



London Borough Enfield

ENFIELD LOCAL PLAN 2019-2041

Annex 2: Transport Topic Paper





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1 INSTRUCTION

1.1 INSTRUCTION

1.1.1. WSP UK Ltd (WSP) has supported The London Borough of Enfield (LBE) in the preparation of the Enfield Local Plan (ELP) transport evidence including the Strategic Transport Assessment (STA), the transport modelling work and the Infrastructure Development Plan (IDP) transport chapter.

1.1.2. LBE have appointed WSP to provide a draft Transport Topic paper in response to the Examiner preliminary question:

“Could the Council produce a brief Topic Paper outlining the main issues relating to transport matters. This should set out the strategic transport issues, provide a summary of the main transport evidence produced and the outcomes, what areas of significant transport infrastructure investment are needed to deliver the Plan, what status those infrastructure projects have (for example, are the funded or not), how the interventions have been factored into any viability assessments, what, if any, areas of dispute exist with the relevant highway authorities and what the Council is doing to address these?”

1.1.3. This note therefore seeks to provide a high-level summary of the wider transport related evidence submitted to support the examination of the ELP.

2 INTRODUCTION

- 2.1.1. London Borough Enfield submitted the ELP 2019-2041 to the Secretary of State for independent examination on 6 August 2024. The Inspector has written to the council with his preliminary matters and questions, one such question is a request to prepare a brief Topic Paper outlining the main issues relating to transport matters.
- 2.1.2. The purpose of this Transport Topic Paper (TTP or ‘Paper’) is to set out the strategic transport issues, provide a summary of the main evidence produced and its outcomes. Furthermore, to highlight what areas of significant transport infrastructure investment are needed to deliver the ELP and what areas of dispute exist with relevant stakeholders including highway authorities and transport operators.
- 2.1.3. The transport related evidence submitted in support of the ELP is listed in Table 2-1 below, including references and links to the on-line evidence library.

Table 2-1 – Summary of transport related evidence

Document Reference	Document Title	Publication Date	Author
IDP1	Emerging Infrastructure Development Plan	September 2024	WSP
IDP2	Infrastructure Development Plan - Transport	March 2024	LBE
TRA1	Strategic Transport Assessment	March 2024	WSP
TRA2	Enfield Transport Strategy	March 2024	LBE
TRA3	Transport Modelling Outputs – Part 1	May 2022	WSP
TRA4	Transport Modelling Outputs – Part 2	May 2022	WSP
TRA5	Transport Modelling Outputs – Part 3	May 2022	WSP
TRA6	Transport Modelling Outputs – Part 4	May 2022	WSP
PLA11	Crews Hill Transport Baseline Analysis	October 2023	Alan Baxter Associates
PLA12	Chase Park Movement Baseline Analysis	October 2023	Alan Baxter Associates
TRA7	Transport Assessment Executive Summary	June 2021	WSP
TRA8	Transport Baseline Review Report	June 2021	WSP
TRA9	Transport Baseline Review Report - Appendix A	June 2021	WSP
TRA10	Transport Baseline Review Report – Appendix B	June 2021	WSP
TRA11	Transport Baseline Model Study Areas	June 2021	WSP



2.1.4. The Paper content is structured as follows:

- Policy Context – highlighting the policy framework of reference and proposed ELP transport policies.
- Summary of the main transport evidence produced and the outcomes
- Duty to cooperate and statements of common ground
- Summary and conclusion.

3 POLICY CONTEXT

- 3.1.1. The ELP Local Plan transport policies are aligned with the National Planning Policy Framework (NPPF) and the evidence supporting the Local Plan was prepared in the context of the Planning Practice Guidance (PPG).
- 3.1.2. The vision, goals and targets set out in the Enfield Transport Strategy are closely aligned with the London Plan (2021) and the Mayor's Transport Strategy (2018).
- 3.1.3. A summary of the proposed ELP transport policies is presented following on, whilst the policy framework of reference (NPPF, PPPG, London Plan and Mayor Transport Strategy) can be found to the rear of the document within Appendix A).

3.2 ENFIELD LOCAL PLAN 2019-2041 – TRANSPORT POLICIES

- 3.2.1. Chapter 13 of the ELP addresses movement and connectivity. Acknowledging the important role that transport plays in supporting residents and enabling growth, Enfield Council reaffirms its commitment to the Mayor's Transport Strategy objectives and particularly recognises the significance of mode shift in achieve these.
- 3.2.2. The transport policies call for development to contribute to these aims. The policies also prioritise the delivery of sustainable transport and recognise transport's role in addressing issues related to air quality and noise pollution as well.

Policy T1: a sustainable and decarbonised transport system

- 3.2.3. Set out in 'Part 1 Ensuring access to a fully connected sustainable transport network' is that new and planned transport investment will be required to support levels of planned growth. New development will be expected to facilitate sustainable transport solutions by safeguarding space, delivering improvements and actively seeking to reduce vehicle-based journeys. Sustainable movement of goods is also addressed and developments likely to generate significant goods movements will be required to submit additional evidence and contribute towards monitoring.
- 3.2.4. In 'Part 2 Increasing all active travel opportunities' an outline of how developments should contribute to supporting walking, cycling and public transport is provided. This includes pedestrian environment improvements in the form of suitable network connections, safety, signage, landscape and accessibility improvements. Cycle provision should comply with guidance (LTN 1/20 or successors) and include connecting to existing cycle network and green chains and providing accessible and secure cycle parking and facilities as per London Plan. With regards to public transport, it is stated that: *"Development should provide public transport infrastructure to safeguard and promote the provision of public transport in the Borough."* This includes contributing to the network infrastructure and its accessibility, as well as supporting the delivery of improved and new services in rural areas or when exceeding capacity.

Policy T2: a healthy and connected Enfield

- 3.2.5. 'Part 1 Active Travel and Mobility is part of a healthy lifestyle' points to Transport for London's (TfL's) Healthy Streets Indicators guidance for walking access and route improvements expected of developments, as well as setting out expectations of creating safer cycling and walking movements.



- 3.2.6. 'Part 2 Open spaces are green, multifunctional and accessible' details that developments will be expected to support healthy streets by encouraging a substantial shift from private car journeys to active transport modes by creating or contributing to the removal of through traffic, supporting low speed limits and providing new crossings and high-quality routes to destinations.
- 3.2.7. 'Part 3: Making transport choices which positively impact health and wellbeing' states that the Council will use the London Plan parking standards and will consider further reductions in car parking provision based on local constraint considerations, limits to the on-street or on-site parking permits and will consider redevelopment of existing car parks for alternative uses. Complementary measures such as car clubs are welcome as well as electric vehicle charging provision in compliance with the London Plan.

Policy T3: a vibrant and safe Enfield for everyone

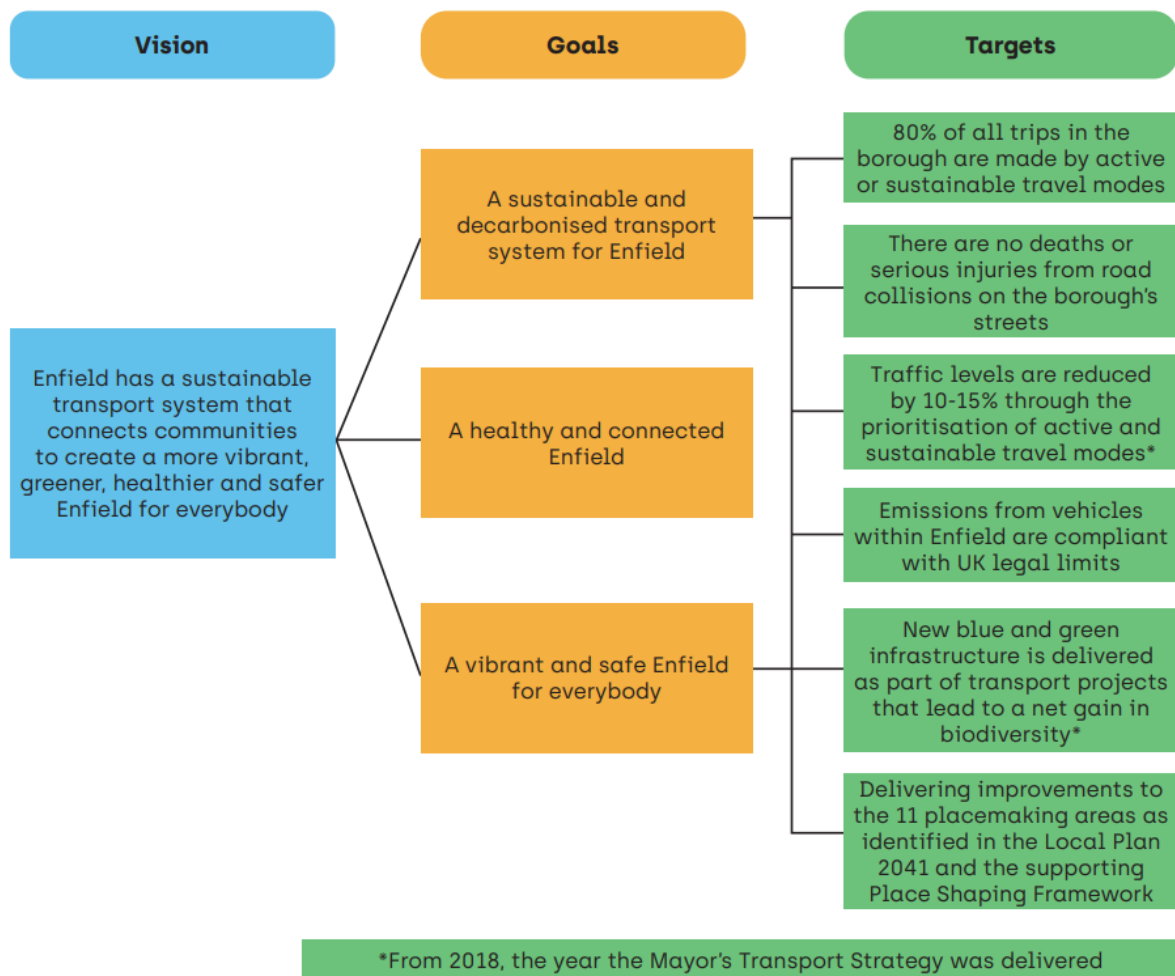
- 3.2.8. 'Part 1: Neighbourhoods are compact and mixed use' stipulates that developments that have a high degree of public transport connectivity and opportunities for active travel should either be designed as car-free areas or should encourage lower car usage by offering a low level of parking provision, as is set out in the London Plan. Additionally, the policy states that developments should offer "*well-connected, high quality, convenient and safe active travel routes both within and extending beyond the development site.*" Adding that the routes should be easy to navigate, permeable and well lit.
- 3.2.9. 'Part 2: Achieving 20 minute accessibility to destinations and services' focuses on the transport networks surrounding developments. It states the need for Transport Assessments (TAs) to identify key local services within an identified 20 minute active travel zone. For larger developments, all of these key local services should be available within the development area and active travel infrastructure should be in place prior to the occupation of the development. In addition, it is stated that developments should have a minimal impact on the existing transport network and should implement appropriate mitigation measures where potential additional traffic has been identified in a TA.
- 3.2.10. In 'Part 3: Feeling of safety on the Borough's roads', it is stated that developments are expected provide active travel routes both within and beyond the site which are well-connected, high quality, convenient, effective and efficient, which will ensure that these routes are both easy and safe to use. Where there is interaction with town centres, transport nodes, and quieter neighbourhoods, developments must promote road safety and traffic calming measures in residential areas and in pedestrian environments. Additionally, developments must build upon already existing transport networks, improving the safety of connections through enhancing pedestrian infrastructure including safe road crossings.

3.3 ENFIELD TRANSPORT STRATEGY 2024

- 3.3.1. The Enfield Transport Strategy 2024 sets out the borough's plans for improving its existing transport links and facilities and is aligned with the 2024 Local Plan. The Transport Strategy has been formed on the basis of a number of key challenges in the borough, including congestion, climate change and air quality, connecting rural and urban communities, place making, growth pressures, social equity and inclusion, changes to society, road danger, public health and funding.

- 3.3.2. In practice, Enfield Council will use this Transport Strategy to inform its annual programme of projects for delivery. This will cover interventions to its roads and pavements including cycle routes, pedestrian crossings, bus priority and schemes to reduce traffic congestion. Which will be delivered by its 'Journeys and Places', 'Highways', and 'Parking' teams who are integral to the delivery of the strategy. The Transport Strategy has been formed in line with local, regional and national transport strategies, however the TS sits as a definitive document.
- 3.3.3. This document sets out an overarching vision, goals for reaching this vision, and key targets for success. The delivery of the strategy's Vision and Goals will form the basis of the solutions to the Borough's challenges and are expected to help deliver the strategy's target.

Figure 3-1 - The TS vision, goals and targets (source: Enfield Transport Strategy, LBE, 2024)



- 3.3.4. By linking the outcomes back to the vision, goals and targets, as well as identifying the indicators for each benefit, Enfield is also able to better understand the impacts of the strategy by tracking and monitoring from a consistent baseline. For this purpose, Benefits and associated Indicators are also identified in the TS.
- 3.3.5. Furthermore, the TS recognises that transport is a major source of carbon emissions and pollutions, for this reason transport outcomes are linked to the Enfield [Climate Change Action Plan 2024](#).

4 SUMMARY OF THE MAIN TRANSPORT EVIDENCE PRODUCED AND THE OUTCOMES

4.1 TRANSPORT EVIDENCE PROCESS AND METHODOLOGY

- 4.1.1. The ELP transport evidence base helps to identify opportunities for mode shifting to a more sustainable transport pattern. The evidence produced includes an assessment of both the existing and committed growth, as well as of the proposed Local Plan.
- 4.1.2. The methodology followed includes both a “predict and provide” and a “vision and validate” approach. A quantitative assessment of the highway and public transport network capacity was carried out using TfL’s strategic modelling suite including:
- MoTioN, a Multi-modal strategic transport ‘mode of travel’ in London model.
 - LoHAM, a strategic London-wide highway assignment model.
 - Railplan, a public transport strategic model.
- 4.1.3. The transport modelling analysis methodology and approach were discussed and agreed with TfL at project inception. The modelling process included:
- Establishing the ‘fitness for purpose’ of the models through review of the baseline scenario and discussion with TfL and the local highway authority. This included a model review audit and a local model validation process.
 - Building the ‘future year’ baseline model scenario capturing development and infrastructure completions and secured growth only.
 - Building the ‘future year’ new Local Plan growth model scenario, including option testing.
 - Assessing the impact of ‘future year’ new Local Plan growth scenarios by ways of comparison with the Future Baseline.
 - Testing the validity of potential mitigations through modelling.
- 4.1.4. Alongside the quantitative approach, a qualitative review of the policy, best practice and transport data was carried out to map transport trends and patterns, the network coverage and accessibility and to identify solutions to deliver the most sustainable transport solutions.
- 4.1.5. The qualitative transport review applied a ‘Vision and Validate’ approach with the aim of enabling existing and future communities to choose public transport, walking and cycling increasingly as preferred ways of movement, by identifying the local infrastructure solutions, policies and strategies to deliver the modal shift.
- 4.1.6. The transport evidence preparation submitted in the Examination Library includes a selection of deliverables prepared through Regulation 18 and 19 of the ELP review process.
- 4.1.7. This process was documented in a series of technical notes and reports, shared with TfL and National Highways (NH), Network Rail (NR) and local highway authorities for the purpose of agreeing a methodology, and presentations for Duty to Cooperate (DtC) engagement.
- 4.1.8. Following the transport assessment and movement studies, the Infrastructure Development Plan was prepared to evidence the transport infrastructure gaps and needs. LBE have since updated the draft IDP to include a list of site allocations specific transport needs.

4.1.9. Following on is presented a brief summary of the contents of the transport related evidence previously listed in Table 2-1.

4.2 INFRASTRUCTURE DELIVERY PLAN (IDP)

4.2.1. The Council has produced the draft IDP to identify the infrastructure necessary to support the delivery of the emerging Enfield Local Plan to 2041. The information within the IDP is still emerging along with the evidence base and the more detail information related to specific site allocations. The IDP will be updated further prior to the submission of the Local Plan to the Secretary of State.

4.2.2. Developers and landowners are expected to use the IDP to help identify the infrastructure requirements they need to consider providing over the plan period. It is expected that the details of infrastructure provision will be confirmed at planning application stage in order to meet the needs of each site allocation. Transport Assessment/Statement will confirm the infrastructure sought for each allocation/phase of development.

4.2.3. National Planning Practice Guidance identifies a range of costs to be considered as part of a Local Plan viability assessment. Infrastructure partners have identified that several site allocations should plan for significant on-site infrastructure. The most effective way to secure such infrastructure is via section 106 planning obligations. Further information about the infrastructure requirement costs for the strategic sites is currently being prepared through a Infrastructure Delivery Strategy for each of the sites.

4.2.4. The Whole Plan Viability Assessment provides a general cost per dwelling (to cover all infrastructure) based on the size of the proposed allocations, as identified below:

- Small (1-9 units) £2,500 per unit
- Medium (10 -99 units) £5,000 per unit
- Large (100-249 units) £7,500 per unit
- Very Large (250 units) £9,000 per unit
- For the strategic sites¹ a base assumption £50,000 per unit, supplemented by scenario tests at various per unit increments.

4.2.5. These general costs do not include the expected CIL liability. Expected CIL income over the Plan period is estimated to be in the region of: £116,000,000.

4.2.6. There are many potential funding options available to the Council and its partners to use to provide infrastructure during the Plan period. These include:

- Local Implementation Plans
- Transport for London Funding
- Government Departments/agencies
- Borough Council Capital Spend

¹ 'The modelling includes the 2 potential strategic sites being Chase Park and Crews Hill, and the elements of Meridian Water.' (2023 Whole Plan – Viability Update, HDH Planning and Development, 2023) under Local Plan Examination Library reference [VIA1](#)

- 4.2.7. The IDP Appendix 1 sets out the site-specific infrastructure requirements for the site allocations/or parcel allocations within the Local Plan, it categorises infrastructure based on when provision will be needed as 'essential', 'important' and 'desirable'.

4.3 STRATEGIC TRANSPORT ASSESSMENT (STA)

- 4.3.1. The STA reports the policy framework, the baseline network review, the forecasting and modelling processes as well as the transport needs, mitigations and monitoring processes resulting from the ELP transport assessment review. The STA was published in support to the Regulation 19 consultation.
- 4.3.2. The STA concludes that the committed and planned future infrastructure and transport programmes described in the STA and IDP will provide the basis to facilitate modal shift and safe operation of the transport network, supporting the Local Plan growth.
- 4.3.3. It is recognised that the Council will have to continue to invest significantly in sustainable transport infrastructure, road safety mitigation measures, transport related noise and air quality management, and public transport improvements. This will involve working alongside National Highways, TfL, Network Rail, adjacent local authorities and transport operators.
- 4.3.4. Following on is provided a summary of the STA outcomes by topic.

Active Travel Network

- 4.3.5. Currently the cycle network in Enfield serves some important routes such as the A1010 and the A105 however, the areas of significant Local Plan growth are not all served by consistent standard of cycle infrastructure.
- 4.3.6. Key growth areas around Meridian Water, Chase Park and Crews Hill will require upgrade of existing cycle provision or new cycle infrastructure to realise their modal shift potential.
- 4.3.7. Furthermore, as identified by [TfL's Cycling Action Plan](#) 'Potential cycle corridors', there are strategic routes in Enfield that would benefit from cycle infrastructure:
- Theobald's Park Road and Clay Hill Road linking Crews Hill site allocation.
 - A110 Enfield Road, Slade Hill, Southbury Road linking Chase Park site allocation, Enfield Town, Sainsbury's & Morrison's site allocations and Ponders End.
 - A10 Great Cambridge Road north-south corridor.
 - A1055 Meridian Way linking Meridian Water site allocation.
- 4.3.8. As well as good quality routes, cycle parking infrastructure will need to be strengthened at transport hubs, local centres and key leisure and services destinations and provision of cycle facilities promoted on employment site allocations.
- 4.3.9. The Council has recently concluded a borough wide cycle network development review, including identification of new proposed cycle corridors. This review includes the cycle network expansion to link all Local Plan site allocations.



- 4.3.10. Through the [Local Implementation Plan](#) (LIP) Programme² TfL works with the local authorities to deliver transport schemes, with the objective to meet the Mayor Transport Strategy and London Plan objectives. Currently, LBE receives circa £1.3M per annum plus additional discretionary funding for cycle network development and bus priority.
- 4.3.11. Funding however remains a constraint and Enfield will seek additional funding where possible for measures that comply with Enfield's Transport Strategy and Infrastructure Delivery Plan list of schemes.

Public Transport - Rail

- 4.3.12. The rail network shows minimal change and no constraints on the line capacity in the borough, with only the following changes being observed:
- In the morning peak period crowding change from “no passenger standing” to “1-2 passenger standing/sqm” seen at Grange Park to Winchmore Hill and Bush Hill Park to Edmonton Green.
 - In the evening peak period crowding change from “no passenger standing” to “1-2 passenger standing/sqm” seen at Winchmore Hill to Grange Park; crowding change from “1-2 passenger standing/sqm” to “2-3 passenger standing/sqm” at Seven Sisters to Bruce Grove and White Hart Lane.
- 4.3.13. This is considered an acceptable level of crowding, as defined by operators' guidelines.
- 4.3.14. Great Northern have applied for funding to make Enfield Chase and Gordon Hill step free, and conversations are ongoing on medium-long term Network Rail programme for the West Anglia Main Line, Great Northern and with TfL for London Underground and Overground Lines.
- 4.3.15. Further improvements for step free access, as well as improvements to upgrade stations and nearby areas as interchanges, with active travel and buses, are considered in the developing the IDP to deliver a better experience for passengers and increase travel by sustainable modes.
- 4.3.16. The Council will continue to discuss rail network and related improvements with Network Rail, operators and TfL.

Public Transport - Buses

- 4.3.17. The public transport model predicts significant increases in bus demand, some of which in areas that have excellent bus frequency and high demand already, such as Enfield Town, the A1010 and the A406 corridors.
- 4.3.18. As a result of the Local Plan, several bus services are at risk of becoming overcrowded, furthermore the bus network coverage does not extend as far as some of the major site allocations. The constraints on the bus network have been identified as:

² LIP funding is the process through which TfL provide boroughs with financial support. The funding is for schemes to improve their transport networks in a way that is consistent with and supports the Mayor Transport Strategy.

- Crowding - Route 313 westbound
 - Crowding - Route 491 northbound
 - Crowding - Route 191 southbound
 - Crowding - Route 313 westbound (already over capacity in Future Baseline)
 - Crowding - Route 192 southbound
 - Crowding - Route 307 westbound
 - Network coverage in proximity of the Crews Hill, Chase Park, Meridian Water and the Upper Lee Valley Opportunity Area corridor
 - Night-time and 24-hour bus service coverage does not extend to service new major Enfield site allocations, such as Chase Park, Crews Hill and Meridian Water.
- 4.3.19. Consideration should be given to extending the bus network, including the night-time bus services to achieve modal shift for existing and new passengers travelling at those times.
- 4.3.20. Enfield Council and TfL have already agreed a comprehensive package of interventions that will improve bus network coverage, capacity and connectivity to support the homes and jobs planned at Meridian Water ([TfL Bus Action Plan](#)). These include:
- Expanding the bus network so it connects the site to local rail stations, increasing the number of destinations.
 - Establishing a central public transport and active travel spine.
 - Ensuring high-quality bus priority remains at the heart of the development.
 - Restructuring and simplifying local bus routes to integrate the site with neighbouring communities and town centres.
 - Redirecting local bus routes away from the A406, which offers a poor walking and waiting environment for bus customers.
 - The Superloop service helps to alleviate and improve the passenger demand and experience along the A406.
- 4.3.21. Following Regulation 19 publication Enfield and TfL have also discussed in more detail a possible package of bus mitigations for Crews Hill and Chase Park. Possible service changes at these locations have been tested through strategic transport modelling, indicating there would be good demand to support new services at these locations.
- 4.3.22. A bus improvement package for Crews Hill and Chase Park will include:
- Provision of new bus stops, shelters and driver welfare facility on site.
 - Provision of new bus stops and shelters along existing highways in proximity of the site allocations.
 - Provision of new routes suitable for buses, turning spaces and bus cages to accommodate bus network extension.
 - Pump Priming (time limited financial contribution) to pay for existing bus route diversion and/or new bus route provision at the sites.
- 4.3.23. TfL regularly monitors the performance of buses, including their usage, speed and reliability. TfL and the Council will work together to identify opportunities for developments to contribute to public transport capacity improvements through S106 contributions.
- 4.3.24. Tackling the constraint in bus capacity as well as opportunities to improve service frequency and capacity, will be important. Enfield and TfL will work jointly on managing road space on



the following corridors, which experience high demand both currently and in the future, aiming to deliver reliable bus services as one of the objectives:

- The A110 between the A111 to the west and the A1010 to the east.
- The A1010 between Edmonton and south of the A406.

Strategic Road Network

- 4.3.25. The assessment carried out indicates that the M25 junctions serving London Borough of Enfield, Junction 24 and 25, experience some level of delay at present and will continue to do so in the future. It should be noted that Junction 25 upgrades were completed in 2022 including pedestrian and cycle facilities.
- 4.3.26. National Highways will continue to monitor the performance of the network and will discuss with Enfield next steps as part of the ongoing cooperation process. In particular, a mitigation plan for Junction 24, consisting of a formalised two-lane circulatory movement between the eastbound off-slip and the on-slip roads was tested through modelling, discussed and agreed in principle with National Highways and the adjoining local highway authority Hertfordshire County Council.
- 4.3.27. The A10 and A406 are part of the Transport for London Road Network (TLRN) and cater for significant Enfield and longer journey travel and freight movement. The modelling assessment indicates that the Future Baseline is likely to be affected by congestion and delay, to a similar degree as the base year, and that some additional effects can be expected at the following locations as result of the Local Plan:
- A10 junction with A110 Southbury Road
 - A10 junction with Church Street
 - A10 junction with Bullsmoor Lane
 - A406 approaches
- 4.3.28. TfL and Enfield will monitor the locations likely to be affected and, TfL in the capacity of TLRN operator, will continue to explore opportunities to improve the A10 and A406 corridors and maintain a fit for purpose TLRN network, safe and adequate to cater for the future demand.
- 4.3.29. TfL has indicated that site allocation bounding the A406 and A10 should not have direct access to the TRLN, and that they will work with Enfield to mitigate car-dependant demand from new development minimising parking provision and providing sustainable travel alternatives.

Local Highway

- 4.3.30. The local road network remains largely under similar capacity pressure as per the baseline context. Localised highway effects, as result of the Local Plan, can be observed in proximity of:
- Stag Hill junctions with Waggon Road, Beech Hill and Cockforsters Road with major changes observed in junction delay.
 - A110 junctions with Bincote Road/Trentwood Side, Links Side, Chase Side and the London Road approach south of Enfield Town.
 - The Ridgeway junction with Lavander Hill.

- 4.3.31. Considering the moderate and major significance of the effects, these should be considered in more detail, however details of the highway proposals relating to the site allocations at Crews Hill and Chase Park are expected to be developed at later stage, through Spatial Planning Documents (SPD) and planning applications.
- 4.3.32. It is therefore recommended that the highway corridors identified enter a framework of monitoring, and that more detailed work on how these trips access the highway network is carried out as the proposals develop. In particular development proposals should carry out more detailed modelling and road safety reviews to scope out specific interventions. Any highway proposals alongside the identified Enfield new proposed cycle corridors will be required to accommodate and incorporate active travel solutions in its design.
- 4.3.33. This has been captured through the IDP for the site allocations at Crews Hill and Chase Park in particular, indicating that on-site and off-site highway mitigations should be defined through more detailed modelling and road safety reviews. The Council expects that these mitigations will meet the ELP policy and will cater for all users with a particular focus on delivering improvements that actively seek to reduce vehicle-based journeys.
- 4.3.34. In relation to highway capacity impacts, it should be noted that the demand model MoTioN captures the travel mode share and distribution the basis of the 'committed and funded' only future transport network. The London Plan mode shift objectives, and therefore the Council mode shift targets, are reliant on a number of major schemes which are planned only.
- 4.3.35. Further efforts will continue to be made to manage highway demand arising from the Local Plan, especially for short-medium length trips by bolstering the access and developing the network of sustainable travel in the areas affected.
- 4.3.36. This, jointly with the application of the development management transport policies, the delivery of the LIP programme, will aid the modal shift for the affected areas to move from private vehicle use to sustainable travel modes.

4.4 MODELLING OUTPUTS (ALL)

- 4.4.1. The modelling outputs capture the key transport modelling processes, providing the depth of information required to evidence the robustness of the assessment and to detail the modelling outcomes. The modelling outputs provide the detailed information informing the Strategic Transport Assessment.
- 4.4.2. Like the STA this information was published in support of the Regulation 19 consultation.
- 4.4.3. The Modelling Outputs (1 through 4) include:
- Local Model Validation Report – Railplan
 - Local Model Validation Report – LoHAM
 - Forecast Assumptions Technical Notes – MoTioN
 - Transport Modelling Outputs - Model outputs for Future Baseline and Local Plan scenarios and difference plots for metrics such as Demand changes, Actual Flows, Delays, Volume over Capacity and passenger line loading and crowding levels.



4.5 CREWS HILL AND CHASE PARK TRANSPORT AND MOVEMENT BASELINE ANALYSIS

- 4.5.1. These studies have been first prepared following Regulation 18 consultation to map out in more detail the site allocations specific transport context. The studies are based on existing transport conditions, identified through available databases and mapping information, and a review of the Baseline Transport evidence submitted for Regulation 18 (TRA8, TRA9 and TRA10) with the aim to provide an insight into the multi-modal transport opportunities and constraints for each site.
- 4.5.2. These studies form the basis for the spatial site capacity assessment and placemaking studies, the outcomes of which are captured in the Crews Hill and Chase Park Topic Papers (PLA1 and PLA2) and Spatial Frameworks (PLA3 and PLA4).

4.6 TRANSPORT BASELINE REVIEW AND RELATED DOCUMENTS

- 4.6.1. The transport assessment executive summary provides a succinct review of the Transport Baseline and Transport Baseline Model Reviews, carried out in support of Regulation 18 consultation.
- 4.6.2. The Transport Baseline Model Study Areas identifies the agreed areas of influence and local model extent relevant to Enfield and the ELP, including in matters of air quality.
- 4.6.3. The Transport Baseline Review and appendices provides a comprehensive review of the policy framework including National, Regional and adjacent local planning authorities' relevant policies and best practice guidance.
- 4.6.4. Furthermore, it provides a summary of the relevant transport studies and outcomes providing a context of the Enfield transport networks opportunities and constraints, in relation to the policy objectives.

5 DUTY TO COOPERATE AND TRANSPORT RELATED STATEMENTS OF COMMON GROUND (SOCG)

5.1 DUTY TO COOPERATE (DTC) ENGAGEMENT

- 5.1.1. Throughout the preparation of the ELP evidence, LBE engaged with stakeholders and their input has informed transport evidence, policies and proposals that reflect local needs.
- 5.1.2. Enfield has published a comprehensive [Duty to Cooperate Statement](#), following on is a summary of DtC transport related engagements to date:
- April 2021 – TfL, National Highways, Network Rail and adjoining boroughs – Introduction to the Local Plan, Assessment Approach and Baseline review.
 - July to September 2021 – TfL, National Highways, Network Rail and adjoining boroughs – Update on programme and engagement, assessment progress, Regulation 18 Plan approach (emerging spatial strategies, placemaking areas, growth typologies), policies.
 - June to September 2021 – Draft Local Plan public consultation.
 - October 2022 to January 2023 – TfL, National Highways and Network Rail – Forecast assessment assumptions.
 - July to September 2023 – TfL, National Highways, Network Rail and wider adjoining planning and highway authorities – Summary of Local Plan consultations, Local Plan update and Transport Assessment outcomes, follow on actions.
 - March to September 2024 – LB Barnet, Broxbourne Council , TfL and National Highways – Outstanding matters.

5.2 OUTSTANDING AND ONGOING MATTERS

- 5.2.1. Following Regulation 19 plan publication, representations were received on transport matters, outstanding and ongoing matters are summarised in the tables below.
- 5.2.2. This represents the status of outstanding matters as of October 2024, we anticipate that the Council continue to engage with stakeholders to find a resolution and relevant Statement of Common Grounds will be updated accordingly.

Broxbourne Council

Table 5-1 – Broxbourne Council Outstanding and Ongoing Matters

Outstanding Matter Raised	<ul style="list-style-type: none"> ■ Broxbourne has concerns about the accuracy of the traffic modelling work underpinning the Enfield Local Plan, in particular arising from the proposals for 5,500 new dwellings at Crews Hill, together with the cumulative impacts of this development and the proposed employment allocation West of Ramme Marsh for at least 70,200sqm of light industrial, storage and distribution, and related sui generis floorspace. ■ Broxbourne Council has been working with Hertfordshire County Council to develop a package of interventions on and relating to the A10, to be funded through the Department for Transport’s Major Road Network (MRN) scheme. The Council has concerns that if the modelling undertaken by WSP on behalf of Enfield Council underestimates the impacts on junction capacity in Broxbourne, this could have adverse implications for the proposed interventions currently under development on the A10 north of the M25.
LBE response	<ul style="list-style-type: none"> ■ LBE and WSP on behalf of LBE have met Broxbourne Council representatives and have reviewed the modelling assumptions underpinning the HCC/Broxbourne A10 interventions work.

<ul style="list-style-type: none"> Overall comparing the traffic modelling that BC and LBE have undertaken is not a robust argument as it means comparing two different traffic modelling exercises. Although the starting highway models are TfL's models, Broxbourne used TfL's East London Highway Model (ELHAM) with a base year of 2013 and Enfield used London Highway Assignment Model (LoHAM) with a base year of 2016, locally validated with 2019 surveys. The TfL versions are different (Enfield's is more up to date), informed by different "demand" models, and validated to a different locality to inform a robust assessment one in Broxbourne and one in Enfield. Under these circumstances it should not be assumed that the traffic modelling results should be the same, as this will never be the case. The transport modelling work underpinning the LB Enfield Local Plan used the latest available transport models that TfL could provide at the time, and WSP have undertaken the assessment for Enfield's Local Plan in line with industry guidance and in consultation and agreement with TfL and National Highways. Therefore, the Enfield Local Plan transport modelling evidence is robust, and the outcomes evidenced are valid for the purpose it is intended, the assessment of the Enfield Local Plan impacts.
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Transport For London

Table 5-2 – TfL Outstanding and Ongoing Matters

Outstanding Matter Raised	<ul style="list-style-type: none"> SP EI Employment and Growth TfL reiterates its concern about the identification of employment sites in the Green Belt with relatively poor public transport connectivity including land east of junction 24 (RUR.04). This site is likely to be car dependent and difficult to serve by public transport or to reach by active travel. The site would therefore only be suitable for employment uses with very low staff to floorspace ratios and traffic generation to and from the site should not result in increases to road capacity that facilitate greater traffic volumes within London.
LBE response	<ul style="list-style-type: none"> LBE acknowledges that there is a demand for employment land from industries reliant on good access to strategic road network. LBE have not considered detailed employment land uses associated with the site allocation. We note the comment, and we welcome discussion on this at examination.
Outstanding Matter Raised	<ul style="list-style-type: none"> SP HI Housing Development Sites TfL do not believe that sites at Chase Park (PLIO) SAIO.1 - SAIO.4, sites at Crews Hill (PLII) SAIL.1-SAIL.6, land opposite Enfield Crematorium RUR.01 and land between Camlet Way and Crescent West, Hadley RUR.02 are suitable sites for housing because of the very poor transport connectivity and the exceptional costs that would be incurred in providing access by sustainable modes of transport to a standard that would make them comparable to urban housing sites in the borough. If these sites were to come forward, they are likely to result in car dependent development contrary to the Good Growth objectives of the London Plan and the NPPF.
LBE response	<ul style="list-style-type: none"> LBE is aligned with TfL on Good Growth and London Plan policies, however LBE is seeking to provide improved transport connections and make the site allocations sustainable through IDP, Transport Strategy and placemaking policies – please refer to the Crews Hill and Chase Park Topic Papers. LBE will consider site specific policies through further supplementary planning document evidence development. LBE will work with TfL to enable delivery of sustainable travel solutions at these sites.
Outstanding Matter Raised	<ul style="list-style-type: none"> SP PL2 Southbury TfL welcome the addition of the statement: 'Contributions will also be sought to increase station capacity and to improve station access.' Gateline capacity could be increased within the existing station. However, step free access may need a wider reconfiguration of the station, and at least access to land adjacent to the station.
LBE response	<ul style="list-style-type: none"> The STA assessment does not indicate a line capacity issue at this station and considering the frequency of services it is unlikely to pose a safety issue. WSP have undertaken ticket gateline calculations and this indicates that there is no additional

	<p>ticket gateline requirement as result of the Local Plan. LBE will, as part of the IDP and Transport Strategy work, review in more detail Southbury station and capacity impacts and opportunities to deliver a step free access and improved gateline capacity will be discussed with TfL.</p>
<p>Outstanding Matter Raised</p>	<ul style="list-style-type: none"> ■ SSI - Spatial Strategy ■ SP PL9/SP PLII ■ Crews Hill and Chase Park <p>TfL has raised concerns with the Council about the lack of detail on transport proposals, the need for car parking to be limited, and the costs and feasibility of providing the level of public transport provision in the proposed context (eg densities, parking, etc) which would be necessary to support Good Growth in line with the London Plan.</p> <p>Furthermore, TfL is concerned about the lack of a costed and agreed Infrastructure Delivery Plan for the two sites is a particular concern. From documents seen to date, Enfield's consultants have substantially underestimated the costs of providing new bus services, indicating that the level of service suggested in the placemaking strategies may not be deliverable.</p> <p>TfL is concerned that a 'worst case' highway modelling approach could result in high car mode share assumption and undermine public transport provision. TfL notes the STA does not support a mode share target of 75 per cent and requires further work to be done.</p>
<p>LBE response</p>	<ul style="list-style-type: none"> ■ LBE will continue to work with TfL throughout the examination process and the development of Supplementary Planning Documents for the areas of Crews Hill (PLII) and Chase Park (PLIO) to resolve any outstanding issues/concerns. Further detail on the strategy to provide high frequency sustainable modes of transport to these areas have since been discussed between LBE and TfL bus colleagues. The updated Infrastructure Development Plan (IDP) published 30 September 2024 contains details of infrastructure requirements for both PLII and PLIO in line with latest discussions. ■ As "worst case" the STA assumes Crews Hill and Chase Park will have levels of car use comparable to the existing levels in the surrounding areas. These levels are within the London Plan car parking policy, and no further mitigation was applied as part of the "worst case" STA testing. <p>Following further consultation with TfL colleagues WSP/LBE will provide an updated modelling test in line with TfL Reference Case car mode share assumptions for the Local Plan for review and inclusion in the evidence base. This modelling scenario will be representative of the London Plan aspirations for mode share and will provide a range of forecast for highway related impacts that will need to be further explored on a site by site basis when proposals are brought forward.</p>

National Highways

Table 5-3 – National Highways Outstanding and Ongoing Matters

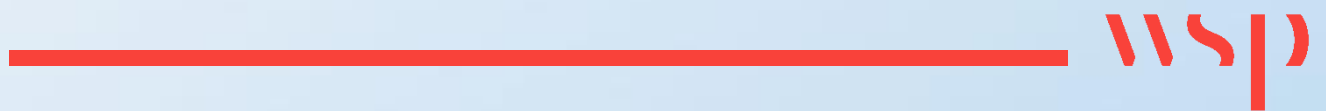
<p>Outstanding Matters Raised</p>	<ul style="list-style-type: none"> ■ Junction 24 of M25 ■ Initial modelling outputs indicated some delays that would "<i>ordinarily require some form of mitigation in line with the Circular 01/22 requirement to future proof the network.</i>" Following more detailed review of the modelling assumptions and the potential impact further evidence was presented indicating that a minor delay can be expected at Junction 24. ■ A mitigation scheme was agreed in principle and tested through modelling, National Highways have requested this be documented in a drawing, discussed and agreed in principle with Hertfordshire County Council (local highway authority) and a road safety review be undertaken.
<p>LBE Response</p>	<ul style="list-style-type: none"> ■ LBE are currently working to address National Highways requests and will be providing an updated Statement of Common Grounds in due course.

6 SUMMARY AND CONCLUSION

- 6.1.1. The Local Plan has outlined a target for the delivery of 30,000 plus homes over the next 20-plus years, consistent with GLA targets. The Transport Assessment underpinning the Local Plan growth analysis, and the supporting Infrastructure Development Plan and Transport Strategy illustrate that the Enfield network is, and can be made, fit for purpose to accommodate this growth.
- 6.1.2. To facilitate this, a comprehensive constraints and gap analysis was carried out benchmarking the coverage, operation and capacity of the borough network to accommodate the projected growth outlined in the Local Plan.
- 6.1.3. The TfL strategic modelling suite, including forecast demand model (MoTioN), highway assignment model (LoHAM), and public transport model (Railplan) have been interrogated to determine future capacity constraints and gaps in the transport network. The work was rigorously assured by TfL, with outputs shared and discussed extensively with stakeholders including National Highways, Network Rail, and adjoining local planning and highway authorities.
- 6.1.4. The assessment of the transport network's capacity to manage the Local Plan demand involved benchmarking the Future Baseline and Local Plan scenarios, revealing several constraints and gaps across all scenarios in the multi-modal transport.
- 6.1.5. Overall, the review indicates that committed and planned future infrastructure and transport programmes, combined with ongoing Council investment in sustainable transport initiatives such as new infrastructure, road safety, noise and air quality management, and public transport improvements, in collaboration with TfL and Network Rail will provide a robust basis to facilitate a modal shift and safe operation of the transport network. Thereby supporting the growth and development outlined in the Local Plan.

Appendix A

POLICY DOCUMENTS SUMMARY



NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

The reader should note that the ELP was prepared and will be examined under the NPPF updated version published in December 2023.

Several paragraphs within the NPPF are of relevance to transportation in the Local Plan making process. They emphasise achieving sustainable development, transportation planning, and integration with land use policies.

Here are some key paragraphs and their significance:

- Paragraph 8: Achieving Sustainable Development

Paragraph 8 states that “*achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways*”: an economic objective, a social objective and an environmental objective.

- Paragraph 11: Presumption in favour of sustainable development

Paragraph 11 states that “*plans and decisions should apply a presumption in favour of sustainable development. For plan-making this means that:*

- all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;*
- strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:*
 - the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area; or*
 - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”*

- Paragraph 15 and 16: Plan-making

Paragraph 15 outlines the priorities of a plan-led planning system, plans should be up-to-date, set a vision, provide a framework for housing, economic, social and environmental priorities and be a platform for local people to shape their surroundings.

Paragraph 16 states “*Plans should:*

- be prepared with the objective of contributing to the achievement of sustainable development;*
- be prepared positively, in a way that is aspirational but deliverable;*
- be shaped by early, proportionate and effective engagement between planmakers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees;*
- contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals;*
- be accessible through the use of digital tools to assist public involvement and policy presentation; and*
- serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area (including policies in this Framework, where relevant).”*

- Paragraph 17, 18 and 19: The plan-making framework

Paragraph 17 states that “the development plan must include strategic policies” to address local authorities’ priorities.

Paragraph 18 introduces the development plans as joint or individual local plans and/or spatial development strategies produced by an elected Mayor or combined authority.

Paragraph 19 clarifies that the development plan for an area comprises both strategic and non-strategic policies which are in force at a particular time.

- Paragraph 20 to 23: Strategic policies

Paragraphs 20 to 23 outline the strategic policy function, these should make provision for housing, infrastructure, community facilities and conservation and enhancement of the natural built and historic environment. Strategic policies should have a minimum period of 15 years lookahead and should be supported by diagrams, designation and land use allocation policy maps.

- Paragraph 24 to 27: Maintaining effective cooperation.

Paragraphs 24 to 27 reinforce the duty to cooperate with local planning authorities, county councils and prescribed bodies on strategic and cross boundary matters. In particular, joint working is encouraged to identify additional infrastructure and development needs.

- Paragraph 28, 29 and 30: Non-strategic policies

Paragraphs 28, 29 and 30 introduces the scope of non-strategic policies and neighbourhood planning. Non-strategic policies should be used to set more detailed policies for specific areas. Neighbourhood planning gives communities the power to develop a shared vision for an area. Whilst the neighbourhood plan should not seek to promote less development than set in strategic policies, once adopted it takes precedence over non-strategic local plan policies.

- Paragraph 31, 32 and 33: Preparing and reviewing plans

Paragraph 31 states:” *The preparation and review of all policies should be underpinned by relevant and up-to-date evidence. This should be adequate and proportionate, focused tightly on supporting and justifying the policies concerned, and take into account relevant market signals.*”

Paragraphs 32 and 33 set the timescale for the local plan, and a spatial policies review to five years. The reviews should account for local circumstances as well as policy changes. The evidence supporting the local plans should be informed by a sustainability appraisal, addressing economic, social and environmental objectives. Significant adverse effects should be avoided or mitigated.

- Paragraphs 108 to 113: Promoting sustainable transport.

Paragraphs 108 to 113 highlight the importance of promoting sustainable transport through early consideration of transport issues in planning and development proposals. It highlights the need to address potential impacts on transport networks, utilise existing or proposed transport infrastructure efficiently, and identify opportunities to promote walking, cycling, and public transport.

The planning system should focus significant development on sustainable locations to reduce congestion, emissions, and improve air quality and public health. Planning policies should support mixed-use areas, involve local authorities and transport providers, protect critical infrastructure sites, and provide for well-designed walking and cycling networks.



Additionally, policies should consider local parking standards based on accessibility, public transport availability, and car ownership levels, with maximum parking standards justified by clear necessity. Adequate overnight lorry parking facilities are also emphasised to reduce the risk of parking issues in locations lacking proper facilities.

The NPPF provides clear guidance and requirements for integrating transportation considerations into the Local Plan making process. By adhering to these principles and policies, local planning authorities can promote sustainable transportation solutions, create accessible and well-connected communities, and contribute to the overall objectives of sustainable development.

PLANNING PRACTICE GUIDELINES (PPG)

A planning guidance of relevance was published in 2025 to help local authorities to assess and reflect strategic transport needs in Local Plan making. This guidance addresses the importance of establishing a transport evidence base for Local Plans highlighting the purpose of transport evidence and listing key issues that should be considered in developing the transport evidence base.

The PPG details when the transport assessment should be undertaken alongside the Local Plan review, including what baseline information, transport considerations and site allocation should form part of a robust assessment.

LONDON PLAN 2021

The London Plan emphasises creating a sustainable, accessible, and integrated transportation network that supports the city's growth and enhances the quality of life for all Londoners. The vision prioritises active travel, public transportation, and measures to reduce car dependency and air pollution.

The London Plan promotes walking, cycling, and public transport as the preferred modes of travel in the city. It seeks to increase the share of trips made by sustainable modes and reduce reliance on private car travel, particularly for shorter journeys.

The plan prioritises improving public transport accessibility and connectivity, ensuring that all Londoners have convenient access to high-quality public transportation services. It emphasises the need to invest in public transport infrastructure, enhance service frequencies, and improve accessibility for people with disabilities.

The London Plan includes policies to promote the development of safe, attractive, and interconnected walking and cycling networks across the city. It encourages the provision of dedicated cycle lanes, pedestrian-friendly streets, and secure bicycle parking facilities to encourage active travel and enhance road safety.

The plan addresses the management of road space and traffic congestion, emphasising the need to prioritise sustainable modes of transport over private car travel. It supports measures such as road pricing, congestion charging, and low-traffic neighbourhoods to manage traffic volumes, reduce congestion, and improve air quality.

The London Plan highlights the importance of integrating transportation and land use planning to create sustainable communities and reduce the need for car travel. It encourages the development of mixed-use neighbourhoods with good access to public transportation, amenities, and employment opportunities.

The plan includes policies to promote environmental sustainability and improve air quality within Greater London. It supports measures to reduce vehicle emissions, increase the uptake of electric vehicles, and create cleaner and greener streets for all Londoners.

Overall, the Transport chapter of the London Plan provides a comprehensive framework for shaping transportation policies, investments, and initiatives across Greater London. It reflects the city's commitment to promoting sustainable modes of transport, enhancing public transportation services, and creating healthier, more liveable communities for residents and visitors alike.

The 2021 London Plan includes several policies specifically related to transport, aimed at shaping the transportation network, promoting sustainable travel modes, and integrating transportation with land use planning. Here are some key transport-related policies from the 2021 London Plan:

- Policy T1 Strategic approach to transport
- Policy T2 Healthy Streets
- Policy T3 Transport capacity, connectivity and safeguarding
- Policy T4 Assessing and mitigating transport impacts
- Policy T5 Cycling
- Policy T6 Car parking
 - Policy T6.1 Residential parking
 - Policy T6.2 Office Parking
 - Policy T6.3 Retail parking
 - Policy T6.4 Hotel and leisure uses parking
 - Policy T6.5 Non-residential disabled persons parking
- Policy T7 Deliveries, servicing and construction
- Policy T8 Aviation
- Policy T9 Funding transport infrastructure through planning

The London Plan 2021 advocates for '*good growth - growth that is socially and economically inclusive and environmentally sustainable*'. Through its transport specific policy objectives, the London Plan promotes sustainable travel and aims to achieve 80 per cent of London travel by public and active travel modes by 2041. The policy objectives aim to promote public transport schemes, with a promise to work with stakeholders to deliver schemes and safeguard land for future public transport improvements, as well promote active travel by securing walking and cycling infrastructure and by making the network safer reducing car travel and fossil fuel vehicle emissions.

The London Plan references transport specific schemes (Table 10.1 London Plan 2021), that will contribute to achieve the objectives set targeting Healthy Streets and active travel projects.

The London Plan is backed by the Mayor's Transport Strategy (TfL, 2018) which relies on the Healthy Streets approach, thus focusing on three principles:

- *'Healthy Streets and healthy people – streets make up 80 per cent of London's public spaces making them Healthy Streets will improve the quality of life for everyone in London.*
- *A good public transport experience - public transport is the most efficient way for people to travel distances that are too long to walk or cycle. A seamless, 'whole-journey' experience will provide an attractive alternative to using the car.*
- *New homes and jobs - London needs 65,000 new homes every year to meet demand, plus around 1.3 million more jobs by 2041. We have an opportunity to reshape London and make sure it grows in a way that improves the quality of life for everyone.'*



MAYOR TRANSPORT STRATEGY 2018

Overall, the 2018 London Mayor's Transport Strategy sets out a bold vision and a comprehensive set of policies to transform London's transportation network, promote sustainable travel modes, and improve the quality of life for all Londoners.

The Mayor's Transport Strategy is supported by Action Plans: the Bus Action Plan, the Cycling Action Plan 2, the Walking and Leisure Walking Action Plan, the Freight and Servicing Action Plan and the Vision Zero Action Plan and progress reports.

In the 2018 London Mayor's Transport Strategy, several references are made to outer London boroughs, recognising their unique transportation needs and priorities. Here are some specific references to outer London boroughs in the strategy.

- Improving Public Transport Accessibility

The strategy acknowledges that outer London boroughs often have lower levels of public transport accessibility compared to central and inner London areas. It highlights the importance of improving public transport services and connectivity in outer London to enhance accessibility and promote sustainable travel options for residents.

- Investment in Cycling Infrastructure

The strategy recognises the potential for cycling to play a greater role in outer London as a mode of transport for both commuting and leisure trips. It calls for investment in cycling infrastructure, including segregated cycle lanes, cycle parking facilities, and traffic-calmed streets, to encourage more people to cycle in outer London boroughs.

- Addressing Traffic Congestion

The strategy acknowledges the challenges of traffic congestion in outer London boroughs, which can impact journey times, air quality, and road safety. It supports measures to manage traffic volumes, improve traffic flow, and reduce congestion in outer London through initiatives such as intelligent traffic management systems and congestion charging schemes.

- Promoting Sustainable Travel Modes

The strategy emphasises the importance of promoting sustainable travel modes, including walking, cycling, and public transport, in outer London boroughs. It encourages the development of safe and attractive walking routes, cycling networks, and public transportation services to provide residents with viable alternatives to car travel.

- Integrated Transport and Land Use Planning

The strategy highlights the need for integrated transport and land use planning in outer London boroughs to create well-connected and sustainable communities. It calls for the development of mixed-use developments, employment hubs, and recreational facilities around public transportation nodes to reduce the need for car travel and enhance local amenities.

- Community Engagement and Participation

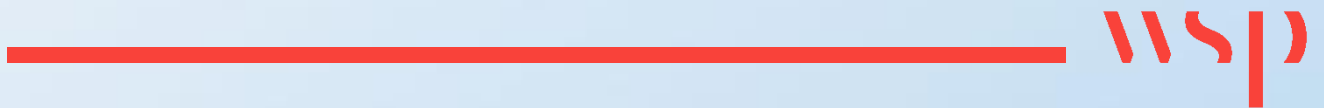


The strategy recognises the importance of engaging with communities and stakeholders in outer London boroughs to understand their transportation needs and preferences. It emphasises the importance of consultation and collaboration with residents, businesses, and local authorities in shaping transportation policies and initiatives that reflect the diverse needs of outer London communities.

Overall, the 2018 London Mayor's Transport Strategy acknowledges the specific challenges and opportunities facing outer London boroughs and outlines a range of policies and initiatives to improve transportation accessibility, promote sustainable travel modes, and enhance the quality of life for residents across the city's diverse neighbourhoods.

Appendix B

INFRASTRUCTURE DELIVERY PLAN EXTRACTS



Document last updated December 2024 and subject to change.

Crews Hill Infrastructure Requirements

Requirement	Description	Priority	Phasing Considerations	Delivery mechanism	Delivery Responsibility
Transport - On Site Highways					
New Highway Network	New highway network to support various development parcels. To include new on site primary and secondary roads, providing accesses to development plots. To include off residential plot allowances for visitor/external car parking in appropriate areas, as well as landscaping and street furniture.	Essential	Delivered based on phasing of the buildout of each parcel.	Construction costs	Developer
Widening work of Existing Highway Network	Within red line boundary, the key local highways of Cattlegate Road, Theobalds Park Road, Burntfarm Ride, Whitewebbs Road, E Lodge Lane. Widening to accommodate various needs, including right turn lanes, bus lanes, new cycleways and improved landscaping.	Essential	Delivered at an early stage, as widening work would be in conjunction with new local junctions to provide access to the site (see subsequent section).	S106/S278	Developer/EC
Upgrades to Existing Local Junctions	Assumed 4 upgraded junctions (assumed to be Northaw Road/Cattlegate Road, Theobald's Road/ Whitewebbs Road, Cattlegate Road/East Lodge Lane, East Lodge Lane/The Ridgeway). Scope of upgrades to be determined following detailed modelling as part of future work. Anticipated improvement could include localised widening (e.g. for right turn lanes), the provision of additional pedestrian crossings, or signalisation schemes.	Essential	To be determined based on phasing of buildout and associated trigger points	S106/S278	Developer/EC

Creation of New Local Junctions on existing highway network to enable access to various new development plots	Assumed 7 new junctions (3 on Cattlegate Road, 3 on Theobalds Park Road, 1 on Whitewebbs Road). Expected to be priority junctions with a major road central treatment i.e. right turn lane with a ghost island, and therefore accommodated in widened street sections. Junctions may also include the provision of pedestrian crossings, and signalisation schemes.	Essential	Delivered at an early stage, and in conjunction with widening work, in order to provide access to the site.	S106/S278	Developer
(Potential) Vehicular bridge over railway	1 potential new bridge across railway connecting east-west from Owls Hall Farm (SA11.1) to SA11.3 north of Crews Hill Station. New bridge connection considered essential for improved pedestrian/cycle connections and wider placemaking benefits, and desirable for it to be potentially upgraded/enhanced to enable vehicular/bus usage.	Desirable	Assumed delivered towards the end of the Plan Period or beyond, in conjunction with development parcels delivered north of Cattlegate Road.	S106	Developer

Public Transport					
Upgrades to Crews Hill Railway Station	Expected to be second entrance, widened staircases, lifts, and improvements to subways and concourses. Potential developer contribution to staffing costs.	Essential	Phased in line with growth in local population and usage of the station. Initial assumption that likely trigger of 2000-3000 homes and towards the end of the Plan period.	S106/CIL	Network Rail, Govia Thameslink Railway
New Bus Stops	6 (minimum) new pairs of bus stops on Cattlegate Road, and within the Crews Hill site, all assumed to include shelters.	Important	Cattlegate Road bus stop delivered at an early stage. Other bus stops delivered based on phasing of buildout.	S106	TfL, Developer, EC
New Bus Facilities	New bus facilities may include additional bus standing space at Crews Hill station, additional driver welfare facilities, and potential additional standing space. Measures to be evolved further and be based on final bus strategy to be developed with TfL as part of future work.	Important	Delivered based on phasing of buildout.	S106	TfL, Developer, EC
New Bus Route Pump Priming	Initial assumption there would be a new bus service between Chase Park and Crews Hill with 8 buses per hour, plus an extension of existing 456 service (no change in service frequency), and rerouting of Hertfordshire bus 313 through Crews Hill (no change in service frequency). Alternative options to be considered further, and potentially if a new bus route serves both Chase Park and	Important	Early pump-priming of routes will be needed prior to critical mass of new population to make routes viable. Delivered based on phasing of buildout.	S106	TfL, Developer

Requirement	Description	Priority	Phasing Considerations	Delivery mechanism	Delivery Responsibility
	Crews Hill then both developments could pump prime the cost of this.				
Micromobility Bays	6 x Bike, scooter hire and parking etc (1 per allocation sub-area). Based upon provision of circa 12 spaces/bays.	Important	Delivered based on phasing of buildout.	S106/CIL	Developer
Travel Plan	Softer measures and initiatives to encourage sustainable transport based on assumed £500/unit for travel vouchers, with a LBE Monitoring Fund in place over 20 years, and travel surveys to be undertaken by developers.	Important	Continuous during buildout, over 20 years.	S106	EC
Footways, Cycleways and Bridleways					
New Walking and Cycling Routes within development	New footways and cycleways within the development. Includes new pedestrian routes and existing to be upgraded.	Important	Delivered based on phasing of the buildout of each parcel.	Development costs / S106	Developer
Upgrades to Walking and Cycling Routes beyond development	Refer to walking and cycling network diagram in Spatial Framework for routes beyond Crews Hill Placemaking Area. Theobalds Park Road-Clay Hill Road is identified for a cycle corridor and a number of cycle route upgrades, new cycle routes, and green links in the vicinity of Crews Hill which could be expected to be funded as offsite improvements.	Desirable	Delivered based on phasing of the buildout of each parcel and relationship to wider network	S106/CIL	EC
New footbridge and cycle link over railway (SA11.1 to SA11.3)	1 new pedestrian/cycle bridge east west over railway connecting Owls Hall Farm (SA11.1) to SA11.3 north of Crews Hill Station. New bridge connection considered essential for improved pedestrian/cycle connections and wider placemaking benefits. As above (under Transport On Site Highways) desirable for it to be potentially upgraded/enhanced to enable vehicular/bus usage.	Important	Assumed delivered within Plan Period, in conjunction with development parcels delivered north of Cattlegate Road.	Development costs / S106	Developer
New footbridge and cycle link over railway (SA11.2 to SA11.6)	1 new pedestrian/cycle (only) bridge east west over railway, circa 500m south of Crews Hill Station. Desirable to provide access to local open spaces and for safety reasons to replace level crossing.	Important	Assumed delivered in conjunction with development parcels delivered on SA11.6.	Development costs / S106	Developer

Chase Park Infrastructure Requirements

Transport - On Site Highways

Requirement	Description	Priority	Phasing Considerations	Delivery mechanism	Delivery Responsibility
New Highway Network	New highway network to support various development parcels. To include new on site primary and secondary roads, providing accesses to development plots. To include off residential plot allowances for visitor/external car parking in appropriate areas, as well as landscaping and street furniture.	Essential	Delivered based on phasing of the buildout of each parcel.	Construction costs	Developer
Widening work of Existing Highway Network	Enfield Road/A110 for extent within area boundary. Widening to accommodate various needs, including right turn lanes, bus lanes, new cycleways and improved landscaping.	Essential	Delivered at an early stage, as widening work would be in conjunction with new local junctions to provide access to the site (see subsequent section).	S106/CIL/S278	Developer/EC
Upgrades to Existing Local Junctions	4 upgraded junctions (assumed to be Enfield Road/Merryhills Drive, Hadley Road/Oak Avenue, The Ridgeway/Existing Vehicular Access, Enfield Road/Old Park View). Scope of upgrades to be determined following detailed modelling as part of future work. Anticipated improvement could include localised widening, the provision of additional pedestrian crossings, or signalisation schemes. At Enfield Road/Old Park View, scope is expected to be signalisation with a Toucan crossing.	Essential	To be determined based on phasing of buildout and associated trigger points	S106/CIL/S278	Developer/EC
Creation of New Local Junctions on existing highway network to enable access to various new development plots at Chase Park	4 new junctions along Enfield Road/A110. Scope of upgrades to be determined following detailed modelling as part of future work. Expected to be priority junctions with a major road central treatment i.e. right turn lane with a ghost island, and therefore accommodated in widened street sections. Junctions may also include the provision of pedestrian crossings, and signalisation schemes.	Essential	Delivered at an early stage, and in conjunction with widening work, in order to provide access to the site.	S106/S278	Developer
New Road Bridges	3 internal bridges (2 across Merryhills Brook, 1 across Salmon's Brook) to stitch together development parcels north and south of Merryhills Brook. Link across Salmon's Brook north to Hadley Road to be bus, cycle and pedestrian only.	Essential	Delivered when development north of Merryhills Brook is delivered.	Construction costs	Developer
Public Transport					

Requirement	Description	Priority	Phasing Considerations	Delivery mechanism	Delivery Responsibility
Upgrades to Enfield Chase Railway Station	Upgrades to support enhancements of and step free access at Station. Developers may be expected to provide contribution.	Desirable	Phased in line with growth in local population and usage of the station.	S106/CIL	Network Rail, Govia Thameslink Railway
Bus Lanes on Enfield Road	Enfield Road/A110 for extent within/along area boundary. Widening of Enfield Road to include bus lanes, as well as being coordinated with highway improvements (right turn lanes), and new footways cycleways and improved landscaping. New signalised junctions could include bus priority.	Important	Delivered at an early stage, as in conjunction with the corridor enhancement and new junctions to provide access to development.	S106/S278	TfL, EC
New Bus Stops	4 (minimum) new pairs of bus stops on Enfield Road and within the site, all assumed to include shelters.	Important	Enfield Road bus stop delivered at an early stage, in conjunction with corridor enhancement works. Other bus stops delivered based on phasing of buildout.	S106	TfL, Developer, EC
New Bus Facilities	New bus facilities may include additional bus standing space at Oakwood and/or Southgate stations, additional driver welfare facilities, and potential additional standing space within the Chase Park site. Measures to be evolved further and be based on final bus strategy to be developed with TfL as part of future work.	Important	Delivered based on phasing of buildout.	S106	TfL, Developer, EC
New Bus Route Pump Priming	Initial assumption of additional 12 buses per hour, being an increase of 4 of existing services along Enfield Road, and 8 for a new bus service between Chase Park and Crews Hill. Alternative options to be considered further, and potentially if a new bus route serves both Chase Park and Crews Hill then both developments could pump prime the cost of this.	Important	Early pump-priming of routes will be needed prior to critical mass of new population to make routes viable. Delivered based on phasing of buildout.	S106	TfL, Developer
Micromobility Bays	4 x Bike, scooter hire and parking etc. Based upon provision of circa 12 spaces/bays.	Important	Delivered based on phasing of buildout.	S106/CIL	Developer
Travel Plan	Softer measures and initiatives to encourage sustainable transport based on assumed £500/unit for travel vouchers, with a LBE Monitoring Fund in place over 20 years, and travel surveys to be undertaken by developers.	Important	Continuous during buildout, over 20 years.	S106	EC
Footways, Cycleways and Bridleways					

Requirement	Description	Priority	Phasing Considerations	Delivery mechanism	Delivery Responsibility
New Walking and Cycling Routes within development	New footways and cycleways within the development. Includes new pedestrian routes and existing to be upgraded.	Important	Delivered based on phasing of the buildout of each parcel.	Development costs / S106	Developer
Upgrades to Enfield Road Walking and Cycle Routes	Enfield Road/A110 for extent within/along area boundary (and also at Salmon's Brook). Existing footway and cycleway along Enfield Road assumed to be replaced entirely by new routes which are parallel to the road.	Important	Delivered at an early stage, as in conjunction with the road widening work and new junctions	S106	Developer, EC
Upgrades to Walking and Cycling Routes beyond development	Refer to walking and cycling network diagram in Spatial Framework for routes beyond Chase Park red line (noted as "potential off site connections"). Enfield Road is a key E-W cycle corridor. and a number of cycle route upgrades, new cycle routes, and green links are located in the vicinity of Chase Park which could be expected to be funded as offsite improvements.	Desirable	To be determined based on phasing of buildout.	S106/CIL	EC
New footbridge and cycle links	7 (2 across Merryhills Brook, 4 across Salmon's Brook within site, 1 across Salmon's Brook immediately north of Enfield Road). In addition to the new road bridges across brooks (see above), there are a number of ped/cycle only bridges proposed.	Important	Bridge across Merryhills Brook delivered when development north of this brook is delivered. Bridges across Salmon's Brook (within site) delivered when development east of this brook is delivered. Bridge across Salmon's Brook north of Enfield Road delivered along with corridor improvements.	Development costs / S106	Developer



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