



# PLANNING FOR GROWTH



## High Level Transport Assessment of potential sites for housing and employment

Site assessments conducted by Hertfordshire County Council in  
accordance with Hertfordshire's Local Transport Plan.



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## **1. Introduction**

### **1.1 Background**

- 1.1.1 Hertsmere Borough Council is currently in the process of reviewing its Local Plan. A significant element of this process is a consideration of the borough's housing need and how best to meet this sustainably. As such, an evidence base approach is required which includes a range of studies which explore the different options for accommodating future development requirements.
- 1.1.2 The evidence base includes an assessment of the current and future infrastructure requirements for the borough. To this end, Hertfordshire County Council (HCC) has conducted a high level transport assessment which assesses the new potential strategic housing and employment sites against Hertfordshire's Local Transport Plan.
- 1.1.3 However, it should be noted that this does not replace the separate COMET traffic modelling. Instead it should be seen as an independent study which assesses each of the strategic sites against Hertfordshire's Local Transport Plan (HLTP).

### **1.2 Regional Context**

- 1.2.1 Hertsmere is situated immediately north of London, with the majority of the borough being inside the M25. It is the southernmost borough of Hertfordshire. Hertsmere sits along the boundary of Greater London and shares borders with the London Boroughs of Harrow, Barnet and Enfield, as well as St Albans to the north, Watford and Three Rivers districts to the west and Welwyn Hatfield to the east. It is important to note that these nearby centres have a significant influence in terms of the housing market, jobs, retailing/leisure and other services, and patterns of movement.
- 1.2.3 Hertsmere is well connected to London and the rest of the country. The M25, M1 and A1 all run through the borough and it is also served by main line rail services stopping at Potters Bar, Radlett and Borehamwood, as well as Bushey station just outside of the borough.
- 1.2.4 This has led to a significant proportion of the borough commuting for work, meaning that any future development needs to carefully consider current and future transport requirements.

### **1.3 Local context**

- 1.3.1 Due to the nature of its formation in 1974, as a combination of Bushey Urban District, Potters Bar Urban District, Elstree Rural District and a section of Watford Rural District, the different areas of the borough have distinct characteristics.
- 1.3.2 Approximately 80% of the borough is currently Green Belt land, with the four main settlements of Borehamwood, Potters Bar, Bushey and Radlett constituting the only urbanised areas, where the majority of the population reside.

### **1.4 Context/role of the High Level Transport Analysis**

- 1.4.1 The evidence base that informs the Local Plan is made up of a number of technical documents and includes the high level transport analysis. Other studies consider housing and employment need, the settlement hierarchy, land availability, accessibility, sustainability and green belt functionality.

- 1.4.2 The high level transport analysis, which is the first to be produced by HCC for potential Local Plan sites, guides our consideration of the distribution of future development across the borough, by accessing each of the sites against HCC's existing transport policy framework (Appendix 1). It should therefore be seen as a tool for delivering sustainable travel.

## 2. High Level Transport Assessment of potential sites for housing and employment

### 2.1 What is the High Level Transport Assessment?

- 2.0.1 The report is an assessment by HCC of each potential site for housing and employment, within Hertsmere, against the policies that have been adopted within Hertfordshire's Local Transport Plan (HLTP). Certain policies may not be considered applicable due to their location, or because the majority of sites are green field sites that are currently undeveloped.
- 2.0.2 A high level desk based approach has been taken, and the resulting report and outcomes should be seen as a tool to deliver sustainable travel; through highlighting where intervention may be required in order to meet policies and address the challenges and constraints raised in the HLTP.

### 2.1 What is the Hertfordshire Local Transport Plan (HLTP)?

- 2.1.1 The HLTP is a statutory requirement and sets out how transport can help deliver a positive future vision for Hertfordshire. This plan will not only help in providing safe and efficient travel, but also will provide wider benefits by having major input into policies which aim to address economic growth, housing needs, improving public health and reducing environmental damage.
- 2.1.2 The HLTP 2018 takes a more balanced approach which will cater for all forms of transport and encourage the use of sustainable transport solutions (e.g. walking, cycling, and passenger transport), and is focused around three key themes:
- Prosperity – better links between towns and cities, reduced travel, resilient and reliable network, less car dependence, and increased business and tourism opportunities
  - Place – limit impacts on climate change, encourage development and regeneration, improve local environment and green infrastructure, retain heritage and places of character, and provide adequate affordable and environmentally sustainable housing
  - People – improve quality of life, encourage vibrant and healthy communities, promote active and inclusive transport, and encourage varied and accessible employment opportunities.

These principles tie into Hertfordshire's County Council's vision:

*We want Hertfordshire to continue to be a county where people have the opportunity to live healthy, fulfilling lives in thriving, prosperous communities.*

- 2.1.3 HCC has translated these principles to into 9 objectives and 4 principles (Figure 1).



Figure 1: Themes, Objectives and Principles of the LTP<sup>1</sup>

These objectives and principles have then been translated into policies and schemes. (Appendix 1)

## 2.2 Purpose and aims

- 2.2.1 The purpose of the high level transport analysis is to assess each of the potential housing and employment sites against the policies set out in the HLTP. This will document will then help to inform Hertsmere decision's in relation to the new Local Plan.

## 2.3 Policy Context

### National and Regional planning policy

#### National Planning Policy Framework NPPF 2018

- 2.3.1 The Government's National Planning Policy Framework (NPPF) recognises that transport policies have an important role to play in facilitating sustainable development and places emphasis on developments being encouraged in areas served by high quality passenger transport. Patterns of growth should be managed to make the fullest possible use of passenger transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.

<sup>1</sup> Hertfordshire's Local Transport Plan 2018 pg. 11

2.3.2 The NPPF states that strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for infrastructure and transport. Furthermore, transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places. (paragraph 102)

2.3.4 The NPPF 2018 details a number of objectives which should be achieved through the development of a planning policy which effectively require this to happen. Relevant objectives include:

- Actively managing patterns of growth in support of the NPPF objectives, with significant development being focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This will however vary between urban and rural areas. (Paragraph 103)
- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned. (Paragraph 104b)
- 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. (Paragraph 104c)
- Provide high quality walking and cycling networks and support facilities such as cycle parking. (Paragraph 104 d)
- 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. (Paragraph 104 e)
- Ensure that appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and



its location, when assessing sites that may be allocated for development (paragraph 108)

- Give priority first to pedestrian and cycle movements, when assessing sites for development, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use; (paragraph 110)
- For all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed. (paragraph 111)
- Ensure that developments optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks. (paragraph 127)

### Local Policy

2.3.5 The existing Local Plan 2013 target for the number of homes per annum is stated as 266. This is currently in the process of being reviewed although the latest figure under the new standard methodology is 444 (plus a 20% buffer). Further proposed changes to the standard methodology are set to be made by the end of 2018.2

2.3.6 The current Core Strategy was adopted in January 2013 and deals with issues that involve the use of land, the movement of people and access to services. The current vision for Hertsmere is for the delivery of a high quality, accessible, safe and economically viable environment to be achieved through a commitment to the principles of sustainable development.

2.3.7 Hertsmere currently has a high degree of mobility and levels of in and out-commuting, which reinforces the need to improve both public transport patronage and capacity, and locate new development in accessible locations. This is highlighted by one of the current core strategy objectives:

*To raise levels of access by seeking development in locations not dependent on access by car and by requiring the provision of physically accessible transport interchanges and other buildings.*

The following policies from the Core Strategy are also relevant:

- Policy CS15 (Promoting recreational access to open spaces and the countryside),
- Policy CS18 (Access to services),
- Policy CS22 (Securing a high quality and accessible environment),
- Policy CS24 (Development and accessibility to services and employment),
- Policy CS25 (Accessibility and parking).

It is important that any new development is assessed from a transport perspective,

so that an accessible and sustainable built environment can be achieved.

2.3.8 This part of the document is followed through into some of the priorities for the new local plan. (Issues and Options document - September 2017).

- To respond to local housing need through ensuring that all new homes are built in places where there are or will be roads, schools, cycle routes, shops and other services and facilities nearby.
- To help people in Hertsmere connect better by planning better public transport, cycle and pedestrian routes and other sustainable transport initiatives.

## 2.4 Methodology

2.4.1 The following assessment stages were undertaken in order to ensure that the aims and objectives stated within this document and the Local Plan were met.

- Stage 1: Define sites for assessment
- Stage 2: Define policy framework – Hertfordshire's Transport Policy
- Stage 3: Scoring and categorisation of sites

### Stage 1: Define sites for assessment

2.4.2 All of the strategic housing and employment sites were assessed. Strategic housing sites are sites suitable for the development of at least 250 homes. (see *Potential sites for housing and employment* document for more details)

### Stage 2: Define policy framework – Hertfordshire's Transport Policy

2.4.3 The following is a list of all the different policies that make up the HLTP. These policies have been used as the assessment criteria when conducting the high level transport assessment of each site.

#### *Hertfordshire's Transport Policy*

##### **a) Transport User Hierarchy**

To support the creation of built environments that encourage greater and safer use of sustainable transport modes, the county council will in the design of any scheme and development of any transport strategy consider in the following order:

- Opportunities to reduce travel demand and the need to travel
- Vulnerable road user needs (such as pedestrians and cyclists)
- Passenger transport user needs
- Powered two wheeler (mopeds and motorbikes) user needs
- Other motor vehicle user needs

##### **b) Influencing land use planning**

The county council will encourage the location of new development in areas served by, or with the potential to be served by, high quality passenger transport facilities so they can form a real alternative to the car, and where key services can be accessed by walking and cycling.

##### **c) Travel Plans and Behaviour Change**

The county council will encourage the widespread adoption of travel plans through:



- a) Working in partnership with large employers, businesses and other organisations to develop travel plans and implement Smarter Choices measures.
- b) Seeking the development, implementation and monitoring of travel plans as part of the planning process for new developments.
- c) Supporting school travel plans, and working closely with parents, pupils, teachers and local residents to deliver a network of more sustainable transport links to school.

**d) Demand Management**

The county council considers greater traffic demand management to be essential in the county's urban areas in the next five years to achieve modal shift and improve sustainable travel provision. This can only currently be achieved efficiently and effectively through parking restrictions and charging applied to on-street, off-street and potentially at workplace parking. The county council will work with the district and borough councils and other key stakeholders to develop locally appropriate strategies.

**e) Development Management**

The county council will work with development promoters and the district and borough councils to:

- a) Ensure the location and design of proposals reflect the LTP Transport User Hierarchy and encourage movement by sustainable transport modes and reduced travel demand.
- b) Ensure access arrangements are safe, suitable for all people, built to an adequate standard and adhere to the county council's Highway Design Standards.
- c) Consider the adoption of access roads and internal road layouts where they comply with the appropriate adoption requirements and will offer demonstrable utility to the wider public. Where internal roads are not adopted the county council will expect suitable private management arrangements to be in place.
- d) Secure developer mitigation measures to limit the impacts of development on the transport network, and resist development where the residual cumulative impact of development is considered to be severe.
- e) Require a travel plan for developments according to the requirements of 'Hertfordshire's Travel Plan Guidance'.
- f) Only consider new accesses onto primary and main distributor roads where special circumstances can be demonstrated in favour of the proposals.
- d) Resist development that would either severely affect the rural or residential character of a road or other right of way, or which would severely affect safety on rural roads, local roads and rights of way especially for vulnerable road users. This should include other routes which are important for sustainable transport or leisure.
- e) Ensure that any new parking provision in new developments provides facilities for electric charging of vehicles, as well as shared mobility solutions such as car clubs and thought should be made for autonomous vehicles in the future.

**f) Accessibility**

The county council will seek to increase the ease with which people, particularly disadvantaged groups, can access key services, by:

- a) Working in partnership with key stakeholders such as bus and rail operators, community transport operators, the voluntary sector and public service providers.

- b) Supporting transport services which could include providing resource for bus and other transport services.
- c) Addressing the barriers to accessibility particularly regarding active modes and for people with impaired mobility.
- d) Promoting travel options and facilitating accessible travel information provision, including open data initiatives.
- e) Improving travel choices and options, including support for the provision of shared mobility initiatives.

**g) Active Travel - Walking**

The county council will seek to encourage and promote walking by:

- a) Implementing measures to increase the priority of pedestrians relative to motor vehicles, especially in town centres, and creating walking friendly town and neighbourhood centres.
- b) Delivering infrastructure to provide safer access to key services, and pedestrian facilities to enable and encourage walking.
- c) Identifying and promoting networks of pedestrian priority routes.
- d) Promoting walking as a mode of travel and for recreational enjoyment.
- e) Supporting the implementation of the Rights of Way Improvement Plan.

**h) Active Travel - Cycling**

The county council aims to deliver a step change in cycling, through:

- a) Infrastructure improvements, especially within major urban areas to enable and encourage more cycling.
- b) Implementing measures to increase the priority of cyclists relative to motor vehicles.
- c) Improved safety for users including delivery of formal and informal cycle training schemes.
- d) Supporting promotion campaigns to inform, educate, reassure and encourage cycling provision and education, such as Bikeability.
- e) Facilitating provision of secure cycle parking.

**i) Buses**

The county council will promote and support bus services to encourage reduced car use by:

- a) Supporting the delivery of infrastructure including bus priority measures, focussed on a core bus network, and by minimising bus service disruption from road congestion and the effects of road works.
- b) Providing and maintaining all bus stops, and other bus related highway infrastructure, to a consistent quality and standard across the county.
- c) Utilising new powers afforded to local authorities through the Bus Services Act 2017 as appropriate.
- d) Reviewing, procuring and supporting cost effective and efficient bus services to improve accessibility and respond to existing and potential passenger needs.

Review existing services and take account of enhanced security provision.

- e) Working with a wide range of partners through the Intalink Quality Partnership to achieve improvements in facilities and services to improve the end to end journey by multi-modal interchange, accessibility, security and the journey experience.
- f) Working with partners to develop appropriate passenger fares, encourage the development of smart ticketing and to improve the provision and accuracy of passenger information.

- g) Working with partners to promote bus services as an option for work and school journeys, and promote and publicise the passenger transport network through a variety of media.

**j) Rail**

The county council will support and promote rail use in the county, especially in order to reduce car use. To do this it will:

- a) Work with the rail industry and other partners to seek improvements to train services in regards to capacity, journey times, frequency and range of destinations served.
- b) Work with the rail industry and other stakeholders to make rail travel more attractive through improved fares and ticketing, upgraded station facilities and better access and interchange by sustainable modes of transport.
- c) Support Community Rail Partnerships in the county.
- d) Publish a Rail Strategy setting out how the county council's objectives can be achieved.

**k) Airports**

The county council, working in partnership with neighbouring local authorities and airport operators, will seek improvements to surface access to Luton and Stansted Airports, and promote and where possible facilitate a modal shift of both airport passengers and employees towards sustainable modes of transport. The county council is opposed to new runway development at Luton and Stansted Airports.

**l) Network Management**

As part of its Network Management Duty the county council will seek to manage, and where feasible reduce traffic congestion, prioritising strategic routes. Activity will focus on making more efficient use of highway network capacity via:

- a) Use of Intelligent Transport Systems and small scale traffic management interventions.
- b) Maintaining a Network Management Strategy which will include the county council's road network hierarchy and associated policies.
- c) Reducing levels of single occupancy car use and encouraging travel by walking, cycling and passenger transport.
- d) Sharing data (open data) and supporting the use of technology to provide up to date and accessible information for all network users.
- e) Control of on-street vehicle parking in line with the Network Management Strategy.
- f) Managing street works and minimising network disruption.

**m) New Roads and Junctions**

The county council will work closely with partners including Highways England, districts and major scheme developers to design new transport infrastructure, following application of the Transport User Hierarchy, to manage existing demand and that of planned development. Future capacity that may be required beyond this could be safeguarded but should not be released until necessary to avoid inducing demand.

**n) Climate Change Network Resilience**

The county council, as part of its response to climate change adaptation, will design, construct, maintain and operate all infrastructure in the light of the risk from a changing climate. The same principles will be applied to infrastructure provided by other organisations including developers.

**o) Speed Management**

The county council through its Speed Management Strategy, a joint working strategy with the Police, will seek to manage the network to achieve appropriate speeds in the interests of safety, other road users, and the environment.

**p) Freight and Logistics**

The county council will seek to manage freight and logistics traffic, by:

- a) Encouraging HGV's to use the primary route network.
- b) Providing clear advice to local planning authorities in respect of highways and freight implications of new development proposals.
- c) Encouraging a shift from road-borne freight to less environmentally damaging modes, including rail, water and pipelines.
- d) Supporting the formation of Quality Partnerships between interested parties.
- e) Monitoring changes in HGV and LGV activity to inform possible solutions which reconcile the need of access for goods and services with local environment and social concerns.
- f) Supporting improvements in HGV provision in the county, including overnight parking, in appropriate locations.
- g) Utilising traffic management powers, where appropriate to do so, to manage access and egress from specific locations.

**q) Road Safety**

The county council will seek to continually improve safety on the county's roads, working towards an ultimate vision of zero fatalities and serious injuries, by:

- a) Working with partners, in particular through the Hertfordshire Road Safety Partnership to deliver targeted, effective and appropriate road safety measures.
- b) The development of a 'Safe Systems' approach that seeks to co-ordinate a mix of safer roads, safer speeds, safer vehicles, safer road users and post-collision response with a focus on casualty reduction.
- c) Using latest data analysis and intelligence led techniques to target and evaluate measures.

**r) Transport Safety and Security**

The county council will seek to improve the perception of safety and security on Hertfordshire's transport system where this could deter people from travelling, particularly by active modes and passenger transport. This includes ensuring the county's transport system is resilient and prepared for instances of major alert.

**s) Emissions reduction**

The county council will reduce levels of harmful emissions by:

- a) Promoting a change in people's travel behaviour to encourage a modal shift in journeys from cars to walking, cycling and passenger transport.
- b) Addressing any barriers to and supporting the uptake of ULEVs in the county, particularly where this can positively affect areas with identified poor air quality.
- c) Reducing emissions from its operations.

**t) Air Quality**

The county council will seek to reduce the impact of poor Air Quality on human health, by:

- a) Investigating the use of Clean Air Zones.

- b) Working with district/borough councils to monitor and assess air pollution levels, and working in partnership with them to deliver any declared AQMA joint action plans.
- c) Implementing, monitoring and reviewing the county council's Air Quality Strategic Plan.

**u) Environment**

The county council will seek to:

- a) Ensure the impacts of traffic and transport infrastructure on the natural, built and historic environment are minimised.
- b) Protect and enhance the quality of public spaces both in urban and rural areas.
- c) Minimise the visual intrusion of highways infrastructure in order to reduce street clutter.
- d) Minimise light pollution and conserve energy from street lighting and signage illumination.
- e) Minimise noise issues arising from transport where practical to do so. Where highway improvements are being undertaken the county council will:
- f) Minimise and or mitigate the adverse physical impact on the landscape and environment and will try to secure significant and demonstrable environmental gains.

**22. Asset Management**

The county council will:

- a) Ensure the Highway Infrastructure Asset Management Plan fully considers how it can support delivery of the LTP objectives & policies, such as with regard to safety, accessibility, active travel and environmental impact.
- b) Identify and apply industry-leading good practice to the management of all transport assets.
- c) Maximise the opportunity for investment to maintain and improve the condition of the transport network.
- d) Seek value for money for all transport assets and minimise future maintenance liabilities as far as possible.

**23. Growth and Transport Plans**

The county council will produce and maintain a series of Growth and Transport Plans (GTPs) covering different sub areas of Hertfordshire. Each plan will consider current and future challenges and identify interventions aligned to LTP objectives. The GTPs will also be informed by and in turn help to inform Local Plans and Infrastructure Delivery Plans which are prepared by the district/borough authorities in Hertfordshire.

- 2.4.4 Further information in regards to the different policies and transport strategies for Hertfordshire can be found in Hertfordshire's Local Transport Plan.

<https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/planning-in-hertfordshire/transport-planning/local-transport-plan.aspx>

**Stage 3: Scoring and categorisation of sites**

- 2.4.5 The sites were independently assed by HCC with each site measured against the 23 policies set out above. In certain cases some of the policies were not considered as they did not relate to the site in question, either due to its geographic location or the fact that no development currently exists on the site and no formal masterplans for the sites have been submitted.

2.4.6 It should be noted that this is a new approach as part of a service that HCC have started providing for local borough councils to inform the preparation of Local Plans. HCC and Hertsmere have worked together to develop this new approach as it provides additional information which will guide our consideration of the distribution of future development across the borough.

2.4.7 The scoring process involved assessing each site against HCC's HLTP policies with each policy being ranked accordingly:

- Significant concerns that it is achievable (Red)
- More work needed to meet policy (Amber)
- Policy outcome achieved (Green)

The results of this assessment are summarised in Appendix 1.

2.4.6 Further to this summary table, a breakdown of how these results were calculated is shown on Appendix 2. It should be noted that some of the policies have been assessed against multiple criteria (e.g. Development management) whereas other policies have only been assessed against a single criteria (e.g. Rail).

2.4.7 Below is a list of the criteria that each of the applicable policies was assessed on:

**1. Transport User hierarchy**

- a) Opportunities to reduce travel demand and the need to travel
- b) Impact on area with poor accident history
- c) Bus routes accessible within 400m
- d) Suitable access arrangements achievable and impact on congestion/flow rates to associated highways

**2. Influencing land use planning**

- a) Location of development allows real transport alternative to private car travel

**4. Demand Management**

- a) Opportunity to enhance provision of walking/cycling/public transport through demand management

**5. Development Management**

- a) Development impact is not likely to have an unsafe impact to local or wider highway network
- b) Adequate mitigation measures achievable in relation to scale of development (Viability)
- c) New access onto main distributor demonstrates special circumstances
- d) Scheme will not affect the rural or residential character of a road or other right of way,
- e) No impact to safety on rural roads, local roads or rights of way especially for vulnerable road users. (Retain ability for use of roads for sustainable modes such as cycling/walking) - Dynamic severance
- f) No Severance of rural roads/rights of way that may impact the wider walking/cycling network



### **7. Active Travel Walking**

- a) Walking distances considered within land use to wider area
- b) Supporting the implementation of the Rights of Way Improvement Plan.

### **8. Active Travel Cycling**

- a) No overall negative impact to cycle routes or other highways used by cyclists nor likely severance of routes use by cyclists

### **9. Buses**

- a) Could be served by bus services
- b) Any routing of busses within the site would be suitable (i.e. a looped route over a turning head)

### **10. Rail**

- a) Opportunity to support and promote rail use in the county, especially in order to reduce car use.

### **19. Emissions Reduction**

- a) Promoting a modal shift from cars to walking, cycling and passenger transport.
- b) Access to destination via modes other than private car

### **20. Air Quality**

- a) Location and impact to AQMA

### **21. Environment**

- a) the impacts of traffic and transport infrastructure on the natural, built and historic environment are minimised
- b) Minimise and or mitigate the adverse physical impact on the landscape and environment"

## Appendices

Please note: That all analytical information provided within the appendices has been provided by Hertfordshire County Council's Transport Team. Whilst the presentation of the information may have been adjusted for ease of use, all technical work has not been changed.

<b>Appendix 1</b>	High level transport assessment summary for HLTP polices
<b>Appendix 2</b>	High level transport assessment breakdown of scoring for applicable HLTP polices

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## Appendix 1 – High level transport assessment summary for HLTP policies

Strategic site references	HELLA reference	Address	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Policies met	Concerns raised	Significant concerns raised	
			Transport User Hierarchy	Influencing land use planning	Travel plans and behaviour change	Demand management	Development management	Accessibility	Active travel walking	Active travel cycling	Buses	Rail	Airports	Network management	New road and junctions	Climate change network resilience	Speed management	Freight and logistics	Road safety	Transport safety and security	Emissions reduction	Air quality	Environment	Asset Management	Growth and transport plans				
<b>Strategic Housing Sites</b>																													
1	BE1	391/394	393 Allum Lane																								2	7	2
2	BE2	359	359 Stapleton Road																								2	9	0
3	BE4	376a,b & 206	376a,b & 206 Well End Road/Rowley Lane																								0	8	3
4	BE3	347	347 Cowley Hill																								1	9	1
5	BE6	209a	209a Barnet Lane																								1	7	3
6	B1	201	201 Little Bushey Lane																								0	9	2
7	B2	181	181 Little Bushey Lane and Bournehall																								0	11	0
8		355	355 Elstree Road																								0	9	3
9	E1	274	274 Edgewarebury Farm																								0	6	5
10	H2	382	382 Tittenhanger Estate																								0	6	5
11	PB2	251	Potters Bar Golf Club																								7	4	0
12	PB4	161	161 Southgate Road																								1	8	2
13	PB1	361	361 Wrotham Park West																								0	10	1
14	PB3	362	362 Wrotham Park East																								0	10	1
15	R2	346	346 Home Farm																								1	8	2
16	R1	379 & 172	379 Crown Estate Kemprow Farm																								5	6	0
17	S3	236a & b	236a & 236b Rectory Farm																								1	9	1
18	S4	348 & 349	348 & 349 Shenley Grange																								0	11	0
19	S2	350a	350a Harperbury Hospital																								0	6	5
20	S1	370	370 West of Shenley																								0	10	1
21	SM1, SM2, SM3	385a,b & c	385a,b & c North of Shenley																								0	8	3
22	H1	221	221 Rabley Garden Village																								0	4	1
23		238 & 171	238 & 171 North and West of Centennial Park																								1	5	5
24	B3	176	Former Bushey golf course and country club																								4	7	0
25	E5	393	Elstree Way corridor																								6	5	0
<b>Employment sites</b>																													
EP1	EMP7		Tittenhanger Estate																								0	4	7
EP2	EMP3		376a,b & 206 Well End Road/Rowley Lane																								0	5	5
EP3	EMP6, EMP4, EMP1		North and West of Centennial Park																								0	5	5
EP4	EMP5		361 Wrotham Park West																								0	10	1

## Appendix 2 – High level transport assessment breakdown of scoring for applicable HLTP policies

Strategic site references	HELLA reference	Address	1				2		4				5						7		8		9		10		19		20		21		Policy criteria achieved	More work needed to meet policy criteria	Significant intervention required to meet policy criteria
			A	B	C	D	A	A	A	B	C	D	E	F	A	B	A	A	B	A	A	B	A	A	B	A	A	B							
<b>Strategic Housing Sites</b>																																			
1	BE1	391/394	393 Allum Lane																														6	14	9
2	BE2	359	359 Stapleton Road																														6	17	0
3	BE4	376 a,b & 206	376 a,b & 206 Well End Road/Rowley Lane																													0	17	6	
4	BE3	347	347 Cowley Hill																													3	18	2	
5	BE6	209a	209a Barnet Lane																													4	15	4	
6	B1	201	201 Little Bushey Lane																													6	15	2	
7	B2	181	181 Little Bushey Lane and Bournehall																													7	16	0	
8		355	355 Elstree Road																													5	14	4	
9	E1	274	274 Edgewarebury Farm																													2	13	8	
10	H2	382	382 Tyttenhanger Estate																													1	12	10	
11	PB2	251	Potters Bar Golf Club																													17	6	0	
12	PB4	161	161 Southgate Road																													6	11	6	
13	PB1	361	361 Wrotham Park West																													4	16	3	
14	PB3	362	362 Wrotham Park East																													2	17	4	
15	R2	346	346 Home Farm																													4	13	6	
16	R1	379 & 172	379 Crown Estate Kemprow Farm																													13	6	4	
17	S3	236a & b	236a & 236b Rectory Farm																													7	12	4	
18	S4	348 & 349	348 & 349 Shenley Grange																													6	14	3	
19	S2	350a	350a Harperbury Hospital																													5	12	6	
20	S1	370	370 West of Shenley																													5	16	2	
21	SM1, SM2, SM3	385a, b & c	385a, b & c North of Shenley																													1	5	17	
22	H1	221	221 Rabley Garden Village																													1	10	12	
23		238 & 171	238 & 171 North and West of Centennial Park																													7	6	10	
24	B3	176	Former Bushey golf course and country club																													11	12	0	
25	E5	393	Elstree Way corridor																													15	8	0	
<b>Employment sites</b>																																			
EP1	EMP7		Tyttenhanger Estate																													1	13	9	
EP2	EMP3		376 a,b & 206 Well End Road/Rowley Lane																													0	5	5	
EP3	EMP6, EMP4, EMP1		North and West of Centennial Park																													7	6	10	
EP4	EMP5		361 Wrotham Park West																													4	16	3	

