport any new or amended development proposals and policies will still require to be tested against the relevant NPPF requirements. There are also some areas of the NPPF which have been updated/amended since the adoption of the Local Plan which will need to be reflected.
- 3.5. Further detail on these key changes for consideration are set out in the table below, included under the section 'Local Plan Approach'.

National Policy Guidance

- 3.6. Paragraphs 001 Reference ID: 54-001-20141010 to 012 Reference ID: 54-012-20150313 of the PPG set out the transport evidence base required to support plan making and decision taking in full. The following is a summary of the points for consideration.
- 3.7. It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.
- 3.8. The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage, where reasonable to do so; and highlight the infrastructure requirements for inclusion in infrastructure spending plans linked to the Community Infrastructure Levy, section 106 provisions and other funding sources.
- 3.9. Local planning authorities should also refer to the [Department for Transport's Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development](#).

- 3.10. A robust evidence base will enable an assessment of the transport impacts of both existing and proposed development which can help inform sustainable approaches to transport at a plan-making level. This will include consideration of viability and deliverability.
- 3.11. The key issues, which should be considered in developing a transport evidence base, include the need to:
- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms
 - assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
 - highlight and promote opportunities to reduce the need for travel where appropriate
 - identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate
 - consider the cumulative impacts of existing and proposed development on transport networks
 - assess the quality and capacity of transport infrastructure and its ability to meet forecast demands
 - identify the short, medium and long-term transport proposals across all modes
- 3.12. The outcome could include assessing where alternative allocations or mitigation measures would improve the sustainability, viability and deliverability of proposed land allocations (including individual sites) provided these are compliant with national policy as a whole.
- 3.13. An assessment of the transport implications should be undertaken at a number of stages in the preparation of a Local Plan:
- as part of the initial evidence base in terms of issues and opportunities
 - as part of the options testing
 - as part of the preparation of the final submission
- 3.14. The last of these stages should highlight the scale of and priorities for investment requirements and support infrastructure spending plans. Like a sustainability appraisal, it will be an iterative process and become more refined and detailed as the process concludes.
- 3.15. The following list indicates the key aspects that should be addressed in the transport assessment. This list is not exhaustive, and there may be additional issues that are important to consider locally:
- all current transport issues as they affect all modes and freight covering, for example, accessibility, congestion, mobility, safety, pollution, affordability, carbon reduction across the whole Plan area and, within relevant areas of the Plan, including existing settlements and proposed land allocations
 - the potential options to address the issues identified and any gaps in the networks in the short, medium and longer term covering, for example, accessibility, congestion, mobility, safety, pollution, carbon reduction

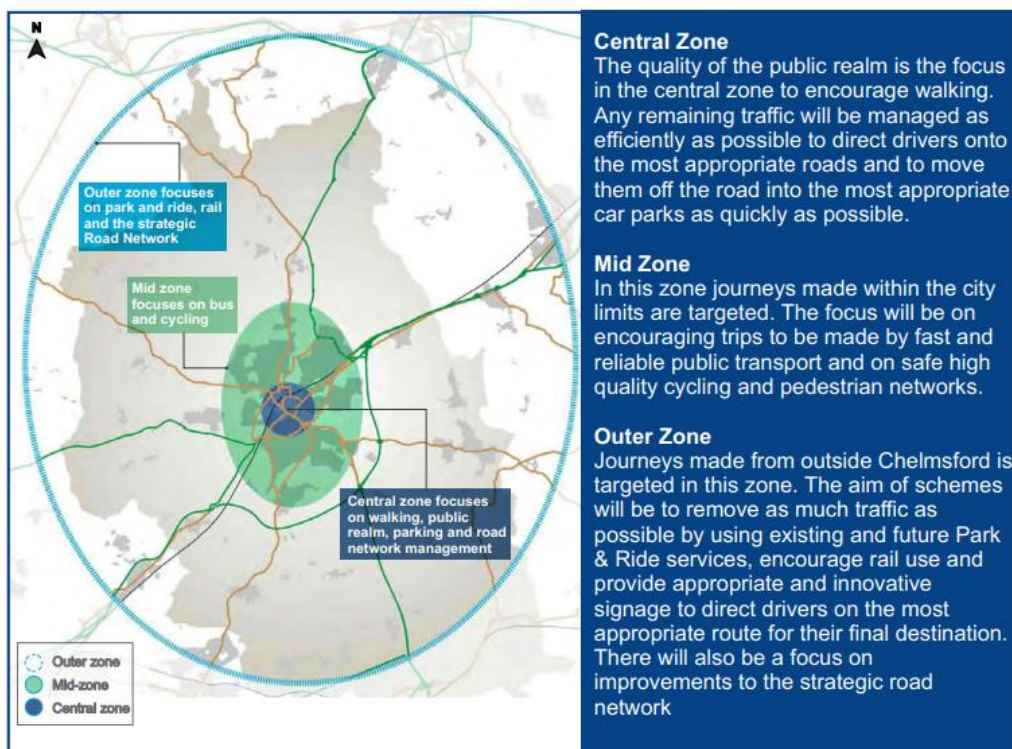
- the locations of proposed land allocations and areas/corridors of development and potential options for the provision of sustainable transport and transport networks to serve them
- solutions to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport
- the scope and options for maximising travel planning and behavioural change.
- accessibility of transport nodes such as rail/bus stations to facilitate integrated solutions

- 3.16. The transport assessment should be produced at a Local Plan level in partnership with all relevant transport and planning authorities, transport providers and key stakeholders, for example, the Local Economic Partnership. It may be appropriate for the transport assessment to cover an area wider than the Local Plan at least initially given the size of some travel to work areas (this would be similar to the Strategic Housing Market Assessment). This process should help to identify any potential measures that may be required to mitigate negative impacts.
- 3.17. Local planning authorities will need to consider the demographics of the area and also the desired or perceived changes likely to take place in the life of the Plan as they might affect the transport network. A number of other considerations that could be included, but are not limited to, are opportunities to change to other forms of transport, parking facilities, including park and ride, and committed network improvements.
- 3.18. Paragraph 007 Reference ID: 54-007-20141010 sets out the detail of how to carry out a transport assessment of the Local Plan and explains that this is likely to be scenario based and in terms of projections look at a range of potential outcomes given a number of assumptions, for example, a movement in the proportion of people using different forms of transport consistent with best practice. It goes on to explain the data that should be included in such an assessment, and how to quantify the impact of land allocations in the Local Plan on the transport system in paragraph 008 Reference ID: 54-008-20141010.
- 3.19. The transport assessment should also identify any significant highway safety issues and provide an analysis of the recent accident history of the affected/impacted areas. The extent of the safety issue considerations and accident analysis will depend on the scale and type of developments in the context of the character of the affected Strategic Road Network. The need to minimise conflicts between vehicles and other road user groups should be adequately addressed.
- 3.20. Any proposed land allocation impact should be considered in the context of two alternative scenarios – ‘with development’ and ‘without development’. This will enable a comparative analysis of the transport effects of the proposed allocation.
- 3.21. The assessment should cover the period of the Local Plan.

Local Policy

Current policy

- 3.22. Chelmsford City Council (CCC) worked in partnership with Essex County Council (ECC), and National Highways (NH) as Highways Authorities to ensure projected development growth in the adopted Chelmsford Local Plan was tested robustly and an appropriate strategy for mitigation formulated.
- 3.23. Good transport provision was considered essential to Chelmsford's continuing prosperity and improvements to the network are needed to be implemented in ways that are both sustainable and minimise the adverse environmental and social impacts.
- 3.24. Given high levels of commuting, the relative prosperity of Chelmsford and ongoing demand for services and facilities, transport infrastructure was already considered under pressure in the adopted Local Plan. A significant change in how people make their journeys towards more sustainable travel choices was considered necessary.
- 3.25. Therefore, the adopted Local Plan promotes improvements to transport infrastructure to ensure that new development is accessible by sustainable forms of transport and which allows Chelmsford to be well-connected. It also ensures that new development will not unduly exacerbate congestion and will provide appropriate mitigation measures to ameliorate effects on the local road network and maximises and improves the way people move around by sustainable modes of transport.
- 3.26. The adopted Local Plan sets out the following Zonal Approach to Chelmsford's Transport System:



3.27. This is set out in the adopted Local Plan in the follow ways:

- **Strategic Priorities 5 and 6** - these seek to deliver new and improved strategic and local infrastructure including ensuring the transport network accommodate future growth
- **The Local Plan Vision** – this seeks to maximise opportunities for sustainable transport by providing increased opportunities for walking, cycling and public transport
- **The Spatial Strategy (Strategic Policy S7)** - this focuses new development at well-connected locations (in line with Strategic Policy S1) for example along strategic transport corridors, close to existing local services, in areas with a good level of existing or proposed transport infrastructure including sustainable transport, and where daily needs can be met locally where possible. This helps reduce the need to travel, and maximise opportunities for sustainable travel and modal shift through planned new development
- **Strategic Policy S9** - this recognises that new development can place additional demand upon existing infrastructure and services, and requires new development to be supported by sustainable means of transport to serve its need including walking, cycling and public transport modes. It also sets out how new highway infrastructure should help reduce congestion, link new development and provide connections in the strategic road network. It further lists a number of transport improvement schemes that are proposed across Chelmsford and which will help to relieve congestion and provide connections in the strategic road network, including:
 - New Rail Station
 - Chelmsford North East Bypass
 - An additional new Radial Distributor Road 2 in North East Chelmsford
 - New access road to Broomfield Hospital
 - Safeguard land for the expansion of Chelmer Valley and Sandon Park and Ride sites
 - Additional Park and Ride facilities will be provided in West Chelmsford and North East Chelmsford within the broad locations shown on the Policies Map
 - Improvements to the Army and Navy Junction
 - Improvements to A130 (Essex Regiment Way) and A131
 - Junction improvements on the A12 and other main roads to reduce congestion
 - Capacity improvements to the A132 between the Rettendon Turnpike and South Woodham Ferrers, including necessary junction improvements to be brought forward as early as possible in tandem with the delivery of development to mitigate its impact
 - Multi-user crossings across the B1012 in South Woodham Ferrers which may include a bridge or underpass
 - New and improved cycling and walking routes both within development sites and to provide connections to centres and hubs of activity such as transport nodes, City, Town and Neighbourhood Centres, strategic areas of recreation and employment areas
 - Bus Priority schemes and rapid transit measures
 - Improvements to inter-urban public transport
 - Transport links between new neighbourhoods and Chelmsford City Centre and employment areas

- Improved road infrastructure aimed at reducing congestion and providing more reliable journey times.
 - **Strategic Policy S10** – this provides the means to secure necessary infrastructure and mitigate the impact of development. Infrastructure will be secured through the use of planning conditions and/or planning obligations and/or financial contributions through the Community Infrastructure Levy or its successor for both on and off-site provision, including the provision of land.
 - **Site allocation policies** - require developments to provide appropriate mitigation, compensation and enhancements to the local and strategic road network as required by the Local Highway Authority and appropriate measures to promote and enhance sustainable modes of transport. In doing so, planned new development will provide physical local highway mitigation measures as well as opportunities for sustainable transport to enable the modal shift of trips away from car borne to sustainable travel modes. All major development will also be encouraged to follow the modal hierarchy with walking, cycling and public transport modes prioritised over private cars (in accordance with Strategic Policy S1)
 - **Development Management Policies DM6, DM7 and DM8** set out the circumstances whereby new local transport infrastructure can be provided outside of built-up or allocated areas. **Policy DM20** seeks to ensure that new community facilities are accessible by sustainable modes of transport such as by public transport, cycling, or on foot. Public transport links should be in close proximity to the site and provide an adequate service. Measures to reduce car dependency are also supported. **Policy DM24** requires all new major development to create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above the use of the private car. **Policy DM27** provides standards for parking in all forms of development.
- 3.28. Essentially, Strategic Policy S11 together with the individual site allocation policies broadly identify what and where new transport infrastructure is required. This was informed by a robust evidence base and through engagement and support from key stakeholders including Essex County Council (ECC), Highways England (HE) and the promoters of the main developments.
- 3.29. Site specific highway requirements are then also covered in more detail through the Masterplan process required for Strategic Site Allocations in the Local Plan and supported by the Development Management policies set out in the adopted Local Plan.
- 3.30. The adopted [Making Places Supplementary Planning Document](#) (SPD) seeks to promote and secure high-quality sustainable new development. It is aimed at all forms of development, from large strategic developments, public spaces and places, to small extensions to individual homes. It sets out detailed guidance for the implementation of the policy requirements set out in the new Local Plan and provides practical advice to help with schemes from single house extensions to strategic sites and their masterplans. It also provides good practice examples on how development can go beyond planning policy requirements to create the most sustainable and environmentally friendly development possible.

- 3.31. The SPD offers further detailed guidance on principles to consider development offers sustainable travel alternatives to the private car as well as include detailed guidance on parking standards, electric charging points and car clubs.
- 3.32. The [Council's Planning Obligations SPD](#) (January 2021) sets out the Council's approach to seeking planning obligations needed to make sure development is acceptable in planning terms. Of relevance to this topic is the need for possible Section 106 Planning contributions towards highways, access and transport. It sets out that all development proposals will be assessed on their own merits in relation to the impact they have upon the highway network. There are no types of development which are exempt from necessary highway infrastructure obligations.
- 3.33. Collectively these seek to ensure development does not have an unacceptable impact on highway safety, or the residual cumulative impacts on the road network are not severe. In addition to the Local Plan, there are a number of other local and regional strategies or guidance that inform this topic area.
- 3.34. [Our Chelmsford: Our Plan](#) sets out the Council's priorities which will improve the lives of residents. There are four themes; a fairer and inclusive Chelmsford; a safer and greener place; healthy, active and enjoyable lives and connected Chelmsford.
- 3.35. The City Council [declared a Climate and Ecological Emergency](#) on 16 July 2019. Essentially this Declaration represents a commitment to take appropriate action to make the Council's activities net-zero carbon by 2030.
- 3.36. In January 2020 a [Climate and Ecological Emergency Action Plan](#) with an initial focus on fifteen key areas of activity was agreed by the Council. It is aimed at:
- reducing carbon emissions
 - lowering energy consumption
 - reducing waste and pollution
 - improving air quality
 - greening Chelmsford
 - increasing biodiversity
 - encouraging more sustainable travel choices
- 3.37. ECC is preparing a new Local Transport Plan 4 to potentially cover the period to 2050. It will be based on four key themes of decarbonisation; Supporting People: Health, Wellbeing & Independence; Creating Sustainable Places and Communities; and Connecting People, Places and Businesses. With regards decarbonisation the approach in LTP4 is to follow the approach recommended by the Essex Climate Action Commission (ECAC) of avoid the need to travel; shift to the most sustainable forms of travel; and improve / decarbonise residual travel. It is envisaged that all transport interventions will need to consider carbon impacts and that the LTP will include a specific carbon zero transport target. LTP4 will also include an implementation plan (yet to be defined), or a suite of plans, that include the full programme of transport investment needed in Essex; capital and revenue, management, maintenance and improvement projects.

3.38. In December 2021, Transport East consulted upon a draft Transport Strategy - A 30-year transport strategy for the East. Following a review of responses to this consultation the Transport Strategy has been revised and adopted by Transport East in July 2022.

3.39. The Strategy identifies four key priorities for the East that strongly reflect the views captured from across the region including Essex:

- Decarbonising transport to Net Zero
- Connecting growing towns and cities
- Energising coastal and rural communities
- Unlocking global gateways.

3.40. The regional Transport Strategy is accompanied by an Investment and Delivery Plan which includes six corridor programmes, of which the London – Chelmsford – Colchester – Ipswich – Norwich and Suffolk Coast connecting the fastest growing cities and towns and gateway ports is relevant to Chelmsford. Strategic schemes relevant to Chelmsford include:

- Great Eastern Mainline strategic package (improvements in London, Essex, Suffolk, Norfolk);
- A12 strategic package South (Colchester to M25); and
- Chelmsford strategic package NE bypass, Army and Navy, Beaulieu Park).

3.41. ECC, as the Local Transport Authority, formally endorsed the Transport East strategy on 11 July 2022. It is expected that the revised LTP4 will reflect the priorities outlined above while also identifying and addressing locally specific issues.

3.42. ECC has published its Bus Service Improvement Plan (2021 - 2026) (BSIP) outlining that ECC is to follow the Enhanced Partnership (EP) approach between the Local Transport Authority (LTA) and Bus Operators to provide a new, high quality and reliable bus network. Bus Network reviews are being undertaken to identify the key characteristics of the existing bus network services and its supporting infrastructure; identify the issues creating barriers to passenger growth, connectivity or accessibility; identify measures to over-come the barriers and promote bus passenger growth which will become a legally binding District-based EP Scheme.

3.43. ECC is undertaking a number of projects and reviews with regards highway and transportation policy for existing and for new communities in the county, which will all feed into the revised Local Transport Plan 4. Workstreams include the review of the existing functional route hierarchy; Parking Standards for developments, Walkable Neighbourhoods and other guidance relating to garden communities including the role of Travel Plans in achieving sustainable transport outcomes. Local Cycling and Walking Implementation Plans are also being developed across the county. In terms of operation of future transport services, ECC is also creating an operational model for future Rapid Transit Schemes which could be delivered through new development and an implementation guide for mobility hubs building on national best practice. This work is being done in partnership with local planning authorities. A detailed study is investigating the concept of walkable neighbourhoods in new development set against more standard approaches to development, with a key

distinguishing principle being that walkable neighbourhoods will have either much reduced vehicular access or will even be delivered as car-free development, possibly with some remote parking located away from core car free areas. As these workstreams progress they will need to be considered as evidence base to support the Local Plan Review.

- 3.44. [Safer, Greener, Healthier](#) is an Essex Highways' on-going campaign aiming to make it as easy as possible for people to travel more sustainably, especially for shorter journeys by walking, cycling, e-scooting or taking the bus or train for longer journeys. The vision is to deliver and enable safer, greener and healthier travel for current and future users of the transport network in Essex.
- 3.45. The Essex Walking Strategy (2021) has been prepared to increase walking across the County, particularly for shorter journeys and as part of longer ones and connecting to other forms of sustainable travel. Local Plans should include policies that seek to provide for high-quality walking and cycling networks designed to provide safe and accessible routes to key facilities and services. Planning policies should also identify places where new walking routes can be delivered by new developments, and ensure the protection of alignments for future planned cycling and walking routes.
- 3.46. [Net Zero: Making Essex Carbon Neutral \(Essex Climate Action Commission, July 2021\)](#) The Essex Climate Action Commission was formed in 2020. It is an independent, voluntary, cross-party body. The report sets out key steps for how to reach zero carbon by 2050 and recommendations within six core themes; land use and green infrastructure, energy, built environment, transport, waste and community engagement. Key transport recommendations include the updating of ECC highway and transportation policies (see above); locating growth to reduce the need to travel, including walking and cycling in city centres; new walkable neighbourhoods; school streets; car sharing clubs; preparation of an EV Strategy including charging points; public transport initiatives; and seeking behavioural change to more active modes.

Duty to Co-operate

- 3.47. The Council is committed to co-operating with other bodies on strategic planning matters. The Duty to Co-operate Strategy was reviewed and adopted in January 2022.
- 3.48. The Council will make every effort to seek co-operation on cross-boundary and strategic planning matters in a focused, positive and structured way. We will discuss the Review of the Adopted Local Plan with neighbouring planning authorities and the prescribed bodies at stages which align with and inform the stages of the Review of the Adopted Local Plan. These discussions will help to formulate the quantum and distribution of Chelmsford's future growth, which will be supported by updated evidence
- 3.49. At the same time, we will continue to work constructively with nearby planning authorities on their own local plan preparation. Early engagement and demonstrating co-operation both with neighbours and the prescribed bodies through Statements of Common Ground are key to meeting the legal duty to co-operate.

3.50. In some cases, discussion on strategic matters will continue through existing joint working arrangements. We will also arrange joint Officer and Member meetings, technical stakeholder meetings, focused workshops, and Statements of Common Ground.

3.51. The strategic matters that may apply to the Review of the Adopted Local Plan have been identified as follows:

- Delivering homes for all including Gypsy and Traveller accommodation
- Jobs and economy including green employment and regeneration
- Retail, leisure, and cultural development
- Sustainable transport, highways and active travel
- Climate change action and mitigation including flood risk and zero carbon
- Natural and historic environment including increased biodiversity and green/blue/wild spaces and connectivity of ecological networks
- Community infrastructure including education, health and community facilities
- Utility infrastructure including communications, waste, water and energy
- London Stansted Airport future airspace redesign.

3.52. In preparing the Issues and Options Consultation Document we have worked with Essex County Council, as the local Highway Authority, to prepare appropriate evidence to support the document by way of the Sustainable Accessibility Mapping and Appraisal. Joint working has also led to the preparation of a summary note outlining the traffic modelling approach to be undertaken throughout the Review of the Local Plan, attached at Appendix 1. More information on these documents is set out below in paragraph 3.77.

3.53. As part of the Issues and Options consultation we will be having meetings with neighbouring Local Planning Authorities as well as other relevant Duty to Co-operate bodies. Any strategic cross boundary issues relating to transport raised through these meetings and the consultation will be further considered and any further engagement undertaken if required.

Integrated Impact Assessment

3.54. The Council is carrying out an ongoing Integrated Impact Assessment (IIA) as the Review of the Local Plan develops.

3.55. The IIA will assess the following aspects of sustainable development:

- Sustainability Appraisal (SA)
- Strategic Environmental Assessment (SEA)
- Habitats Regulations Assessment (HRA)
- Health Impact Assessment (HIA)
- Equality Impact Assessment (EqIA)

3.56. The SA, SEA and HRA are a requirement of national policy. The HIA and EqIA are voluntary, but the Council believes they will help to provide a complete picture of the sustainability of the Review of the Adopted Local Plan.

3.57. The IIA identifies the key sustainability issues for the review of the adopted Local Plan, which feed into a framework against which proposals will be assessed. It will cover the potential environmental, social, economic and health performance of the proposed changes to the adopted Local Plan and any reasonable alternatives. It will be used at each stage of reviewing the Plan, and be subject to separate consultation, as follows:

- Scoping Report
- Issues and Options – Current Stage
- Preferred Options
- Submission
- Adoption

3.58. The Issues and Options IIA appraises key sustainability issues (Table 3.19) and Appraisal Framework Objectives (Table 4.1) relating to this Topic Paper. Please see the Issues and Options IIA for more information.

Evidence base

3.59. In accordance with the requirements of the NPPF, policies and their requirements should be based on up-to-date evidence. The following documents are of particular relevance to transportation of the Plan and will require reviewing and/or updating to support the Review of the Local Plan:

- All Highways modelling documents

3.60. The following documents are new or updated documents of particular relevance to transportation to support the review of the adopted Local Plan which have been completed:

- Integrated Impact Assessment of the review of the adopted Local Plan
- Sustainable Accessibility Mapping and Appraisal

3.61. Following the feedback from the Issues and Options consultation further relevant evidence will be undertaken to support any new policies or requirements intended to be included in the Plan.

Local Plan Approach

3.62. The table below sets out the key issues to be considered at this Regulation 18 Issues and Options Stage. The table below assesses the adopted Local Plan against the key NPPF requirements in respect of transport and Plan making and identifies CCC's assessment of the adopted Local Plan's compliance with the 2021 NPPF. The proposed approach to the Review of the Local Plan is then set out using the following colour codes:

Adopted Local Plan meets NPPF requirement
Adopted Local Plan partially meets NPPF requirement
Adopted Local Plan does not meet NPPF requirement

NPPF Paragraph	NPPF Requirement	Approach in Review of the Local Plan
NPPF Para 105	Should actively manage patterns of growth in support of objectives in Para 104. Significant development should be focused on locations which are/can be made sustainable. Opportunities to maximise sustainable transport solutions will vary between urban and rural areas - this should be taken into account in plan-making.	Settlement Hierarchy in the adopted Local Plan is supported by an assessment of settlement services and facilities. The Integrated impact Assessment will also consider this, alongside other sustainability criteria as part of the on-going assessment of the review of the Local Plan. Once reviewed and updated these pieces of evidence will help inform the most appropriate locations for any further development required through the review of the Local Plan.
NPPF Para 106	Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities.	The adopted Local Plan includes a strategy which provides for a variety of site types and uses to minimise journeys. Need to ensure any amendments through the review continue to be NPPF compliant.
NPPF Para 106	Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development.	Adopted Local Plan protects a route for the North East Chelmsford Bypass and a new rail station which are both coming forward for development. Review will check if any further sites or routes may be critical in developing infrastructure further or if infrastructure proposals create further opportunity for larger scale development in any locations.
NPPF Para 106	Provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans).	Provision set out in adopted Local Plan through Site Allocations and supported by the Masterplan process. Making Places SPD further supports this, but Local Plan policies may need to be updated to better reflect the current wording of the NPPF, particularly in relation to supporting facilities as well as cycle parking. Partial review required to address this NPPF requirement.

NPPF Para 106	Provide for any large-scale transport facilities that need to be located in the area and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy.	Adopted Local Plan allocates land for a new train station and by-pass in North-East Chelmsford. Need to review any current large-scale transport facilities proposed in the area as part of review of the Local Plan.
NPPF Para 106	Recognise the importance of maintaining a national network of general aviation airfields.	Not relevant for Chelmsford City Council (CCC) as no airfields within administrative area.
NPPF Para 109	Provide adequate overnight lorry parking facilities, taking into account any local shortages.	Not currently required in the adopted Local Plan and not aware of any current identified needs. Any future needs identified to be considered during the review process.
NPPF Para 110	In assessing sites that may be allocated for development in plans, it should be ensured that: appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; safe and suitable access to the site can be achieved for all users, the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance including the National Design Guide and the National Model Design Code; and any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.	Provision set out in adopted Local Plan through Site Allocations and supported by the Masterplan process. Making Places SPD further supports this, but Local Plan policies may need to be updated to better reflect the current wording of the NPPF and Highways Modelling needs to ensure it covers these issues to ensure the necessary site requirements are included on any further site allocations.
NPPF Para 111	Development should only be prevented on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.	The adopted Local Plan includes a strategy which was not found to have an unacceptable impact on highway safety, and the residual cumulative impacts on the road network were not found to be severe. Need to ensure any amendments and additional allocations through the review continue to be NPPF compliant in this respect. Highway modelling will be needed to be updated to assess this.

3.63. The adopted Local Plan policies generally remain consistent with national policy and are leading to effective decision making as demonstrated in the latest [AMR](#). However, with the need for new housing and employment floorspace any further development needs to ensure that the overall strategy in the Plan remains acceptable in highway and transportation terms.

3.64. Furthermore, we want to be more proactive in addressing the climate and ecological emergency and are using the review as an opportunity to see if there are ways the Local Plan can assist further in meeting the Council’s Climate and Ecological Emergency Action Plan. We want to ensure that tackling the climate change challenge is a theme running through the Plan so that all development contributes to addressing these priorities as well as improving the environment around us. This includes the need to ensure sustainable and active mode of transport are at the heart of development.

3.65. Considering this the review of the Local Plan seeks to amend the Strategic Priorities as set out in the Issues and Options Consultation Document. Specific to this topic paper the following priorities are relevant:

Priorities for climate
<p>1. Addressing the Climate and Ecological Emergency</p> <ul style="list-style-type: none"> • Mitigate the impacts of climate change and adapt to its consequences • Ensure new development moves towards delivering net-zero carbon emissions (energy efficiency, sustainable construction, renewable energy, infrastructure for active and sustainable travel) • Ensure development adapts to minimise adverse impacts that create climate and ecological change, including managing flood risk and reducing carbon emissions • Encourage tree planting and an increase in woodland expansion • Ensure sustainable drainage systems in developments
<p>2. Promoting smart, active travel and sustainable transport</p> <ul style="list-style-type: none"> • Promote/prioritise active travel and sustainable transport • Reduce reliance on fossil fuelled vehicles • Support the provision of strategic and local transport infrastructure to enable a future for alternatives to fossil fuelled vehicles • Make provision for charging electric vehicles • Make provision for infrastructure to support active travel and the use of sustainable modes of transport • Promote innovations in transport including smart technology
<p>3. Protecting and enhancing the natural and historic environment, and support an increase in biodiversity and ecological networks</p> <ul style="list-style-type: none"> • Plan positively for biodiversity net gain and green infrastructure including high quality green spaces • Minimise the loss of the best and most versatile agricultural land to ensure future food production • Protect/enhance the River Valleys and increase opportunities for sustainable travel • Ensure that new development respects the character and appearance of the City’s varied landscapes

Priorities for growth

4. Ensuring sustainable patterns of development and protecting the Green Belt

- Ensure we plan positively to meet identified development needs
- Promote development of previously developed land in Chelmsford’s Urban Area
- Use the Settlement Hierarchy to identify the most sustainable existing locations
- Locate development in locations that are close to existing or proposed local facilities so people can walk/cycle/use public transport and be less reliant on the car
- Protect the Green Belt from inappropriate development
- Ensure accordance with the Minerals Local Plan, Waste Local Plan and South East Inshore Marine Plan

Priorities for place

7. Creating well designed and attractive places, and promoting the health and social wellbeing of communities

- Promote the health and wellbeing of communities
- Encourage healthy lifestyles and living environments for all residents for example by providing new green spaces, quality housing and enhanced walking and cycling infrastructure
- Ensure that the integrity of communities is maintained, and social cohesion is promoted in new development
- Ensure that all new development meets the highest standards of design
- Require the use of masterplans and encourage design codes where appropriate for strategic scale developments
- Ensure new development helps provide new primary health services
- Promote community involvement in the long-term management and stewardship of new strategic residential development
- Encourage development to be future-proofed and as sustainable and energy efficient as possible

8. Delivering new and improved infrastructure to support growth

- Address city-wide infrastructure needs
- Maximise the efficient use of existing infrastructure capacities
- Explore opportunities for new sustainable infrastructure
- Ensure that necessary new or upgraded local infrastructure is provided alongside new development when it is needed
- Ensure appropriate and timely strategic infrastructure to support new development

3.66. In terms of transport, to address the global climate emergency, we need to re-think how we move around with a much stronger emphasis on walking, cycling and the use of public transport, particularly for shorter trips. Having a meaningful choice to pick the most appropriate type of transport for different types of journeys is at the heart of this. Changing how we travel can also help us lead healthier lives, reduce traffic congestion, noise and air pollution and reclaim our neighbourhoods and centres to make them more attractive environments for walking and cycling, being less car dominated.

- 3.67. To make this happen, the Council needs to help address a number of challenges across the transport network in Chelmsford. This includes the differing needs of residents living in our more remote rural areas and also those with reduced mobility. There is not a single simple solution, so we need to consider a wide range of actions which, when taken together, will help to address some of the challenges we face.
- 3.68. Using the right type of transport for different journeys is key. For example, making it easier, safer and more convenient to walk, cycle (including cargo bikes) or scoot for day-to-day short journeys such as a trip to the local shops or doing the school-run particularly at peak hours. We also need to acknowledge that there will always be some members of our community (e.g., elderly and those with disabilities) where this might not be an option, although a reliable and well connected bus network is essential, particularly to get to key destinations such as Broomfield Hospital or the City Centre. Alternatives for commercial vehicles may include last mile local deliveries by e-cargo bike and on foot.
- 3.69. Public spaces such as squares, pedestrianised streets, walkways, cycle routes and our parks not only look attractive and encourage people into our centres they also create a fantastic network for walking and cycling. Chelmsford has a compact city centre which really lends itself for walking and cycling to be the preferred ways of moving around. This was clear when emergency measures were put in place to allow for social distancing at the early stages of the COVID-19 pandemic. Further public realm projects and the implementation of the Active Travel Bid schemes will help enhance existing and provide new connections in the walking and cycling network, improving the city centre environment and measures to calm and control traffic on the remaining trafficked streets will continue.
- 3.70. Prior to the COVID-19 pandemic there was only 4% capacity on the road network during peak hours in Chelmsford City Centre leading to congestion and poor air quality at certain locations. As traffic levels have steadily risen following the lifting of restrictions so have traffic levels in the city centre. There is limited, if any, opportunity to build more roads in the City Centre, so making best use of the existing network and prioritising active and sustainable travel is essential to ease congestion and improve air quality.
- 3.71. Chelmsford's role as the Capital of Essex ensures it is an important destination for shopping, leisure, culture, education, healthcare and legal and administrative functions for the sub region and beyond. It is important to get the right balance of public car parking to support and improve the economic vitality and community functions of the city centre, whilst encouraging sustainable commuter travel options reducing traffic congestion and improving air quality. The provision of park and ride sites (and their expansion), a new rail station and enhanced and new public transport, cycling and walking opportunities will help this modal shift. The majority of long stay car parking is focused near to the existing rail station and short stay nearer to the High Street. Short and medium stay public car parking will still be needed to support the City Centre functions, but there is likely to be less need for long stay parking in the future. With the move to electric vehicles, more charging points will be needed in our public car parks and other key locations.

- 3.72. In the instances where using a car is the most suitable means of transport, opportunities should be provided for people to have more choices to walk and cycle to their final destinations. For example, the Park & Ride sites should be better connected by walking and cycling to the wider network, key destinations and the city centre. Both existing Park and Ride sites have high quality and secure cycle lockers for overnight bike storage to enable 'Park and Choose' enabling the final destination of any journey to be undertaken by bus, walking or cycling. Strategic developments in the adopted Local Plan including the Chelmsford Garden Community are contributing to new and enhanced connections and any new development in the review will be expected to do the same, if not more.
- 3.73. In light of this, policies in the Plan will need to be strengthened/updated to reflect the updated Plan Vision and Strategic Priorities including a greater focus on:
- Maximising/prioritising active travel and sustainable transport and their connectivity
 - Reducing reliance on fossil fuelled vehicles
 - Supporting the provision of strategic and local transport infrastructure to enable a future for alternatives to fossil fuelled vehicles
 - Increasing provision for charging electric vehicles
 - Increasing provision for infrastructure to support active travel and the use of sustainable modes of transport
 - Promoting innovations in transport including smart technology.
- 3.74. CCC and ECC have agreed an approach regarding the transport appraisal of the Local Plan review which is set out in Appendix 1. In summary, it will cover the following elements:
- Sustainable Accessibility Mapping & Appraisal of Spatial Approaches - this mapping and appraisal exercise will help inform the level of sustainable accessibility of proposed development locations within a selection of Spatial Approaches. This has been completed;
 - Traffic Impact Appraisal of Spatial Approaches - this exercise will involve high-level strategic assignment and junction capacity modelling to assess the comparative local and cross-boundary impact of development traffic on the road network associated with selected Spatial Approaches in the Preferred Options Local Plan. The existing sustainable transport network and prior Local Plan mitigation will also be reviewed to a similar high-level;
 - Traffic Impact Appraisal of Preferred Spatial Approach, Mitigation Appraisal and Response to Representations - this exercise will involve more detailed modelling of the strategic assignment of trips around Chelmsford, vehicle movements through the city centre and the capacity of key junctions. This will be used to assess the local and cross-boundary impact of development traffic on the road network associated with the preferred Spatial Approach. Prior and additional mitigation will be assessed in more detail with a focus on sustainable measures. These will be tailored to the sustainable accessibility of development sites/areas to promote aspirational, yet deliverable targets for sustainable travel uptake. Responses will also be provided to transport modelling representations made during Pre-Submission consultation.
 - Transport Planning and Modelling Support at Examination - Consultancy support will be provided to assist with the preparation of technical material for Examination.

Support will also be offered through attendance at Hearing Sessions during the Examination process.

- 3.75. The Issues and Options consultation is supported by the Sustainable Accessibility Mapping and Appraisal of the Spatial Approaches, undertaken by ECC as Highways Authority and Essex Highways. The appraisal assessed 25 settlement areas identified across the five spatial approaches in the Issues and Options consultation document (Figure 1 of the report). These areas have been assessed on their level of sustainable connectivity to key urban centres, employment, rail stations, bus services and bus stops, healthcare and education. They have also been assessed on their digital connectivity highlighting the ability for residents to work from home thereby reducing peak hour journey trips on the local transport network. Further details of the methodology are outlined in Section 2 of the report, pages 4 – 13). The assessment of Spatial Approaches will continue to be developed through each stage of the review of the adopted Local Plan and will include traffic impact modelling at an appropriate stage. Alongside other pieces of evidence this will help the Council to determine specific development sites within the preferred Spatial Approach.
- 3.76. Full details of the sustainable accessibility mapping and appraisal methodology are set out in Section 3 of the appraisal and summarised below. It should be noted that the appraisal assesses the current accessibility and connectivity of the locations and at this stage does not take into account future uncommitted infrastructure improvements which might come forward to support new development. Alongside other evidence base documents this will help determine a selection of Spatial Approaches comprising defined Local Plan development sites to take forward for traffic impact modelling appraisal.
- 3.77. With a focus on housing development in the Chelmsford Urban Area and North East Chelmsford, Approach B is shown to make the most of the good levels of sustainable accessibility in these locations and therefore ranks a clear first in the comparison of Spatial Approaches.
- 3.78. Approach A and C have near identical scores, ranking second and third respectively, with the difference brought about by the allocation of housing proposed in the smaller service settlements for Approach C.
- 3.79. Approach D ranks fourth due to the allocation of housing in more rural settlement areas with limited sustainable accessibility. However, the score is not dissimilar to Spatial Approaches A and C, owing to the larger number of dwellings proposed in North East Chelmsford.
- 3.80. Finally, Approach E ranks fifth in this assessment given the focus of housing on the proposed Hammonds Farm site. However, it should be noted that this is an appraisal of the current position, and it is likely that potential strategic scale development at the Hammonds Farm site would introduce a good level of public transport and active mode provision to the area which would significantly improve its accessibility. In addition, development at this scale would also be required to provide significant on-site provision of employment, services, neighbourhood centres and education, all of which should be designed to encourage sustainable trips as the primary mode of travel.

3.81. In terms of more specific policy changes, it is suggested that these may include additional or enhanced policy requirements to enhance active and sustainable modes of travel such as:

- Increasing provision for electric vehicle charging points (EVCPs) and fast charging EVCPs for new housing and employment development
- Increasing provision for well-designed and secure cycle parking and electric cycle charging points for new housing and employment development, as well as associated storage facilities for cycle equipment (helmets, panniers etc.)
- Requiring contributions towards or the provision of car clubs on all major development sites, not just the larger strategic sites
- Requiring the layout of major site allocations for housing and employment to explore opportunities to future proof for autonomous vehicles
- Allocating or safeguarding land for expanding current Park and Ride sites.

3.82. Opportunities will also be taken to ensure that the locations and layout of future housing and employment site allocations help to enhance and/or provide new direct access to the walking and cycling network, including that proposed in the Chelmsford Local Cycling and Walking Infrastructure Plan (LCWIP) in order to encourage active travel and provide health and well-being.

3.83. In additions to enhancing existing policies, we may explore the following new local policy:

- **15/20 Minute Walkable Neighbourhoods within major new developments including large strategic housing site allocations**

This initiative would make sure that wherever possible residents can easily walk or cycle to everyday services and facilities from their homes such as schools, shops, workplaces, community facilities, open spaces and sports facilities. The approach is also being rolled out in Chelmsford Garden Community.

3.84. Although not mutually exclusive of one another, further issues surrounding the delivery of transport infrastructure are covered more widely in the Infrastructure Topic Paper.

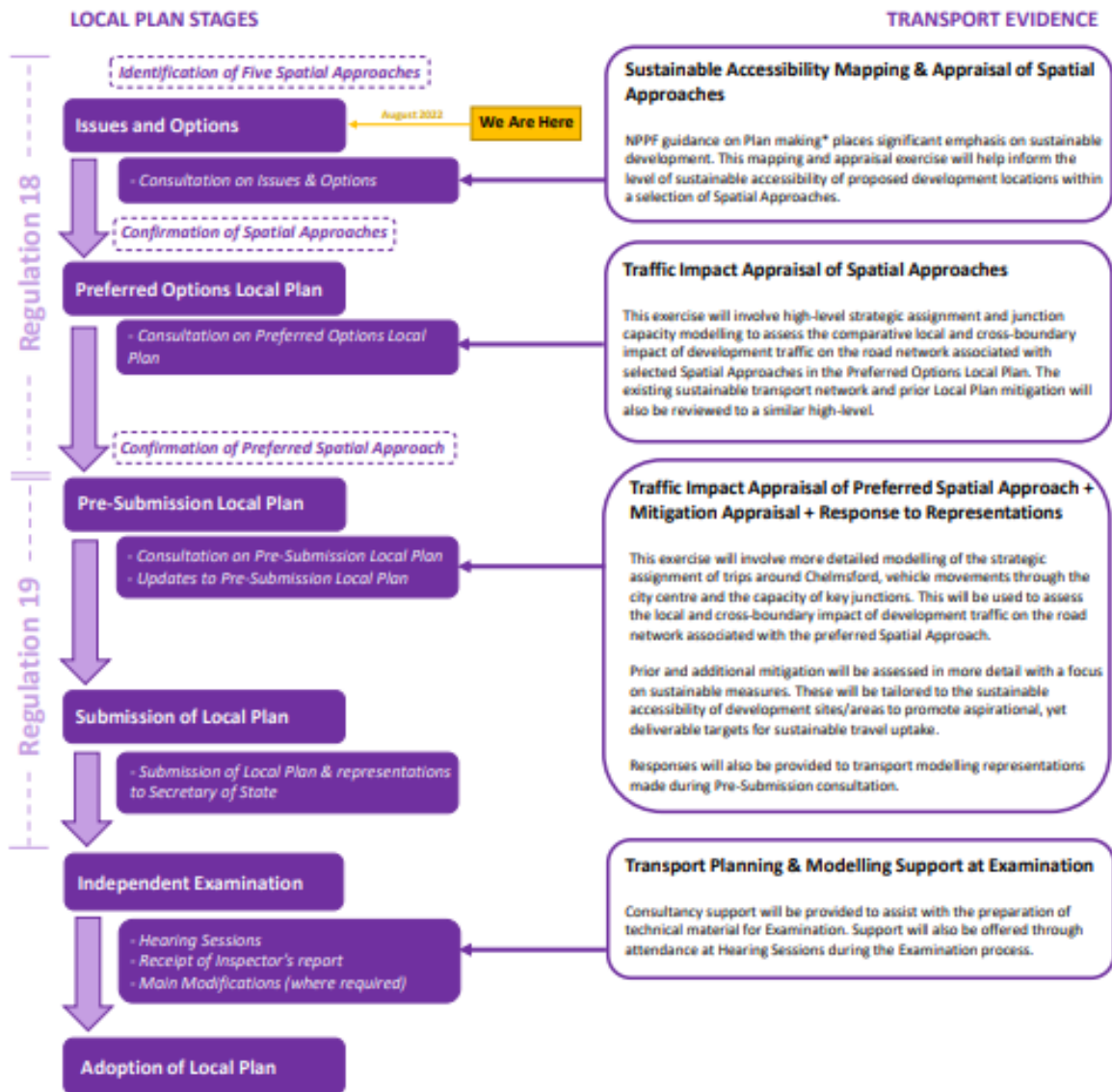
Next Steps

3.85. This Topic Paper will be updated and expanded on following feedback to the Issues and Options consultation and progress of further evidence-based documents. An updated version will then be published at the next stage of Local Plan Consultation (Preferred Options) setting out the progress made and the reasoning behind the proposals in the Preferred Options Consultation Document.

Appendix 1

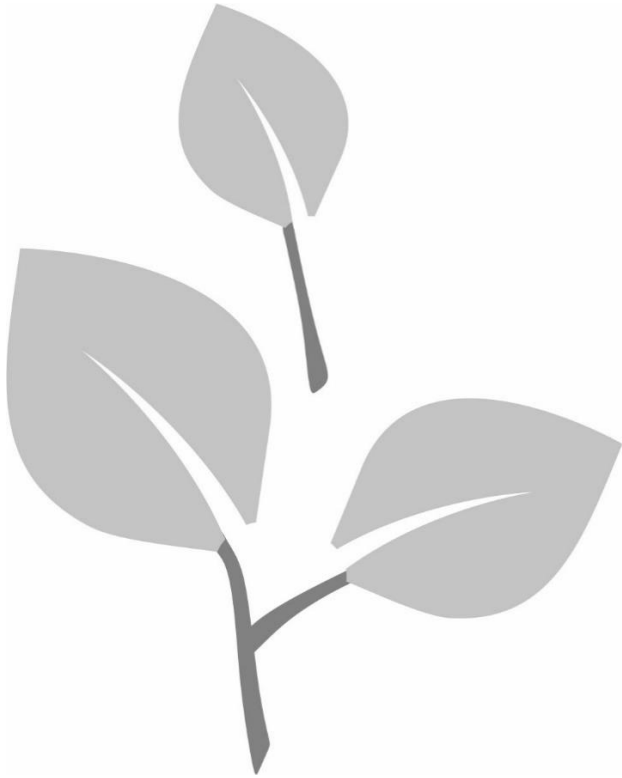


Proposed transport evidence deliverables for each stage of the Chelmsford Local Plan Review Process



*Updated 20th July 2021
<https://www.gov.uk/guidance/national-planning-policy-framework/3-plan-making>





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Please call 01245 606330

Spatial Planning Services
Directorate for Sustainable Communities
Chelmsford City Council
Civic Centre
Duke Street
Chelmsford
Essex
CM1 1JE

Telephone 01245 606330
planning.policy@chelmsford.gov.uk
www.chelmsford.gov.uk

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