

Chapter 2: Transport

2.1 The County Council have reviewed the Transport Schedule from the previous IDP and have provided an updated schedule as part of this review. The broad assessment of the adequacy of the transport network remains valid and can be found in the DSIS Transport Report however the transport modelling previously undertaken has been updated. The DSIS transport report used an assessment framework to determine the future need associated with each development scenario. The impact of the growth was examined in terms of the gaps in the transport network and the interventions required in mitigation. This assessment has not been repeated for the level of development planned in the Core Strategy as it is considered that the outcomes in the assessment in the DSIS are a reasonable proxy.

2.2 The report acknowledges the historic deficit in the transport network but does not seek to identify measures to address it; it is focused on addressing the impact of growth. The NPPF highlights the importance of sustainable modes of transport and the use of technology in the creation of sustainable development.

Published Strategies

2.3 There are a number of plans and strategies for the transport network, which identify schemes required to improve the transport network to cope with anticipated levels of growth.

2.4 The third Hertfordshire Local Transport Plan 2011 – 2031 (LTP3) (2011) sets out the County Council's vision and strategy for the long term development of transport in Hertfordshire It can be located under:

<http://www.hertsdirect.org/services/transtreets/ltplive/>

2.5 The *Strategy Document* (Volume 1) is now contained within 'Overarching strategy'. The *Policy Document* (Volume 2) has been replaced with 'Transport Policy A-Z'. The *Implementation Plan* (Volume 3) has been superseded by the 'Transport schemes map'. The Local Transport Plan has a number of daughter documents which can be found under 'Supporting

strategies' on the County Council website.

- 2.6 LTP3 identifies a number of schemes included in the Infrastructure Delivery Schedule in Appendix A. The County has started to implement two county-wide projects: Intelligent Transport Systems (ITS); and Quality Network Partnerships (QNP). The Maylands Growth Corridor (formerly known as the Hemel Hempstead North East Relief Road) is identified as a major transport proposal within the LTP the scope of which will result from further work on the East Hemel Area Action Plan and depend on the nature of growth to the east of Hemel and within St. Albans City and District Council's administrative area.
- 2.7 The Urban Transport Plans are the primary source of projects within LTP3. The Hemel Hempstead Urban Transport Plan (HHUTP) (2009) identifies short, medium and long-term strategies to shape travel patterns and provides a transport framework for the town. Schemes identified in the HHUTP are included in the Infrastructure Delivery Schedule in the Annex to this report where it is still appropriate to do so. The HHUTP recognises the role of transport modelling to assess the impact of planned development in the town
- 2.8 The Tring, Northchurch and Berkhamsted Urban Transport Plan (TNBUTP) (2013) identifies short, medium and long-term strategies to shape travel patterns and provides a transport framework for these settlements. This plan includes a number of measures to improve the efficiency of the local highway network and reduce congestion and provide necessary improvements to the highways network to support the growth identified for these towns in the Core Strategy. The identified projects were added to the Transport Schedule during the previous update to the IDP.

Hertfordshire Travel Vision and LTP 4

- 2.9 Since 2014 work has been underway on delivering a new spatial Transport Vision for Hertfordshire to 2050. The intention of the Travel Vision was to address changes in the local and national planning and transport context since the current Local Transport Plan (LTP3) was adopted in 2011 and to tackle the absence of a new generation of major transport schemes, since those detailed in previous local transport plans are now being delivered.

- 2.10 Two reports have been produced to date that form part of the emerging evidence base for the Transport Vision and a public consultation on the emerging content of a new LTP is taking place in 2016. The Vision and Strategy will be detailed in the new Local Transport Plan (LTP4) planned for adoption in 2017.

The South West Hertfordshire Growth and Transport Plan

- 2.11 Work recently commenced on a Growth and Transport Plan for South West Hertfordshire covering the Districts and Boroughs of Dacorum, Three Rivers and Watford and the highway network defined by the M1, M25 and A41. In the longer term, a series of Growth and Transport Plans will cover the County and will replace the Urban Transport Plans. Evidence has been gathered on movements between towns and smaller settlements and this is being examined to gain a strategic impression of current and future growth and transport related issues and possible interventions to support growth.
- 2.12 The plan will be developed by Hertfordshire County Council, supported by its specialist transport planning consultants AECOM. The South West Hertfordshire Growth and Transport Plan will be the first in a series of plans which will be developed over the next few years covering different parts of Hertfordshire.
- 2.13 A Growth and Transport Plan ('GTP') is a spatial transport plan developed in partnership with key stakeholders, including District/Borough councils, the Local Enterprise Partnership, transport operators, local user groups and communities, for the purpose of applying Local Transport Plan policies and objectives to a growth-focused area.
- 2.14 The GTP will be founded on robust evidence which will be used to help identify and confirm the most significant current and future growth and transport challenges in South West Hertfordshire, and develop and justify packages of transport-led improvement schemes and priority actions. The GTP will not be a single-town plan but will concern itself with challenges around growth and transport within and between towns in South West Hertfordshire including Hemel Hempstead, Rickmansworth, Watford, St Albans, Harpenden, Berkhamsted and Tring, as well as smaller settlements and rural areas.

- 2.15 The GTP will concern itself with facilitating sustainable economic growth and positive change to local communities and their well-being through transport-led improvements. It will identify multi-modal schemes which address transport issues affecting urban areas or inter-urban corridors.
- 2.16 The County Council are aiming to adopt the Growth and Transport Plan in early 2017 and the infrastructure projects identified therein will be incorporated into next year's update to the IDP. If major projects are being delivered outside of the GTP process e.g through LTP4 these will be acknowledged and complimentary schemes could be developed.
- 2.17 The County Council is currently investing in more robust evidence that will provide a much greater understanding of Hertfordshire's current and future transport challenges, and the COMET strategic model is a leading example of this investment. The County will also be developing a suite of Evidence Packs for each of the largest towns in the County including Hemel Hempstead. These packs will showcase transport and socio-economic data through a series of maps and infographics.

Transport Modelling

- 2.18 Two transport models have historically been used to assess the impact of the proposed level of growth on the road network; one for the county highway authority (Hemel Hempstead Urban Transport (Paramics) Model) and one for the Highways Agency (The DIAMOND model) These are being supplemented and in the case of the DIAMOND model superseded by the development of a Countywide transport model (COMET) to be used in the next stage of local plan provision. The current urban models represent the local road network in more detail (particularly the Paramics based models) and remain the best means of testing detailed transport schemes and smaller scale development within urban areas.

COMET model

- 2.19 Following publication of the last update to the IDP the County Council commenced work on the development of a Countywide Transport Model (COMET) with the intention of plugging gaps in the East of England Regional Model (EERM) and bespoke traffic models across the County. Whilst the current models are sufficient to undertake an operational assessment of

plans of proposed interventions on the performance of junctions and undertake assessments of the impacts of development proposals, they lack information covering public transport and the representation of travel between modelling areas. There is little detail on impacts in areas outside the major towns. The COMET model should be based on and provide new and updated information on current and future travel across the whole of the County.

- 2.20 Key areas of ongoing work include the development of a Transport Vision for Hertfordshire to 2050 (Local Transport Plan 4) and ongoing development of District Local Plans. These need to be supported with evidence on the transport implications of future growth across the county, in addition to the isolated needs within individual settlements or across specific Districts. This requires some means of understanding travel needs and accessibility across the county, in addition to those within individual urban areas, an identification of problem locations and a means of testing proposed transport schemes. The COMET model is now available to inform ongoing Local Plan works. It is intended that districts will be able to make use of the model to identify the best locations of strategic growth for the next round of Local Plans / Local Plan reviews from 2016 onwards.

Hemel Hempstead Urban Transport (Paramics) Model

- 2.21 The Hemel Hempstead Urban Transport Model was commissioned by the county highway authority to investigate the potential impact on the road network of development at Hemel Hempstead. Several model runs have been commissioned to date with the latest published run (May 2015) incorporating a revised housing scenario (reflecting the 2014 housing trajectory):
- 2.22 The modelling reflected the broad levels of development in the Core Strategy but also took into account more detailed work on allocations as identified in the Site Allocations DPD.
- 2.23 The broad conclusion of the May 2015 run, testing the impacts of development within Hemel Hempstead urban area, remains the same i.e. that the additional traffic demand from the Dacorum Core Strategy can be accommodated on the road network subject to a number of infrastructure

upgrades. While the impact of traffic does vary during the am and pm peaks, the main threats to the road network are over capacity at:

- Link Road with Redbourn Road and Piccotts End Road roundabouts;
- Leighton Buzzard Road / Queensway roundabout;
- Leighton Buzzard Road / St Albans Road (Plough roundabout)
- Queensway / Marlowes signalised junction;
- Maylands Avenue / Wood Lane End signalised junction;
- Boundary Way / Buncefield Lane roundabout;
- Breakspear Way / Green Lane roundabout;
- Two Waters Road / London Road signalised junction;
- Fishery Road with London Road and Northridge Way roundabouts
- Redbourn Road / Shenley Road priority controlled junction;

2.24 The suggested mitigation measures required were identified as:

- Improvements to the Leighton Buzzard Road / Queensway roundabout (part- time signals/signalised junction);
- Improvements to Boundary Way / Buncefield Lane roundabout (additional approach lanes / signalised junction);
- Improvements to Link Road / Redbourn Road roundabout (partial signalising);
- Improvements to The Redbourn Road/Shenley Road roundabout (traffic signals/mini-roundabout);
- Improvements to Warners End Road/Long Chaulden (signal controlled junction);
- Modifications to Station Road / St Johns Road / Heath Lane junctions (various measures);
- Optimisation of London Road / Red Lion Lane (optimise signal staging / minor realignment);
- Improvements to Fishery Road / Northridge Way (part-time signals / priority controlled junction);
- Optimisation of Maylands Avenue / Wood Lane End (optimise signal staging).

2.25 The Paramics model is currently being enhanced to better represent the road network particularly in the East of Hemel Hempstead area and to make use of updated information on travel patterns from the COMET modelling work. A revised future year model will be developed as part of the process and will be used to continue to test and develop suggested mitigation measures and support on going Site Allocations and Local Plan works. Any outputs from a re-run of the model will be incorporated in the next update to the InDP.

Key Locations of Cumulative Transport Impact to 2031

2.26 The Core Strategy identifies Hemel Hempstead town centre and the Maylands Business Park as areas where significant development and improvements are planned. The key transport elements included in the local objectives of the Hemel Hempstead Place Strategy include:

- Efficient public transport services between the town centre, the railway station and Maylands;
- A Bus Interchange in Hemel Hempstead town centre;
- A better footpath network in Hemel Hempstead town centre;
- New transport infrastructure, linked to parking management in East Hemel Hempstead;
- Completion of the North East Hemel Hempstead Relief Road (now referred to as the Maylands Growth Corridor); and
- A new access road from Breakspear Way to Boundary Way

2.27 The Council and Hertfordshire County Council have already delivered a town centre bus interchange along Marlowes and Bridge Street improved pedestrian and cycle links between the town centre and train station and have implementation of a one-way system in the Old Town.

2.28 The Bus Interchange provides visitors with new toilets, extra bus shelters, real time passenger information boards, new seating and a dedicated coach and long haul services in Bridge Street. The taxi rank and dedicated disabled parking areas have been installed on Waterhouse Street.

2.29 Additional highways improvements and schemes may be required once detailed modelling work has been undertaken for the Local Allocations,

which will be done in preparation for the Site Allocations DPD.

New Infrastructure

Bus Improvements

- 2.30 Significant improvements have been made to bus services within the Borough since the UTP was written and since the original InDP was drafted. There is a programme of bus stop improvements providing easy access kerbs and shelters. Real Time Bus stops and Smarter ticketing arrangements have been introduced in key locations within each town within the Borough and a new Hemel Hempstead bus interchange has been delivered.

Walking/Cycling Improvements

- 2.31 A wider and more user friendly walking and cycling route now links the town centre of Hemel Hempstead with the train station. A signed cycle route from the Maylands area to Hemel Hempstead town centre was completed in 2014 which included access improvements to the Nickey Line. Recent interventions have increased the availability of cycle parking areas within the towns of Berkhamsted and Tring and provided pedestrian crossing facilities at both Bridgewater Road, and Durrants Lane, Berkhamsted and Grove Road and Miswell Lane, Tring, both of which were vital to the delivery of safer routes to schools.

Canal Towpath Improvements

- 2.32 The Grand Union Canal is an important open space and provides an important transport link and recreational space through the Borough. The County Council, Borough Council and Canal and River Trust have improved the canal towpath through Berkhamsted and are implementing a programme of towpath improvements along the length of the Grand Union Canal to encourage walking and cycling. The towpath through Kings Langley has been improved in conjunction with Three Rivers District Council during 2016 and further improvements to the canal towpath in Hemel Hempstead are planned as part of a wider scheme concerning pedestrian movement around Durrants Hill and Apsley later in 2016/17.

Rail Improvements

- 2.33 A number of improvements are identified within the associated InDP schedule of infrastructure projects. The majority will be delivered by or in conjunction with Network Rail and/or train operators and are not expected to be deliverable in the short/medium term. The Council is not aware of any additional works at local train stations since the InDP reported the installation of lifts to both Hemel Hempstead and Berkhamsted stations. The Council has started to discuss either improvements or the redevelopment of Hemel Hempstead station as part of a wider objective to regenerate the Two Waters area and London Road between Apsley Station and Hemel Hempstead Station.

Road

- 2.34 The delivery of the Maylands Growth Corridor comprising a series of junction improvements within the Maylands business area and to the east of Hemel Hempstead remains a high priority. A study of the Maylands Growth Corridor is due to report in October 2016 and recommendations will need to be incorporated in an updated Schedule at the next InDP update. Some improvements at Three Cherry Trees Lane have been delivered in association with the first phase of the Spencer's Park housing scheme with further improvements expected to be delivered in Phase 2. The delivery of the Kings Road/Shootersway/Kingshill Way junction improvement scheme is expected to be delivered in 2017.

Parking

- 2.35 The Council is at an advance stage in securing planning permission for a multi-storey car park within the town centre of Berkhamsted which it intends to deliver in 2017/18.

Future Requirements

General

- 2.36 The role of the IDP is to identify infrastructure required to support the planned development within the Core Strategy, and to set out how it will be

funded and delivered. There is a need for consistency between the IDP and transport policy documents such as the Urban Transport Plans and as such most of the detailed transport projects resulting from the UTP's are included within the Transport Schedule

Rail

- 2.37 It is anticipated that growth in the Borough will require improvements to cycle storage, parking and upgraded access and egress points at all railway stations within the Dacorum area including Aplesey, Hemel Hempstead, Berkhamsted and Tring. Some capacity on the West Coast Main Line is anticipated to be released in 2026 by HS2

Site Allocations – Issues and Options

Hemel Hempstead

- 2.38 Marchmont Farm (LA1) – High level traffic modelling has not highlighted any significant issues which cannot be resolved through off-site highway improvements. The option of a priority junction or roundabout onto the Link Road (A4147) has been assessed and would be sufficient to provide access to the scale of development proposed. Pedestrian and cycle links including the use of Piccotts End Lane should be considered.
- 2.39 Old Town (LA2) – A primary access will be provided off Fletcher Way.
- 2.40 Land at West Hemel Hempstead (LA3) – A Transport study has identified an appropriate access strategy taking account of the impact of development on the surrounding road network and junctions. The main vehicular accesses to the site will be taken from Long Chaulden and The Avenue with a number of local junctions being improved to provide additional capacity. Further discussion is needed with the landowners regarding access for the Local Allocation planned at West Hemel Hempstead.
- 2.41 East Hemel Hempstead - The Council is expecting significant development to occur on land to the east of Hemel Hempstead which will incorporate around 1000 new homes, new jobs, a primary school, sports facilities and a new local centre in the Heart of Maylands as set out in the Core Strategy. The development is expected to incorporate new transport infrastructure

including the Maylands Growth Corridor identified in the Hertfordshire Growth Plan and a new access road from Breakspear Way to Boundary Way. The Council is looking to unlock the Maylands Gateway site through the direct provision of access roads and utilities infrastructure as identified in the Infrastructure Delivery Schedule and a Maylands Growth Corridor Study (funded by the LEP) is underway to identify the transport improvements required to enable growth in the area.

Berkhamsted

- 2.42 Regarding the Strategic Site and Local Allocations planned at Berkhamsted, there is a clear preference for the signalisation of the junctions of Shootersway/Kingshill Way and Kings Road. This has been recently trial to assess the impact upon traffic movements in this locality. The junction of Durrants Lane and High Street has been upgrading in accordance with the TNBUTP. Amendments will need to be made to the timing of traffic signals at the crossroads of Kings Road/Lower Kings Road and the High Street in due course.

Tring

- 2.43 The west of Tring is well located in relation to the main road network. The impact of the level of development planned at Tring can be accommodated on the existing road network without significant additional highway works. It is considered that the access to local allocation LA5 is likely to take the form of a priority junction from either Aylesbury Road or Icknield Way.

Bovingdon

- 2.44 The primary access to the Local Allocation will need to be taken from Molyneaux Avenue. This current access to HMP 'The Mount' is considered adequate to serve the scale of development proposed in this location.

Funding

- 2.45 The main sources of funding for the provision of new transport infrastructure appears to be central government grant funding administered through the Hertfordshire Local Enterprise Partnership (LEP), County

Council capital reserves, developer contributions, contributions from third parties and central government funding allocations to the County Council. The County Council's capital reserves are likely to be a lot lower in the future than they have been in the past. Central government transport funding to the County Council is generally from various formula based grants allocated annually and includes funding for highway maintenance and small infrastructure improvements. Additional funding is generally made available by the DfT for transport infrastructure and service improvements, but this is often subject to a bidding process against other local authorities.

- 2.46 The provision of new transport infrastructure by the county highways authority will still be heavily reliant on developer contributions. The Borough Council's Regulation 123 list sets out how S106 agreements are only likely to be appropriate for direct access works to sites identified in the Site Allocations DPD or those works arising from Traffic Assessments undertaken in support of specific planning applications.