



Dacorum Infrastructure Delivery Plan Update

June 2015

Chapter 1: Introduction

- 1.1. An Infrastructure Delivery Plan (IDP) sets out the infrastructure needed to deliver planned growth sustainably, effectively and at an appropriate time. This report provides an assessment of the infrastructure required to support the existing and planned levels of housing and employment development within the Borough up to 2031 as set out within the Core Strategy.
- 1.2. This IDP builds on previous infrastructure studies provided in evidence to both the Core Strategy examination and the examination into the Community Infrastructure Levy Draft Charging Schedule. These studies include the Dacorum Strategic Infrastructure Study (DSIS) (2011) and both the Infrastructure Delivery Plan (2012) and the Infrastructure Delivery Plan Update (2014). Previous versions of the IDP and the DSIS should be referred to for background information and for information on the standard of infrastructure to be provided.
- 1.3. The assessment has been informed by discussions with infrastructure providers and reflects their published plans and strategies at this moment in time.
- 1.4. This update focuses on the delivery of infrastructure and how infrastructure providers may utilise CIL or other mechanisms to deliver infrastructure required to support the growth in the Borough. The Council has engaged in regular conversations with the County Council with regards to their needs for new infrastructure in accordance with paragraph 48 of the DCLG CIL Guidance 2012 and has sought to discuss wider infrastructure requirements with adjoining local authorities as appropriate.
- 1.5. The IDP is accompanied by an Infrastructure Delivery Schedule (Appendix 1) which, sets out the schemes that are currently proposed to take place during the Core Strategy plan period to 2031. This has been updated from the schedule of the 2014 update to the IDP to remove schemes implemented during the previous 12-18 months.
- 1.6. The IDP is not a policy document and information contained within it does not override or supersede the Core Strategy, policies and commitments contained within the Local Planning Framework (LPF) documents. The Council, its partners and other stakeholders will use the evidence within this document and other infrastructure studies to ensure that appropriate infrastructure is in place as growth is delivered. The IDP may further be used as a reference point when seeking to secure infrastructure projects not proposed to be funded via CIL and as set out in policy CS35 of the Core Strategy and the Council's Regulation 123 list.
- 1.7. Although the IDP is a living document its publication represents infrastructure requirements at that fixed point in time. The IDP itself is subject to regular reviews to ensure that the information within it is accurate. The IDP will be a key consideration in the assessment of schemes requiring CIL funding. A new Infrastructure Business Plan (IBP), to be delivered through the CIL governance arrangements, will be published annually by the Council setting out the schemes that will be delivered with CIL funding.

Hertfordshire Local Enterprise Partnership (LEP)

- 1.8. The LEP brings together a number of organisations with the aim of promoting economic growth whilst enhancing and protecting the valuable natural assets within Hertfordshire. The LEP's Growth Plan for Hertfordshire sets out three priorities namely, Nurturing science based Enterprise and Innovation, Harnessing Hertfordshire's relationship with London; and Re-Invigorating vibrant towns for the 21st Century.
- 1.9. The Growth Plan highlights the opportunities for national headquarters and regional offices in Hemel Hempstead and the importance of the Maylands Growth Corridor (formerly known as the North East Hemel Hempstead Relief Road) to encouraging businesses to locate within the Maylands Business Park. It also highlights the need to regenerate the urban fabric of Hemel Hempstead town centre and is supportive of the town centre regeneration work being undertaken by the Council to support this objective.
- 1.10. The LEP are a major source of funding for highway improvement works and as such hold a critical role in the delivery of new infrastructure within the Borough.

Hertfordshire Infrastructure Investment Strategy Refresh (2012)

- 1.11. The HIIS Refresh examined strategic infrastructure needs within the County, but does not finalise a list of projects which should be defined as strategic work. Instead it highlights the importance of physical infrastructure that is needed to support the growth of strategic employment area such as the Maylands Business Park which would include proposals for the Maylands Growth Corridor.

Infrastructure Delivery Plan (IDP)

Methodology and assumptions

- 1.12. To produce this version of the IDP infrastructure providers were given the information in Table 1 regards the overall development levels and progress towards meeting the levels of development expected as a result of the Core Strategy. The housing programme within the Core Strategy is used for infrastructure work and identifies that a total of 11,320 homes are expected to be delivered over the plan period (2006-2031).
- 1.13. Providers were also made aware of the location of significant new developments as set out in Table 2 in order to establish any infrastructure needs arising from these developments themselves. A more specific breakdown of the location of new dwellings was also provided in some cases in the form of an up dated housing trajectory showing the levels of development expected to occur in small geographical areas. Those infrastructure providers using the housing trajectory were advised of its limitations.

Table 1 – Development Levels Planned for Dacorum.

Development Type (required and completed 2006-2014)	2006 – 2031							Total
	Hemel Hempstead	Berkhamsted	Tring	Bovingdon	Markyate	Kings Langley	Rest of Borough	
Residential dwellings	8,800	1,180	480	130	200	110	420	11,320
Residential dwellings completed	3,397	412	175	39	93	52	220	4,388
Residential dwellings outstanding	5,403	768	305	91	107	58	200	6,932
B1 Offices (m ²) required	n/a	n/a	n/a	n/a	n/a	n/a	n/a	131,000
B1 Office floorspace completed	27,605	612	1,207	0	0	24	5,554	35,002
B2 Industry (m ²) Require	n/a	n/a	n/a	n/a	n/a	n/a	n/a	(131,000)
B2 Industry floorspace completed	64,469	502	873	0	0	0	2,921	68,765
B8 Warehouse (m ²) required	n/a	n/a	n/a	n/a	n/a	n/a	n/a	(131,000)
B8 Warehouse floorspace completed	77,986	825	0	0	0	0	6,316	85,127
A1 Retail (m ²) required	n/a	n/a	n/a	n/a	n/a	n/a	n/a	63,750
A1 Retail floorspace completed	28,353	1,871	148	0	0	35	505	30,912
D2 Leisure (m ²) required	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
D2 Leisure floorspace completed	16,911	2,812	637	177	0	83	4,905	25,525

Table 2 – Strategic and local Sites to be delivered through the Site Allocations DPD (currently at Pre-Submission stage)

Local Allocation/Strategic Site Reference	Town/Village	Number of dwellings (Core Strategy)	Number of Dwellings (Pre-submission Site Allocations DPD)
LA 1 Marchmont Farm	Hemel Hempstead	300	300-350
LA2 Old Town	Hemel Hempstead	80	80
LA3 West Hemel Hempstead	Hemel Hempstead	900	900
SS1 Land at Durrants Lane/Shootersway	Berkhamsted	180	150
LA4 Land at and to the rear of Hanburys	Berkhamsted	60	40
LA5 Icknield Way	Tring	150	180-200
LA6 Chesham Road/Molyneaux Avenue	Bovingdon	60	60

- 1.14. The IDP makes no assumptions about the distribution of offices, industry and warehousing floorspace, The Core Strategy directs most of this type of new floorspace to the Maylands Business Park in Hemel Hempstead and this is what was assumed in the IDP where appropriate.
- 1.15. Infrastructure providers were given information about the number of dwellings planned over the plan period and asked to use their own assumptions regarding population if necessary. To help infrastructure providers identify the requirements arising from the planned level of development, the sites within the housing trajectory were categorised further by location, size of site and expected timescales for development.

Limitations of the Study

- 1.16. A number of infrastructure providers plan according to shorter timescales than that planned for through the Core Strategy and others tend to react when proposals are at the planning application stage. This has limitations in terms of infrastructure planning for the Core Strategy Plan Period to 2031.
- 1.17. There is more certainty about the infrastructure planned in the short to medium term, than that planned in the longer term.
- 1.18. Because of the uncertainties involved in infrastructure planning and continuing changes to circumstances of providers, the Council continues to hold regular discussions with all infrastructure providers.

Funding of Infrastructure

- 1.19. There are a number of sources of funding for infrastructure which must be considered and co-ordinated when planning the future provision of infrastructure. These include developer contributions through either on-site provision, Section 106 (S106) payments or the Community Infrastructure Levy (CIL), which are all delivered via the planning process, those funds available to the providers themselves and external funding sources.
- 1.20. The availability of funding for infrastructure providers has significantly reduced over time resulting in significant funding gaps to infrastructure providers. A good understanding of the availability of a range of funding opportunities, good project management and the ability to be creative are fundamental to the successful delivery of infrastructure. Infrastructure providers were asked about their circumstances as part of this evidence.

Chapter 2: Transport

- 2.1 The County Council have reviewed the Transport Schedule from the previous IDP and updated this accordingly 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 to mitigate those gaps. 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 focussed on addressing the impact of growth. The NPPF emphasises 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 (QNPs) 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 Infrastructure Delivery Schedule at the Annex to this report during the previous update to the IDP.

Transport Modelling

- 2.9 Two transport models have 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)

Hemel Hempstead Urban Transport (Paramics) Model

- 2.10 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 (May 2015) incorporating a revised housing scenario (reflecting the 2014 housing trajectory):
- 2.11 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.
- 2.12 The broad conclusion of the latest study testing the impacts of development within Hemel Hempstead urban area remains the same i.e. that the additional traffic demand 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;

2.13 The suggested mitigation measures required are:

- 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 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).

Key Locations of Cumulative Transport Impact to 2031

2.14 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; and
- A new access road from Breakspear Way to Boundary Way

2.15 The Council is already making significant transport improvements within the town centre of Hemel Hempstead with work having recently commenced on the provision of the town centre bus interchange along Marlowes and Bridge Street, Hemel Hempstead, work being undertaken to improve pedestrian and cycle links between the town centre and train station and work having been completed on the implementation of a one-way system in the Old Town.

2.16 The Bus Interchange will provide 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. Changes in Waterhouse Street will include a relocated and extended taxi rank and dedicated disabled parking. This is due for completion in Autumn 2015.

- 2.17 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 Works

Bus Improvements

- 2.18 Significant improvements have been made to bus services within the Borough with the delivery of Real Time Bus stops and Smarter ticketing arrangements in key locations. Work has commenced on a new Hemel Hempstead bus interchange and this is due for completion in Autumn 2015.

Walking/Cycling Improvements

- 2.19 The Council and County Council have prioritised the improvement of pedestrian and cycle links between Hemel Hempstead town centre and the train station with the inclusion of designated routes and new facilities for cycle parking. Maylands has also been targeted as a key provider of employment within the town. Elsewhere a number of pedestrian crossings and cycle parking facilities have been provided or have funding secured for delivery in 2015 in key locations in Berkhamsted and Tring.

Canal Towpath Improvements

- 2.20 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. We are currently investigating the possibility of carrying out works to the towpath through Kings Langley in conjunction with Three Rivers District Council.

Rail Improvements

- 2.21 The platforms of both Hemel Hempstead and Berkhamsted railway stations have been made more accessible through the provision of lifts at both stations. Controlled parking areas have also been extended around Apsley and Hemel Hempstead station with a view to mitigating the impact on neighbouring residents. Additional improvements are identified within the associated IDP schedule of infrastructure projects.

Future Requirements

General

- 2.22 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 Infrastructure Schedule at Annex A.

Site Allocations – Issues and Options

Hemel Hempstead

- 2.23 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.
- 2.24 Old Town (LA2) – A primary access will be provided off Fletcher Way.
- 2.25 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.
- 2.26 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 is likely to seek LEP funding towards these projects.

Berkhamsted

- 2.27 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 trialled to assess the impact upon traffic movements in this locality. The junction of Durrants Lane and High Street will also require upgrading in accordance with the TNBUTP and 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.

Tring

- 2.28 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

- 2.29 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

- 2.30 The main sources of funding for the provision of new transport infrastructure appears to be central government funding administered through the Hertfordshire Local Enterprise Partnership (LEP) and County Council capital reserves, developer contributions, grants, contributions from third parties and central government funding. 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 funding is generally from the Local Transport Plan (LTP) fund, which is allocated based on the network size, with alterations for the condition of the asset and exceptional occurrences e.g. severe winter. Further central government funding is available for improvement schemes subject to a bidding process to the DfT for capital grants, and for individual projects via bidding for the Local Sustainable Transport Fund (LSTF). HCC submit regular bids for various schemes to the LSTF, much of which is for match funding for schemes where some developer contributions have already been secured.
- 2.31 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.

Chapter 3: Education

- 3.1 This chapter builds on previous assessments of educational needs prepared for the Core Strategy and for the examination of the Council's CIL Charging Schedule including previous versions of the Infrastructure Delivery Plan. It considers the development scenario set out in the Core Strategy and its implications for all forms of education from early year's provision right through to further education. The information within this chapter is based on discussions with the County Council as the statutory provider of education facilities.
- 3.2 As with previous reports, requirements for primary and secondary education are expressed in forms of entry (f.e.). One f.e. is equivalent to 30 children per year group; for primary schools where there are seven year groups from reception to year 6 this totals 210 children. Secondary schools have five compulsory year groups from year 7 to 11, therefore 1 f.e. represents 150 children. Local Authorities (LA) have a duty to ensure that sufficient, suitable places are available to meet the reasonable needs of all young people, and to encourage them to participate.

Forecasting Education Provision

- 3.3 The County Council provide forecasts on education needs every spring and updates these forecasts within the autumn of each year. These forecasts are underpinned by data sources including GP information on the registration of pre-school children, school census data and pupil yield from new developments. Full details on education forecasts can be found on the County Council website at:

<http://www.hertsdirect.org/services/edlearn/aboutstatesch/planning/>

Changes in education provision

New School Providers

- 3.4 A significant shift in national education policy and funding has occurred over the past five years resulted in increased autonomy and diversity of school provision (academies, free schools, university technical colleges, studio schools)
- 3.5 The County Council has a legal duty to ensure there are secure sufficient school and early year's places available for those Hertfordshire residents that want one, to ensure qualitative education standards are met, to co-ordinate admissions and to provide Special Education Needs and Youth Services.
- 3.6 HCC has the responsibility for commissioning the provision of school places from a wide range of providers, but is the admitting authority for only community schools and Voluntary Controlled Schools. All other schools, including Voluntary Aided, trust schools (those supported by charitable trusts), academies and free schools and independent schools, are their own admitting authorities. LAs cannot promote new community provision as all new schools now need to be academies or free schools, approved by the Secretary of State. Free schools, however do not have to be

promoted on the basis of the need for school places and therefore have potential to distort basic needs planning.

Education Provision

- 3.7 Most of the schools in Hertfordshire are part of a two tier system. Children attend a primary school (or an infant, and then a junior school) and then leave at the end of Year 6 to start at secondary school.
- 3.8 Until recently, the town of Berkhamsted operated a three tier system. In 2012, the County Council, in partnership with the governing bodies of Voluntary and Foundation Schools implemented proposals to move from a 'three tier' system to a 'two tier' system in line with most of the rest of Hertfordshire.
- 3.9 The move to a two tier system has changed the pressure in the town for new educational facilities with a notable increase in secondary school places needed to be provided at Ashlyns school, as the sole provider of secondary education.

Early Years Education

- 3.10 The County Council has a statutory requirement to provide 15 hours of free early education (FEE) to eligible 2 year olds across Hertfordshire and universal free early education (FEE) for 3 and 4 year olds as part of its obligations under the Childcare Act 2006.
- 3.11 This Act requires local authorities to secure sufficient childcare places for working or studying parents for 0-14 year olds (up to 19 with Special Educational Needs) in pre-schools, Day Nurseries and Out of school clubs.
- 3.12 The County Council delivers Children Centres in each community of around 800, 0-5 year olds providing a one stop shop of integrated facilities (childcare, early years, health and parenting services) for parents/children. There are 10 Children Centres in Dacorum which are used for the purposes of early years provision.
- 3.13 The county council RAG (Red, Amber Green) rates the sufficiency levels for 2, 3, and 4 year old free early education places in all Children's Centre Areas:
- Red = Insufficient places available (A gap exists which will mean a significant number of families will have difficulty accessing provision in that area)
- Amber = Near sufficient places available (A gap exists which means that some families may have difficulty in accessing provision)
- Green = Sufficient places available (Provision largely matches the needs of families)
- 3.14 The latest information held by Hertfordshire County Council in the Boroughs Children Centres is as shown in the following table.

Table 3.1 – Adequacy of Children Centres

Area	Children's Centre	RAG Rating
D1 Tring	Orchard Children's Centre	Green
D2 – Berkhamsted North	Little Feet Children's Centre	Green
D3 – Berkhamsted South	Little Hands Children's Centre	Red
D4 – Warners End and Chaulden	Galley Hill Children's Centre	Red
D5 – Hemel Hempstead central	Heath Lane Children's Centre	Green
D6 – Grovehill and Woodhall	Worldshapers Children's Centre	Red
D7 – Adeyfield, Highfield & St Pauls	Windmill Children's Centre	Red
D8 – Bennetts End and Leverstock Green	Green Lane Children's centre	Green
D9 – Bovington and Chipperfield	The Lanes Children's Centre	Green
D10 – Kings Langley, Bedmond and Nash Mills	Three villages Children's Centre	Yellow

3.15 The rating for an area can change quickly due to a change in the circumstances of the provider.

Future Requirements

3.16 The County Council have informed us that additional early education provisions will be required in those area identified as insufficient to support housing growth. There is already a shortfall of childcare places at 4 of the children centres, D3, D4, D6 and D7

3.17 The most significant gaps in the provision within Children Centres in Dacorum is in area D4: Warners End and Chaulden and this is likely to be exacerbated by residential development at site LA3.

3.18 Hertfordshire County Council has previously expressed a desire for a dedicated premise's to be provided in D6: Grovehill and Woodhall Farm. The provision of a dedicated centre could be provided in a new build pre-school nursery or by the additional shared use of community rooms offering meeting space for up to 25 parents and children.

Primary Education

- 3.19 Primary education is the first stage of compulsory education and is typically from the ages of 4 (reception) to 11 (year 6). Hertfordshire County Council's strategy to meet the rising demand for school places is set out in the 'Meeting the rising demand for school places' document, The most recent version of Meeting the Rising Demand can be viewed at the following link:

<http://www.hertsdirect.org/docs/pdf/m/mrdseptpri14.pdf>

- 3.20 The County Council has an annual primary school expansion programme (PEP) which intends to primary increase capacity in schools across the county.

New Provision

Berkhamsted

- 3.21 Since the IDP was updated in January 2014, the County Council has implemented its proposals to provide a two tier education system within the town. Greenway, Potten End, St. Marys C of E and Westfield schools have taken children into year 5 for the first time this school year (from September 2014) as part of their transition to becoming primary schools. Overall the reorganisation of schools across the town created an additional 78 reception places.

Hemel Hempstead

- 3.22 Since the IDP was updated Hammond Primary School has become an Academy and has increased its Published Admission Number (PAN) from 60 to 90 providing an additional 1 f.e within the East Hemel Hempstead Primary Planning Area. However, following consultation, Hammond Primary School has determined that it will decrease its PAN from 90 to 60 from September 2016. The Jupiter Community Free School (2 f.e) is now operational and will move onto the Jupiter Drive site from September 2015 following the completion of building works. The County Council's forecast will now include this new school and the impact of these additional places (including any impact on adjoining planning areas) will be accounted for subsequently.
- 3.23 Galley Hill Primary School has been extended by 0.5 f.e to 2 f.e and a permanent expansion of South Hill Primary School by 1 f.e to 2 f.e has been implemented. The expansion of South Hill will assist in meeting some forecast demand in the town centre as well as the adjacent East and South East Hemel Hempstead Primary Planning Area from 2015.

Markyate

- 3.24 Following on from the temporary expansion of the Markyate Primary School in 2014, the school will expand from 1 f.e. to 1.5 f.e. on a permanent basis from

September 2015. This expansion should accommodate the child yield from a number of new developments within the village within recent months.

- 3.25 The forecast on which this expansion was based included a number of housing schemes within the village.

Future Requirements

- 3.26 In short, HCC consider that the child yield from new developments in Dacorum will be somewhere in the range of 1 f.e. per 500 – 850 dwellings, depending on the mix, type and tenure of the dwellings. More recent communication indicates that HCC consider that in order to be 97.5% confident of not underestimating pupil yield; a pupil yield of 1 f.e. per 500 dwellings should be used.
- 3.27 When planning for new education infrastructure arising through development growth, HCC works to a number of consistent principles:
- That developer contributions (either S.106 or CIL) will fund the relevant school infrastructure requirements arising from housing growth, in conjunction with an assessment of local circumstances.
 - That strategic housing sites provide appropriate school infrastructure that is sufficient to meet the demand generated by the development, and that this should be through both the provision of school site(s) and the funding for school builds.
 - That in general, any current capacity is there for the existing community and the normal fluctuations in demand – HCC will seek contributions of some form from all developments for the purpose of prudent planning.
- 3.28 Table 3.2 shows the estimated pupil yield arising from the housing planned in the Core Strategy and the resultant additional requirements for primary school provision and how they will be met by primary planning area. The costs of provision have been estimated and are subject to review.

Table 3.2: Requirements for additional Primary School Provision to 2031

Primary Planning Area	Estimated Pupil Yield arising from housing planned in the Core Strategy	Requirement for additional primary provision	How it will be provided	Estimated cost of additional primary provision
Hemel Hempstead North East	10.4 – 17.6. f.e.	2 f.e.	Plans for an additional 2 f.e provided either by a school expansion or through provision of a new school on a site owned by HCC	£8.32m (based on the estimated cost of expansion of two existing schools).
Hemel Hempstead East to serve development in Hemel Hempstead and St Albans.		2 f.e.	A minimum of one new 2 f.e. school to serve development within the East Hemel Area Action Plan area with potential for additional primary school provision to result from development within SADC to the east of Hemel Hempstead – delivered through a combination of S106 and CIL	£7.64m plus land
Hemel Hempstead South East		2 f.e.	New 2 f.e. school. HCC are currently undertaking feasibility work with a view to providing a new school upon identified sites within Nash Mills (EZ/1)	£7.64m plus land
Hemel Hempstead West and North West		2 f.e.	New 2 f.e. school as part of LA3 delivered through S 106 agreement(s)	£7.64m plus land
Hemel Hempstead Town Centre		2 f.e.	New 2 f.e. school upon the hospital site (MU/1) delivered through S.106 agreement(s).	£7.64m plus land
Hemel Hempstead		4 f.e.	Sites for 2 new schools	Subject to review

Reserve Sites				
Berkhamsted	1.4 – 2.4 f.e.	Up to 4 f.e.	Dependant on the phasing of housing and the impact of the move to two tier education. However the 1180 dwellings only justifies the range of education yield 1.4 to 2.4 fe	£7.64m plus land if required –
Tring	0.6 - 0.9 f.e.	N//A	Through existing latent capacity. There may need to be adjustments to existing playing field provision for example a detached playing field at Dunsley Farm.	There may be costs associated with refurbishment/and or expansion if required
Kings Langley	0.1 - 0.2 f.e.	N//A	Through existing latent capacity (N.B the proposed school at SE Hemel Hempstead will help free up capacity)	There may be costs associated with refurbishment/and or expansion if required
Bovingdon	0.2 - 0.3 f.e.	N//A	Through existing latent capacity	There may be costs associated with refurbishment/and or expansion if required
Markyate	0.2 - 0.4 f.e.	N//A	Through existing latent capacity. Refurbishment and/or expansion may be required	N/A – the cost of expansion have been secured through extant planning permissions for large sites within the settlement.
Countryside	0.5 - 0.8 f.e.	N//A	Through existing latent capacity	There may be costs associated with refurbishment/and or expansion if required
Total	13.4 – 22.6 f.e.	14 f.e. (+4 f.e. in reserve)		£46.52m plus land

School and site requirements – Space Standards

3.29 HCC's current policy is to provide primary schools of at least 2 f.e. plus nursery (if there is a local need), where possible, However, there are variations in provision – for example in rural areas where smaller schools are appropriate. Ancillary uses including pre-schools, children's centres and extended services facilities often co-locate on school sites offering wider provision to the local community.

3.30 The School Premises Regulations (2012) provide a much less stringent approach to school site standards. The County Council has previously applied a Building Bulletin (BB) standard as these are deemed a suitable standard for school premises. In light of the new BB103 guidance however, the County Council is in the process of reviewing its current position. Until this review is complete it will continue to refer to BB98/99 for secondary and primary education as appropriate.

The standards for the primary school sites based BB99 are:

- 2.5 hectares
- Sustainably located
- Flat
- Accessible to pedestrians and vehicles
- Free from site constraints

It should be noted that free schools may not need to meet the same spatial standards.

Schools and site Requirements – Issues and Options

Hemel Hempstead

3.31 The Borough Council and HCC have identified a need for a Hemel town centre school site allocation to address the continued growth in residential units within the town centre and as a result of ambitious plans for regeneration of the town centre and its immediate environs. This is likely to be provided upon the Hemel Hempstead hospital site (MU/1) as part of a wider mixed use development in this location. There is a need to develop a clear strategy over which sites may make appropriate contributions towards such a scheme given that the Council will be under pooling restrictions for Section 106 agreements.

3.32 HCC's current forecast indicates that there is a deficit of reception places in the South East Hemel Hempstead Primary Planning Area. This means that there may be a need to provide a new school in the short-medium term given that many existing school sites within this area are heavily constrained and not capable of expansion to meet educational needs. Dacorum Borough Council has identified site EZ/1 with a view to addressing the demand for a primary education facility within this area. This could require the relocation of a number of community uses.

3.33 In addition to a single primary school identified as needing to be provided to accommodate levels of growth arising from Spencer's Park and the Heart of

Maylands developments in east Hemel Hempstead, HCC have responded to the draft SADC SLP to indicate that new primary school sites and a secondary school site would need to be allocated should there be significant development of around 2,500 units within their administrative area and to the east of Hemel Hempstead.

Berkhamsted

- 3.34 The Core Strategy identifies two education zones within Berkhamsted. The County Council is currently considering options for how these zones could facilitate the provision of additional school places in the future. This does not necessarily equate to a new school immediately. For example, the northern zone may allow for expansion of Bridgewater Primary School and/or the provision of a new primary school in the future. The other zone could help support the provision of a new primary and/or secondary places depending on the greater of the needs. Development of these zones should enable a flexible approach to ensuring there are sufficient school places in Berkhamsted to meet future demand..

Tring

- 3.35 There are two primary schools and an infant and junior school within Tring providing 150 reception places. A further 50 reception places are available in neighbouring villages Aldbury, Wiggington and Long Marston. There is considered scope at Dundale Primary School and The Grove Primary School to increase capacity by up to 2 f.e., which may involve adjustments to existing playing field provision for example a detached playing. They have also indicated that there is latent primary school capacity till 2031 with surplus primary school places from 2015/16 to 2017/18. This should be sufficient to accommodate developments at LA5.

Kings Langley.

- 3.28 There is no capacity to increase Kings Langley Primary School beyond 2 f.e. It is understood that a significant level of development within the settlement of Abbots Langley may result from proposals under consideration in the adjoining Three Rivers District Council administrative area. This level of development combined with future growth at Kings Langley is likely to generate a requirement for an additional primary school in this area. The County Council is engaged in searching for a site within the area and DBC may be able to facilitate in the delivery of this project.

Secondary Education

- 3.29 Secondary education is the second phase of compulsory education and is provided in secondary schools for pupils aged 11 – 16 (years 7 to 11). Many secondary schools in Dacorum also offer a 6th form for pupils in years 12 and 13, however this is not compulsory and is considered under further education. The comments attached at section 3.4 relating to Government Policy increasing sixth form stay on rates should be noted.

New Provision

- 3.30 The capacity of Longdean school, Hemel Hempstead has recently increased by 1 f.e to 8 f.e in total.

Future Requirements

- 3.31 The requirements for additional secondary school places arising from the growth planned in the Core Strategy has been informed by the response to the Pre Submission Core Strategy from Hertfordshire Property (HCC), a document provided to DBC by HCC entitled 'Infrastructure Provision in Hertfordshire – Dacorum Borough Council' and discussions between officers during 2012/13. In short, HCC consider that the secondary school aged child yield from new developments in Dacorum will be approximately 1 f.e. per 500 to 850 dwellings. More recent communication indicates that HCC consider that in order to be 97.5% confident of not underestimating pupil yield, a pupil yield of 1 f.e. per 500 dwellings should be used.
- 3.32 Hertfordshire County Council's strategy to meet the rising demand for school places is set out in the 'Meeting the rising demand for school places' document, The most recent version of Meeting the Rising Demand can be viewed at the following link:

<http://www.hertsdirect.org/docs/pdf/m/mrdsec.pdf>

Table 3.3 shows the requirements for additional secondary school provision arising from the growth planned in the Core Strategy and how they will be met.

Table 3.3: Requirements for additional Secondary School Provision to 2031

Area	Estimated Pupil Yield arising from housing planned in the Core Strategy	How it will be met
Hemel Hempstead	10.3 f.e	<p>Through existing capacity and expansion of existing secondary schools. Contributions would be required to expand existing schools.</p> <p>However, should the large scale allocation of around 2500 dwellings in SADC (east of HH) be brought forward, a new 6 -8 f.e. secondary school site would be sought and additional places required to serve Hemel Hempstead town could also be provided at that school. In that instance, contributions would be sought toward development of that school</p>

Berkhamsted	1.4 f.e.	Expansion of Ashlyns School up to 10 f.e (EZ/2)
Tring	0.6 f.e.	Through capacity within existing secondary schools. If Tring secondary school requires expansion there may be a requirement for detached playing fields. Dacorum Borough Council has included a site at Dunsley Farm for the provision of detached playing fields within its Site Allocations DPD.
Kings Langley	0.1 f.e.	Through capacity within existing secondary schools. However, contributions may be required to expand existing schools if necessary.
Bovingdon	0.2 f.e.	
Markyate	0.2 f.e.	Given that the majority of pupils from Markyate travel to Harpenden secondary schools, contributions may be required to extend schools/facilitate a new school there.
Countryside	0.5 f.e.	Through capacity within existing secondary schools. However, contributions may be required to expand existing schools if necessary.
Total	13.1 f.e.	Largely through capacity within existing secondary schools, although some extensions may be required.

3.33 The County Council have estimated the cost of expanding a secondary school by 1 f.e would be some £3 million (School Expansions – HCC Enterprise, Education and Skills Cabinet – 20th September 2013)

Hemel Hempstead

3.34 The County forecast that there are likely to be secondary education capacity issues within 4-5 years in Hemel Hempstead which will need to be met through the expansion of existing schools.

3.35 A new secondary school may also need to be provided if levels of growth within the neighbouring Borough of St. Albans City and District Council as set out in their Draft Local Plan are pursued together with any expected growth within the East Hemel Hempstead Area Action Plan.

School and site requirements – Space Standards

3.36 HCC policy is to provide secondary schools of between 6 and 10 f.e. where possible, however, there are variations in provision – for example in areas where there is a

three tier system. Ancillary uses including extended schools and dual use sports facilities often co-locate on school sites offering wider provision to the local community.

3.37 The School Premises Regulations (2012) provide a much less stringent approach to school site standards. The County Council previously used Building Bulletin standards. In light of the new BB103 guidance however, the County Council is in the process of reviewing its current position. Until this review is complete it will continue to refer to BB98/99.

3.38 The standards 6-8 f.e. secondary school sites based BB98 are:

- 12 – 15 hectares
- Sustainably located
- Flat
- Accessible to pedestrians, vehicles and public transport
- Free from site constraints

3.39 It should be noted that free schools may not need to meet the same spatial standards. However HCC consider the above to be appropriate as non-statutory guidelines for free schools.

Further Education

3.40 Further education is post-compulsory education at pre-degree level, which may include (the opportunity to take) qualifications also available at the level of compulsory schooling.

3.41 A range of options are open to students in further education including GCSEs, A-levels, vocational courses, Apprenticeships and work experience schemes.

3.42 The Education and Skills Act 2008 places a duty on all 16 and 17 year olds who have not achieved any qualifications at Level 3 to continue in some form of education or training. From the summer of 2015 young people will be required to stay in some form of education or training until their 18th birthday.

3.43 Raising the participation age does not mean young people must stay in school; they will be able to choose one of the following options:

- full-time education, such as school, college or home education
- work-based learning, such as an Apprenticeship
- part-time education or training if they are employed, self-employed or volunteering for more than 20 hours a week.

This is likely to have implications for demands upon secondary schools and colleges, but the extent of this is difficult to model.

3.45 The 16-18 year old cohort across Hertfordshire totalled 38,288 (January 2015). Of this total, 78.8% were enrolled in full-time education, 4.3% in apprenticeships, 0.2% in part-time education, 0.7% in employment with training, 0.6% in training and 0.5%

in work-based learning. Over 96% of the 16 year olds in Hertfordshire are meeting the duty to participate in education, employment or training through any one of the following ways:

- Remain in full-time education on a 16-19 Study Programme at school or college or with an independent training provider or in home education
- Choose work-based learning, such as a Traineeship or an Apprenticeship
- Be in part-time education or training if they are employed, self-employed or volunteering for 20 hours or more a week.

3.46 For the district of Dacorum, the latest activity data (March 2015) shows that out of a total 16-18 cohort of 4868, 83.6% are in some form of education, employment or training.

3.47 Academic pathways such as A levels are predominantly catered for by 6th forms in secondary schools. Vocational pathways are predominantly catered for by further education colleges, specialist learning providers and employers.

New Provision

3.48 The 6th form facilities at Kings Langley Secondary school were improved as a result of the rebuilding project carried out under the PSBP. This significantly increased the capacity for 6th form students.

Apprenticeships

3.49 Apprenticeships are work-based training programmes for new and existing employees designed around the needs of employers, which lead to nationally recognised qualifications. Apprenticeships are designed by Sector Skills Councils and business representatives from industry. Over 100,000 employers in over 160,000 workplaces offer frameworks across a wide range of industry sectors.

3.50 As Apprenticeships are work-based training programmes, most of the training is 'on the job' and the rest can be provided by a local college or by a specialist learning provider. Apprenticeship funding is available from the National Apprenticeship Service (NAS). If the apprentice is aged 16–18 years old NAS will provide all of the cost of the training; if they are 19-24 years old, NAS will provide up to 50 per cent; and if they are 25 years old NAS may provide some funding depending on the sector. Funding is usually paid directly to the training provider; in most cases this will be a learning provider, although some large employers with a direct contract with the National Apprenticeship Service may receive the funding themselves.

3.51 Employers are responsible for providing the 'on the job' element of the training and for paying the wages of apprentices. Employment must be for at least 30 hours per week, except in the minority of circumstances where the learner cannot complete the full 30 hours. In these cases employment must be for more than 16 hours per week.

Future Requirements

In-school further education provision

- 3.53 As set out in the secondary education section, no new secondary schools are planned in Dacorum over the plan period. However, should an anticipated large scale allocation of around 2500 dwellings in SADC (east of HH) be brought forward, a new 6 -8 f.e. secondary school site would be sought and additional places required to serve Hemel Hempstead town could also be provided at that school.
- 3.54 No significant expansion of 6th form provision is planned. However, this may change once the increase in participation age has started to have a more pronounced effect. It is worth noting that current secondary school forecasts show that from 2018 there will be more secondary school aged children than places.

Non-school further education provision

West Herts College

- 3.55 West Herts College (WHC) offers a wide range of courses over three campuses in Hemel Hempstead, Kings Langley and Watford. The Hemel Hempstead campus of West Herts College (WHC) is the only further education college in Dacorum and offers a range of courses in construction, retail and computing, travel and tourism and foundation studies alongside part time adult leisure courses. Since the DSIS report, WHC have submitted a planning application for a new consolidated college facility upon their existing site. This is driven by the college's desire to accommodate changes in further educational requirements, including changes to the college curriculum and space requirements for growth in construction related courses and as a result of increased enrolments for 16-18 year olds. The new college building will keep the same town-centre location in Hemel Hempstead but offer far greater scope for larger, more flexible learning spaces. Each subject area will have its own dedicated space and impressive facilities, with even the most straightforward classrooms fully equipped with the latest learning technology.
- 3.56 The new provision is designed to appeal to NEETs (young people not in education, employment or training) of which Hemel Hempstead has a relatively high proportion. In general, people who are NEET prefer practical learning and vocational courses and the college is successful in running apprenticeship courses with a particular focus on construction activities. The college is looking to offer a greater range of courses and appeal to more female students. The new college building within Hemel Hempstead town centre would have a gross internal floor area amount to some 9,383 square metres and is due for delivery in 2015. WHC aim to modernise its offer to rectify this, as sustainability is becoming increasingly important in the construction industry.
- 3.57 The Dacorum Education Support Centre has been relocated from the campus at West Herts College to Barncroft School to facilitate this proposal.

Funding

HCC Educational Facilities

- 3.58 The main source of funding for additional school places remains the capital funding that HCC receives from central government known as Basic Needs funding. The

level of Basic Needs funding is calculated according to annual demand for places and can vary substantially between years. CIL funding will be vital to supplement the Basic Need funding in meeting the costs of additional school places arising from new housing development where the new development does not justify a new school in its own right.

- 3.59 HCC have confirmed that where the requirement for a new school or expansion of an existing school is triggered by a single development (usually 500 dwellings+), it should remain normal practice for the developer to bear the cost of the building and the land. It would be the County Council's preference to secure such sites and buildings through the continued use of S.106 agreements even with an operational CIL charging schedule.
- 3.60 Such matters have been accommodated through the drafting of the Council's Regulation 123 list for CIL and as a result no CIL will be levied on the two large housing sites at west Hemel Hempstead (LA3) and Spencer's Park – Phase 2.
- 3.61 Where the requirement for a new school or expansion is triggered by cumulative levels of development, the provision of the land is more complex. Sometimes appropriately located HCC owned land can be used, but it is more common for HCC to acquire the land – in some cases via Compulsory Purchase Orders.
- 3.62 The Council has identified land on the Hemel Hempstead hospital site, MU/1, which may be secured under Section 106 for the provision of a town centre school. Therefore there is a need to develop a clear strategy over which sites may make appropriate contributions towards such a scheme given that the Council will be under pooling restrictions for Section 106 agreements.

Priority Schools Building Programme

- 3.63 There are other external funding sources that HCC can apply for, such as the Priority Schools Building Programme, but there is no certainty of these as a source of future income. The Priority Schools Building Programme is designed to address the needs of schools in most need of repair and not provide additional places.
- 3.64 In August 2011, schools in need of urgent repair were invited to apply for the first phase of the priority school building programme (PSBP). 261 schools were rebuilt (or completely refurbished) under this phase of PSBP with the first schools rebuilt opening in May 2014. In our locality, both Kings Langley School and Longdean School, were successful recipients of this first phase of PSPB funding.
- 3.65 A further round of PSBP funding was announced in May 2014. This allocated some £2 billion towards new school buildings. This second phase concentrated on the individual school buildings (or blocks) in the worst condition, rather than the rebuilding or refurbishment of entire schools. The results of PSBP2 were announced in February 2015 and a number of schools within Hertfordshire have been successful in securing funding.
- 3.66 Within our locality the following schools have been successful:
- The Hemel Hempstead School

- The Cavendish School, Hemel Hempstead
- The Astley Cooper School, Hemel Hempstead and
- Tring School

These schools will have at least one of their building (or blocks) rebuilt or refurbished under Phase 2 of this programme. As well as this continued investment to improve school buildings in the worst state through the Priority School Building Programme, the government has also published details of how over £4 billion will be allocated between 2015 and 2018 to schools, local authorities, academy trusts, and voluntary-aided partnerships to help them improve the condition of schools across the country.

- 3.67 Because of the unstable nature of demand for early year's education, and the flexibility in forms of provision, it is difficult to say with certainty these will be funded. Developer contributions, in the form of Section 106 and CIL, will be sought towards early years provision in areas where there are deficiencies, or forecast deficiencies.

West Herts College

- 3.68 The cost of the redevelopment of the Hemel Hempstead campus is being met by the College and its development partners. Proposals for the campus have been subject to a public consultation and the Borough Council is awaiting the submission of a planning application.

Apprenticeships

- 3.69 Apprenticeship funding is still available from the National Apprenticeship Service (NAS) but the format and eligibility criteria have significantly changed. Five grants of up to £1,500 are only available for employers of 16-24 year olds for small companies of less than 50 employees. Further details are set out at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388156/AGE_Employer_Fact_Sheet_Dec_14_.pdf

- 3.70 The Borough Council employed five apprentices between February 2014 and March 2015 at a cost of £94,600. Of these apprentices, one has secured a new post within the Council on a temporary contract, one has had the contract extended and one has been given a permanent role with a local employer, Gyron. An additional £51,000 was secured to support employment of apprentices in local businesses.

Chapter 4: Healthcare

Introduction

- 4.1 The Health and Social Care Act 2012 introduced significant changes to the way healthcare is provided and to the organisational structure of the NHS in England.

Commissioning Healthcare

- 4.2 The NHS commissioning system was previously made up of primary care trusts (PCT) and specialist commissioning groups. Most of the NHS commissioning budget is now managed by 211 clinical commissioning groups (CCGs). These are groups of general practices which come together in each area to commission the best services for their patients and population. The responsible CCG for the Dacorum locality is the Herts Valley CCG (HVCCG) and comprises the Boroughs of Hertsmere, Dacorum, St.Albans City and District, Three Rivers and Watford.

- 4.3 NHS England commissions many of the primary care services previously commissioned by PCTs. It is responsible for primary care contracts and has a duty to commission primary care services in ways that improve quality, reduce inequalities, promote patient involvement and promote more integrated care. NHS England is responsible for commissioning primary care, specialist healthcare services (provided in relatively few hospitals and accessed by small patient numbers), health services for serving personnel and families in the armed forces and health services for people in prison or other secure accommodation.

- 4.4 CCGs are led by local clinicians (Doctors and Nurses) supported by administrators. They will be accountable to and performance managed by NHS England who have regional and local offices. As such they are able to identify specific requirements of the local population that they serve. They are responsible for commissioning:

- Urgent and Emergency Care (e.g A&E)
- Elective hospital care (outpatients and elective surgeries)
- Community health services (services beyond GP's)
- Maternity and Newborn services
- Mental Health and services for those with Learning disabilities

Policy Update

- 4.5 In October 2014, NHS England and national bodies published the 'Five Year Forward View' setting out the vision for the future of the NHS, The purpose of this document was to articulate why change was needed in the NHS, what the change might look like and how it could be achieved. The plan set out the

challenges and questions facing health and care services in England, as a result of an increasing elderly population and more complex health needs. This national situation is reflected in west Hertfordshire.

- 4.6 Since November 2014 'Your Care, Your Future' has sought feedback on current services and identified future health and social care needs for West Hertfordshire. This review builds on 'Delivery Quality Healthcare for Hertfordshire' (2007) and on the work undertaken by the HVCCG to develop a general clinical strategy ([NHS Herts Valleys Clinical Commissioning Strategy](#)) and a strategy for the Dacorum locality. The work will help HVCCG discover what needs to be done to deliver the strategy in practice, including delivering more care closer to where people live.
- 4.7 Hertfordshire County Council and local NHS organisations (including HVCCG and West Herts NHS Hospital Trust) recently published the 'Case of Change' setting out the results of this research and some opportunities for improvements. It is expected that the options to improve health and social care in west Hertfordshire will be published in autumn 2015. These options will be subject to further consultation with a view to identifying preferred options for service and organisation configuration and delivery of services by early 2016.
- 4.8 Once this strategy has been devised by HVCCG, West Herts Hospital NHS Trust will be able to clarify their position in relation to the delivery of services and in particular the future of healthcare on the Hemel Hempstead hospital site. Such options are unlikely to be presented until June 2016 at the earliest,

The Delivery of Healthcare

- 4.9 Once Commissioned, NHS services are delivered by a number of different providers. These are primarily known as Trusts which are classified as NHS Foundation Trusts or NHS Trusts.
- 4.10 A key objective for the NHS is to move appropriate aspects of healthcare provision closer to patient's homes. This may mean provision of care facilities in local facilities or within the patient's home as appropriate. However, to date this has not yet resulted in the planned reduction of acute activity and may require additional capacity in primary care or community based services.

Primary Healthcare Services

- 4.11 Primary healthcare services are delivered by a wide variety of providers including includes General Practices (GP), dentists, optometrists, pharmacist, walk in centres and NHS 111.
- 4.12 GP's look after the health of people in their local community and deal with a range of health issues. They also provide health education, run clinics, give vaccinations and can carry out simple surgical operations. GPs have a contract for service with the NHS but are responsible for staff recruitment and retention. There is no obligation to provide a ratio of staff to patients however service

delivery standards including quality and waiting times are strictly enforced by the NHS.

- 4.13 Dentists are responsible for oral health and are likewise contracted to provide a service to the NHS.
- 4.14 Pharmacists are responsible for the safe supply and use of medicines by the public. The NHS does not support the initial provision or on-going costs of pharmaceutical premises but receive a reimbursement for pharmaceutical services provided. As such they tend to be a private sector function.
- 4.15 HVCCG will support local GP commissioners to maintain a local focus with services provided within the locality. This will ensure that local clinicians with direct patient contact will be making commissioning decisions about what is needed in Dacorum.
- 4.16 Part of the NHS reform has resulted in Public Health Consultants transfer into local authorities enabling more joined up prioritisation of resources to areas of greatest health need.

Primary Care Provision Requirement Standards

- 4.17 Access to primary care facilities hospital and community services is controlled by GPs. Having sufficient GPs operating from adequately sized and located premises is therefore a key factor in a population's access to health.
- 4.18 HVCCG have confirmed that for a traditional five/six day per week GP practice an ideal benchmark is about 1 Whole Time Equivalent (WTE) GP per 1,800 patients on the list¹. HVCCG typically use a population forecast of 2.1 people per dwelling to assess future demand for GP premises. Different types of GP contracts exist which provide the flexibility for primary care provision. With open access to unregistered patients and longer opening hours (such as the West Herts Medical Centre on the Hemel hospital site) these may see a gradual move away from 'traditional' lists and the 1,800 benchmark.
- 4.19 The majority of GPs in Hertfordshire do not operate out of NHS owned premises and this affects their ability to efficiently ensure high standards for medical care. Surgeries are often in the private ownership of the GPs or leased by them. The NHS reimburses them for those areas deemed required for the service commissioned together with certain other elements of infrastructure provision (Information management Technology and business Rates for example) The NHS would expect a practice to see some 18 patients per square metre.
- 4.20 Where new GP premises are either to be constructed or commissioned, HVCCG would request that such premises reflect the design standards and best practice set out at:

¹ 1 GP per 1,800 patients is deemed an accepted target for PCTs across the country highlighted in both the Estates Plan, Guildhouse Ltd UK, September 2009 and The Hertfordshire Infrastructure and Investment Strategy, Atkins, 2009.

<http://webarchive.nationalarchives.gov.uk/20090617170401/pcc.nhs.uk/planning-and-design-guidance.php>

Existing and Committed Provision

Existing Provision

- 4.21 There are 70 GP sites across the area covered by HVCCG, which are strategically located to serve residential communities. Of these, 20 GP practices are provided in Dacorum with around 100 GPs and associated staff. This provides a good coverage of GP premises across the Borough including some sites where expansion of services and premises is feasible.

Adequacy of Existing Provision

- 4.22 NHS England categorises GP premises in terms of their size, list size and number of GP's and allocates an AT score. The premises below in Figure 4.1 are those in the Dacorum area with a lowest AT ranking and thus in most need of improvement or expansion. Those with rankings below 150 would be encouraged to submit bids to NHS England for capital infrastructure funds by the CCG's. Those ranked higher than 150 would not normally be considered a priority.

Figure 4.1: Practices Identified by NHS England for Improvement/Additions

Practice	Internal Area in m2	List Size	NHS England AT ranking
Boxmoor*	25.79	859	11
Parkwood Drive	509.60	15460	16
Highfield	127.554	4658	44
Gadebridge	36.9	1042	48
Kings Langley	421.28	9466	126
Coleridge	91.81	1939	154
Long Meadow	161.09	4057	156
Milton House	345	8876	156

*Boxmoor Surgery is a satellite surgery for Parkwood Drive

Issues and Options

Hemel Hempstead

4.23 The town is considered well placed to meet the likely health demands arising from the growth identified under the Core Strategy. A number of premises within the town are capable of expansion to meet new demand.

4.24 It is known that the development of land to the west of Hemel Hempstead at Local Allocation LA3 will require either the expansion of the Parkwood Drive Surgery or the construction of a new surgery upon the application site. It is clear from discussions with the practice manager that the preferred option would be to expand the existing premises however the site itself is heavily constrained and the feasibility of such a proposal will need to be carefully considered.

4.25 The Borough Council have not been made unaware of any other additional needs for new GP premises or provision within the town

Bovingdon

4.27 We are advised by HVCCG that the surgery is able to support modest growth as set out within the Core Strategy despite the modest size of the Archway premises.

Markyate

4.28 The majority of the anticipated housing growth in Markyate is already being delivered. The shell of a new building for medical purposes was provided as part of the Hicks Road development however this does not meet the spacing standards requested at 4.21. An area team for HVCCG are currently considering how to adapt the building to make it fit for purpose.

Berkhamsted

4.29 It has been confirmed that the Berkhamsted practices could support growth levels within the town however caution should be exercised as much of this capacity relates to the generous proportions of the Gossoms End (Hertfordshire Community Trust owned) surgery which is operating significantly under capacity. Other premises in the town, notably Milton House are operating close to capacity and have little scope for expansion.

4.30 The Council has been approached by a provider of new GP space regards proposals to consolidate the four existing premises in Berkhamsted upon a single health campus. No sites have been identified for such a scheme.

Tring

4.31 The Chief Locality Officer for Dacorum at the HVCCG has discussed the provision of new developments within the town with the GP practices and has confirmed that they consider that both practices should be capable of supporting the levels of growth identified within the Core Strategy and identified for LA5.

Kings Langley

- 4.32 Moderate growth might be supported but consideration should also be given to cross border pressure from Three Rivers (Abbots Langley).
- 4.33 NHS' estates in Hertfordshire are older than the regional averages for the East of England and national figures. However, the majority of the PCT estate properties in Dacorum are of average condition and appear to be well utilised.

Committed/Planned Investment

- 4.34 There is an extant planning consent for the relocation and expansion of Highfield Medical Centre from its current location in Jupiter Drive, Hemel Hempstead to a location near Highfield local centre (4/00803/13/FUL) Conditions have been discharged and works commenced in March 2015.
- 4.35 Parkwood Surgery has applied for approx. £1-2 million through the capital infrastructure funding bidding process to provide additional consultancy rooms and parking, It is recognised in the Site Allocations DPD and master plan for the site at land to the west of Hemel Hempstead that either a new GP premises or an expansion of the Parkwood Drive surgery will be required to accommodate growth arising from this site, but a preferred solution has yet to be identified. The Core Strategy will ensure that there is healthcare provision at Hemel Hempstead, with the configuration of services reflecting the demonstrable needs of the local population.

Costs of Provision

- 4.36 The costs of GP provision may vary substantially depending on the size and specific requirements of each GP surgery and the procurement route taken. Furthermore, precise costs for the future provision of primary health services is complicated by the fact that the range of services, associated number of consulting rooms and size of each healthcare centre that might be developed over the planning period is highly dependent on a range of factors and considerations..

Summary

- 4.37 The population of Dacorum is at present generally well-served in terms of capacity of primary care services; though there are some local areas of deficiency where surgeries are over-crowded and patient lists exceed the 1,800 patient per WTE GP standard, most markedly in Hemel Hempstead.
- 4.38 The application of a standard per-GP cost can be used to estimate the indicative cost associated with additional demand however it is not viable for providers to build new facilities until a significant proportion of the new development is completed and large numbers of patients are seeking to register.

Secondary Healthcare

- 4.39 Secondary healthcare is treatment by specialists to whom a patient has been referred by primary care providers. It covers general acute care (typically provided in a hospital), intermediate care (short-term support to prevent an admission to hospital) and mental healthcare (provided in a range of settings).
- 4.40 Secondary healthcare is provided by NHS trusts, including foundation trusts (which have more financial and operational freedom than other NHS trusts), children's trusts and mental health trusts.
- 4.41 Hospitals and other secondary care facilities are not restricted to local authority boundaries or catchment areas, so patients outside of the area are treated. They have much wider catchment and planning area than primary healthcare, which is provided at a local level.

West Hertfordshire Hospitals NHS Trust

- 4.42 West Hertfordshire Hospitals NHS Trust (the Acute Trust) was formed on 1 April 2000 following the merger of St Albans and Hemel Hempstead NHS Trust and Mount Vernon and Watford NHS Trust. The Trust manages Hemel Hempstead Hospital, as well as St Albans City Hospital and Watford General Hospital, providing general healthcare and some specialist services, and has close links with specialist hospitals. The Trust works with PCTs, local GPs, Clinical Commissioning Groups, other NHS Trusts, and the local social services.
- 4.43 Hemel Hempstead Local General Hospital is the only hospital in Dacorum and occupies a significant area of land within the town centre. Over half the hospital site (57%) is either empty or under-utilised and effectively decommissioned. This has resulted in significant savings in terms of maintenance costs for West Hertfordshire Hospital Trust.
- 4.44 Hemel Hempstead hospital has a relatively new 24/7 Urgent Care Centre which treats patients with minor illness and injuries. A wide range of outpatient services, intermediate care beds, tests and investigations are also provided at the hospital. It appears likely that the hospital site will in future deliver more non-acute health and social care services or out of hospital services.
- 4.45 The Council is aware of proposals by West Hertfordshire Hospital NHS Trust to rationalise the use of the hospital site and promote its use for other activities notably residential uses. The site forms site allocation MU/2 within the emerging Site Allocation DPD. The scale of the health proposals on this site will be dependent on the need to provide services identified by the HVCCG and the Hospital Trusts estate and service strategy.

Figure 4.2 – Proposal MU/2

Proposal MU/2

Location	Hemel Hempstead Hospital Site, Hillfield Road
Site Area (Ha)	6.96
Proposal	Replacement hospital, new 2 form entry primary school and housing (200 homes)
Planning Requirements	Development to be guided by the Town Centre Master Plan (Hospital Zone). Development Brief required. Key uses to include reconfigured local hospital facilities and the provision of a new primary school. Housing is to be delivered as part of a comprehensive development in conjunction with proposal H/8

4.46 It will be some time before the scope of reconstituted hospital services on the hospital site (MU/2) are known and such works are unlikely to represent the aspirations of the local population. This presents some difficulties in terms of bringing forward the delivery of much needed residential development on the site and more importantly addressing the need for a town centre school. A town centre school is likely to be required in the short-medium term whereas the redevelopment of the hospital site is seen as more of a long term aspiration for West Herts NHS Hospital Trust. Securing the delivery of a school may require the Council/County Council to exercise compulsory purchase powers in relation to the site. The Council will continue to discuss bringing the hospital site forward for development and the preferred approach to this development with both the West Herts Hospital NHS Trust and Hertfordshire County Council.

The Hertfordshire Partnership NHS Foundation Trust

4.47 The Hertfordshire Partnership NHS Foundation Trust provides the majority of health and social care for people with mental ill health and learning disabilities. The Trust works in close partnership with Herts County Council and other NHS organisations to promote and support mental health in the community. The Trust provides:

- Acute and Rehabilitation Services including inpatient services and crisis teams. There are no inpatient care sites in Dacorum. There are mental healthcare beds in Albany Lodge, St Albans, where beds may be accessed by the residents of Dacorum. Acute Services provide adult inpatient services for a Crisis and Assessment Service Treatment Team (CATT) and A&E Liaison. A&E Liaison teams operate at A&E in the District General Hospitals, specifically Watford, Lister, and the QEII at Welwyn Garden City.
- Community Services include local teams for mental health and learning disabilities and prison 'in reach' services. In Dacorum there is a Prison In-Reach team based in Bovington. The Trust has introduced Enhanced Primary Mental Health Teams which work closely with GP's and primary care staff to provide improved access and earlier mental health interventions. They are also responding to the local demand for improved

access to psychological therapies, developing these services and recruiting more staff trained to provide these types of treatments.

- Secure and Rehabilitation Services such as medium secure learning disability services, which includes in-patient and specialist residential services.
- Specialist Services such as substance and alcohol abuse, mother and baby care, dementia, eating disorders, specialist learning disability services. Child and Adolescent Mental Health Services (CAMHS)
- The Community Drugs and Alcohol service (CDAT) has recently been awarded to a third sector provider.

Committed Provision

4.48 The main investment project relating to secondary healthcare in Dacorum is the redevelopment of Hemel Hempstead Local General Hospital. The budget of the scheme has not been confirmed nor is the scope of the project identified. HVCCG are currently assessing health care needs and once these are determined West Hertfordshire Hospital NHS Trust will determine the most appropriate delivery mechanism. It is estimated that the costs for a modern health centre would be between £25 million to £30 million.

4.49 Also, in the future there may be adult mental acute beds located in the borough; however this provision is not committed and the location of the proposed beds is undecided.

Assessing Future Demand

4.50 Planning of secondary healthcare services is complex and the DQHH strategy laid out the range of provision required to meet projected growth in Hertfordshire until 2025. Its assumptions require a significant reduction in acute admissions supported by more active management of patients in the community. Key to this objective in the Dacorum area will be the development of the Local General Hospital and the strengthening of extended services in primary and community care. The Council will work with Health Commissioners to ensure the requirements to serve Dacorum's population to 2031 are adequately met.

4.51 HVCCG will be working with HPFT to transform the way in which services will be provided to the patients in Dacorum. A community based model is likely to be adopted over the coming year, ensuring that services provided are being offered in the most appropriate healthcare setting. .

4.52 It is likely that increases in Dacorum's population to 2031 will place additional pressure on all secondary healthcare services in the borough and surrounding areas. The changing age profile of the borough's population is also likely to have an impact on secondary healthcare needs, as certain age groups are likely to utilise healthcare services more than others.

- 4.53 Given the pattern of Dacorum's planned housing growth, it is likely that the greatest future need will be in Hemel Hempstead. In this respect, the location of new Local General Hospital will fit the location of new demand.
- 4.54 Models of healthcare are changing. There is potential to improve services and also to generate efficiencies and reduce costs by integrating primary and secondary healthcare provision. Relevant measures include the shifting of acute services to local community hospitals and reducing demand for services in institutional settings by improving prevention and care in the community.

Costs of Provision

- 4.55 The DQHH Strategy provides fully costed proposals to ensure the changes in the model of acute healthcare are affordable within expected budgets. There are elements of the proposals including the proposed Local General Hospital in Hemel Hempstead that will require service providers to successfully submit business cases for funding. In the period up to 2025 it is anticipated there will be a reduction in acute infrastructure.

Summary

- 4.56 A number of agencies are involved in the provision of secondary healthcare facilities to Dacorum residents, including the Hertfordshire Partnership NHS Foundation Trust and West Hertfordshire Hospitals NHS Trust.
- 4.57 HVCCG's strategic vision will consider the demand for and supply of healthcare infrastructure, and will plan services accordingly. The redevelopment of Hemel Hempstead hospital will be planned with due consideration to the future healthcare requirements of residents in the borough.
- 4.58 The lack of information, at this stage, makes a comprehensive assessment of future secondary healthcare requirements difficult. However, population increase related to planned housing development can be assumed to increase pressure on services. This is especially so given the likely increase in the proportion of the population over 65, and will be most acutely felt at Hemel Hempstead where growth is concentrated.

Funding

- 4.59 The Treasury allocates money to the Department of Health, which in turn allocates money to NHS England. Some of these funds are provided to run NHS England and for them to commission a limited number of services directly. The remainder is passed onto clinical commissioning group (CCG) to enable them to commission services for their populations.
- 4.60 Nearly half (47%) of the NHS budget is spent on acute and emergency care. General practice, community care, mental health and prescribing each account for around 10% of the total spend. In 2003/04 the government introduced 'Payment by Results' (PbR), an activity based system that reimburses providers for the work that they carry out, at an agreed national price PbR represents

approximately 30% of NHS expenditure (Understanding the New NHS, NHS England 2014)

- 4.61 In terms of CCG funding, £250 million of capital infrastructure funding has been made available nationally for the next two financial years. We have been advised that the initial assessment of high level bids by NHS England for Capital funds for premises improvements has been completed. 15 GP surgeries within the HVCCG area have made bids for varying degrees of funding for a range of improvement works (from ensuring buildings are DDA compliant to redevelopment of sites). This includes Parkwood Drive surgery who we understand to have bid for some £1-2m to provide additional consultation rooms and parking spaces at their surgery.

Chapter 5: Open Space

Background

- 5.1 This update to the IDP concentrates on refreshing the Infrastructure Delivery Schedule in Appendix A to reflect the progress made on the delivery of new green infrastructure.
- 5.2 The standard of open space was assessed within the DSIS against recognised standards for provision for a range of green infrastructure typologies.
- 5.3 The impact of the growth was examined for inclusion in the DSIS; in terms of the existing deficiencies, the additional demand arising from planned development and the planned provision of either additional open space or improvements to existing open space, where they may increase capacity.
- 5.4 At a more local level, Green Infrastructure Plans were published for Hertfordshire and Dacorum; the Hertfordshire Strategic Green Infrastructure Plan (HSGIP), and the Dacorum Borough Green Infrastructure Plan (DBGIP). These documents can be located under the following links:
- 5.5 The full HSGIP report can be accessed on the County Council's website: <http://www.hertsdirect.org/docs/pdf/s/SHiP.pdf>.

The full DBGIP report can be accessed on Dacorum's website:

<http://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/evidence-base/green-infrastructure-study-2011>

- 5.6 The projects set out in the HSGIP and DBGIP are aimed at enhancing the existing green space network and delivering multiple benefits. Because of this approach, none of the schemes are required purely because of new development. However, it is clear, that the measures proposed are required to support new housing growth, and these will be complemented by measures required to mitigate the impact of specific development sites. A number of other open space schemes planned for delivery during the plan period have been included in the Infrastructure Delivery Schedule at Appendix A.

New Provision

- 5.7 The Council is making good progress towards the delivery of its key open space projects at the Water Gardens and Two Waters. Works have already commenced within the Water Gardens to remove old trees and open up the garden itself. Works are also under way to improve pedestrian and cyclist access between the train station and town centre as part of the Two Waters Open Space project. The improvements to Heath Park (Heath Park - Phase 1) including replacing footpaths, crossings, providing new benches and additional landscaping. These works should be completed during financial year 15/16.
- 5.8 The Council has made significant progress through its programme of playground improvements and refurbishments with a number of schemes being delivered

Borough wide. These include new playgrounds or playground improvements in the following locations:

Hemel Hempstead

- Bunkers Park,
- Chaulden Lane,
- Grovehill Playing Field
- Jarman Park
- Keens Field
- Nash Mills Play Area, Nash Mills
- Malmes Croft
- Margaret Lloyd
- Marlowes
- Northridge Way
- Randalls Park
- Reith Fields
- Swan Mead

Berkhamsted

- Robertson Road
- Velvet Lawn

Elsewhere

- Beechfield, Kings Langley
- Gaddesden Row
- Great Gaddesden
- Rucklers Lane, Kings Langely
- Sutton Close

New Schemes

5.9 The Open Space projects within the Infrastructure Delivery Schedule have been updated to include those projects subject to the River Colne Catchment Action Plan. These have been developed by the Colne Catchment Action Network (ColneCAN) ColneCAN brings together water companies, local authorities, charities, conservationists and local residents to progress funding opportunities for works on a variety of river projects. There are 8 Action Plans covering the key tributaries feeding the Colne including one covering the rivers Gade and Bulbourne.

5.10 Officers have also identified the four adventure playgrounds (Adeyfield, Bennetts End, Chaulden and Grovehill) and Gadebridge Park as play destinations for Dacorum and are seeking to secure funding towards their refurbishment and expansion. The adventure playgrounds are each estimated to require £1 million of investment to bring them up to a high standard of play, whilst substantial investment would be required to increase the play opportunities at Gadebridge Park, particularly if such proposals are to respond to resident's aspirations for a Splash Park facility.

Funding

- 5.11 The Council has secured external funding and invested significant amounts of capital funding in key open space infrastructure projects. Such sources of funding have declined and will be difficult to secure in the longer term. The remaining green infrastructure projects within the Infrastructure Delivery Schedule, and in particular the programme of play area improvements, are reliant on developer contributions secured historically under Section 106 agreements. Both CIL funding and external funding sources will be required to progress the delivery of a number of green infrastructure projects.

Chapter 6: Emergency Services

Introduction

- 6.1 The DSIS Social Infrastructure Report contained a section on the Emergency Services, with chapters on Fire and Rescue services, Police services and Ambulance services. Information regarding these services was updated during the IDP. This section does not repeat the commentary thereon but sets out the latest position in relation to growth in the Core Strategy and current service plans..

Police Services

- 6.2 The Police Reform and Social Responsibility Act saw the election of Police and Crime Commissioners. The commissioner for Hertfordshire is responsible for setting the strategic policing priorities and for setting the budget for Hertfordshire Constabulary. They are also responsible for appointing the Chief Constable, who will then be accountable to the commissioner for the delivery of the Police service.
- 6.3 There are currently no custodial police facilities within Dacorum due to the downgrading of police stations at both Hemel Hempstead and Berkhamsted. In Hemel Hempstead the custody suite and front desk have closed although the station remains an operational base. The station in Berkhamsted has been sold for residential development and the Safer Neighbourhood team now operate from Berkhamsted Civic Centre. Similar arrangements are in place within the settlement of Tring. The custodial facilities previously provided at Hemel Hempstead station are now provided in Watford.

Planned provision

- 6.4 The Council has recently granted planning permission for 'The Forum' a new facility for civic amenities bringing together new offices for the Borough Council, the library, Hertfordshire Constabulary's Safer Neighbourhood team, Hertfordshire Registration and Citizenship Service and voluntary services including the Citizen's Advice Bureau, Relate Mediation and Community Trust Dacorum. This is due for completion in 2017.
- 6.5 Hertfordshire Constabulary are also considering the feasibility of providing a police station on land opposite Breakspear House due to its close connection to the motorway network. It is understood that such a facility would include custodial facilities and a broader range of modern policing facilities. A similar proposal to Hatfield Police HQ would cost somewhere in the region of £20m.

Future Demand arising from planned growth

- 6.6 Herts Constabulary originally used an Association of Chief Police Officers (ACPO) approved toolkit to assess the impact of additional housing and employment development on their service. This has not been updated. The results of the toolkit are set out in table 6.1.

Table 6.1: Demand placed upon police services arising from planned development

Staff requirements		Floorspace requirements	
Number of staff	Capital set up Cost	Floorspace required	Cost of provision
25.9	£237,107	151 sqm	£472,357
Total cost of requirements: £709,464			

Source: Hertfordshire Constabulary: Assessment of the impact of growth – Dacorum Local Authority

6.7 The Council has been advised that it is not practicable to relate the outputs of table 6.1 into physical infrastructure. It does provide an indication of the scale of the likely impact on the police service in Dacorum arising from the level of development planned in the Core Strategy. It is likely that some adaption of current building stock will be required to meet the current needs of the Constabulary

Funding

6.8 The main sources of funding for Hertfordshire Constabulary are central government funding and council tax receipts; all the funding they receive is revenue funding, a proportion of which is allocated for capital expenditure. The only capital held by the force is in the form of property, vehicles, and ICT.

6.9 Hertfordshire Constabulary aim to minimise capital costs by sharing facilities, for example through the PSQ in Hemel Hempstead town centre and their recent move to the civic centre in Berkhamsted.

6.10 Hertfordshire Constabulary are not currently reliant on S.106 monies. However, if in the future the grant funding received by them continues to decrease they will have to rely on other sources of funding including CIL monies to provide the infrastructure required to support operational needs.

Fire and Rescue Services

6.11 The Hertfordshire Fire and Rescue service currently operate a full time crewed fire station in Hemel Hempstead together with retained duty system crewed stations in Berkhamsted, Kings Langley, Markyate and Tring. These are considered sufficient to meet the projected growth within Core Strategy.

6.12 The main infrastructure need arising from the Fire and Rescue Service is for the repair and replacement of their existing building stock in view of its age and condition should the funds become available.

Ambulance services

6.13 The Ambulance service has planning permission to operate from a new facility at Maxted Road within the Mayland's Employment Area as well as from their current base at Hemel Hempstead Fire Station. The service considers this to be sufficient to meet their needs in the short to medium term.

Chapter 7: Waste

Policy Drivers

- 7.1 The Hertfordshire Waste Local Plan (WLP) has undergone a lengthy process of review with two new Development Plan Documents (DPDs) recently being adopted.
- 7.2 The Waste Core Strategy & Development Management Policies (November 2012) sets out the spatial vision, objectives and strategic issues for waste planning in Hertfordshire and contains the policies to inform decisions for waste planning applications.
- 7.3 The Waste Site Allocations (WSA) (July 2014) has been written since the last update to the IDP and identifies suitable sites to accommodate facilities for sustainable waste management within the county. It includes maps and waste site briefs for Allocated Sites and identifies Employment Land Areas of Search (ELAS), reflecting the spatial vision set out in the Waste Core Strategy & Development Management Policies.
- 7.4 The Waste Core Strategy and Development Management Policies and Waste Site Allocations were adopted in line with PPS10 though this has since been replaced by the National Planning Policy for Waste (NPPW) (October 2014).
- 7.5 The Strategic Objectives in the Dacorum Core Strategy include the aim of reducing waste, and policy CS29 requires new development to provide on-site recycling facilities for waste.

Waste Management Infrastructure

- 7.6 The DSIS considered the collection and disposal of Local Authority Collected Waste (LACW), the policy context and existing infrastructure. There have been no changes to the existing provision of waste management and facilities to those set out in the DSIS report, and the assessment of their adequacy is considered to remain valid.

Planned Provisions

- 7.7 The following facilities are considered necessary to meet the needs of the future population of Dacorum.
- 7.8 With regard to the disposal of LACW the County Council took the view that it would adopt a centralised approach through the provision of one treatment facility to deal with up to 380,000 tonnes of LACW with supporting transfer stations to receive waste closer to the point of arising. The county council are currently working with Veolia Environmental Services (VES) to identify a suitable disposal method. In the meantime interim disposal arrangements are in place with energy recovery and landfill facilities.
- 7.9 The Municipal Waste Spatial Strategy identifies three optimum strategic locations for these facilities:

- A1 /A414 junction in the centre of the county;
- A10 / A602 junction in the east of the county;
- A1 / A505 junction in the north of the county.

7.10 Once delivery of a treatment facility is confirmed it may be considered prudent to include the project within Appendix A.

7.11 An Organic Waste Treatment Facility (OWTF) to serve Dacorum, Watford and Three Rivers (post 2018), with the ability to treat approximately 50,000 tonnes of organic waste per annum will be required. From a waste collection perspective, it would be optimal for the new facility to be within 'tipping range' so that collection vehicles can take waste straight to the facility rather than to a depot first.

7.12 A larger, more modern Household Waste Recycling Centre is needed either through relocation to a suitable area or expansion and improvement of the Hemel Hempstead Household Waste Recycling Centre (HWRCs) to increase capacity and improve usability.

7.13 Additional waste collection vehicles and staff will be required to cope with extra demand placed on the service by new development. In general, 6,000 dwellings leads to the need for an additional round (2 additional vehicles and the associated number of staff), which can be absorbed incrementally up to a point, but at some point will require new equipment. Because new development is likely to come forward incrementally and throughout Hemel Hempstead and other settlements, it will be difficult to attribute a particular proportion of future demand to planned new development. The level of development proposed through the Core Strategy (11,320 dwellings) will give rise to the requirement for two additional collection rounds over the plan period (2006-2031). Additional space and re-organisation at Cupid Green Depot is desirable, but a whole-scale move is not required. Over recent years the proportion of waste that is recycled has increased which has led to more vehicular activity at the site (more transferring and sorting) and at certain time the site is congested with vehicles. If the HWRC could be relocated in conjunction with an expanded Cupid Green Depot, this could potentially solve the current issues with both facilities.

7.14 Both DBC and HCC aim to increase recycling rates in the future, and this may lead to a need for more vehicles and transfer/bulking facilities. It is currently uncertain how far and how quickly recycling rates will increase over the plan period (i.e. to 2031), therefore it is difficult to predict the level of increased capacity required to manage this waste stream. .

Costs and Funding

7.15 The day to day costs of waste disposal and collection are funded through HCC's revenue budget and DBC's Core Budget respectively. Funding sources for new facilities varies. Waste collection, bins and recycling boxes (for households) have been funded by contributions from the county council held Waste Infrastructure

Capital Grant (WICG) and DBC's capital budgets, as have new vehicles and investments to improve operations at Cupid Green Depot. Waste disposal, facilities such as HWRCs and Waste Transfer Stations are funded by HCC's capital budget, while waste reprocessing facilities e.g. windrow composting tend to be privately funded and operated.

- 7.16 The costs of the requirements set out in above have been estimated by officers at DBC and HCC.
- 7.17 The cost of the OWTF is unknown, and will depend on the type, size and location of the facility. A satisfactory site would be around a hectare in size with a minimum width of 80m.
- 7.18 The proposed improvement and expansion of the Hemel Hempstead HWRC is estimated to cost £1.2 million.
- 7.19 An additional collection round requires a refuse freighter (approx £130k), a recycling kerbsider vehicle (approx £110k) and containers (circa £50 per household). Assuming 6,000 households, this totals £540,000. On top of this there are revenue costs such as fuel, labour etc.
- 7.20 The cost of expanding and/or re-organising Cupid Green Depot is unknown as the extent of expansion/re-organisation is unknown.

Chapter 8: Sports Facilities

The DSIS Report

- 8.1 The DSIS Social Infrastructure report contains a section on the provision of sports facilities and the impact of the two development scenarios assessed. The report considers sports halls, swimming pools, health and fitness stations and synthetic turf pitches. These are the types of facilities for which the Sports Facility Calculator, provided by Sport England, has quantitative standards of provision. The report sets out the overall policy context, and for each type of sports facility it provides an assessment of existing provision and future demand. This is followed by a summary of the future infrastructure requirements arising from the two development scenarios and an estimate of the costs of provision.
- 8.2 Officers from Dacorum Borough Council (DBC) and Sportspace fed into the DSIS report and their future plans for provision were considered in light of future requirements according to quantitative standards. The information in DSIS report is not repeated here, but is updated where circumstances have changed. This quantitative assessment has not been repeated for the level of development planned in the Core Strategy as it is considered that the outcomes in the DSIS remain an appropriate proxy.

Policy Update

- 8.3 Since the DSIS was written Planning Policy Guidance Note 17: Planning for Open Space, Sport and Recreation has been replaced by the National Planning Policy Framework (NPPF). The NPPF expects local authorities to plan positively for the provision of community facilities, including sports venues, and to guard against the unnecessary loss of valued facilities. It states that planning policies should be based on assessments of the quantitative and qualitative needs for sports facilities and opportunities for new provision.
- 8.4 The Council adopted a Sports Policy Statement in April 2012. This statement outlined our commitment to sport. The statement recognises the important role that sport and sport clubs plays in the Borough, and aims create conditions to allow the delivery of sporting infrastructure to promote participation and to provide sporting opportunities for all sectors of the community.
- 8.5 The Facilities Improvement Strategy (FIS) referred to in the DSIS has now been completed and adopted by the Council, although the title has changed to Sports Facilities Audit (2011). The conclusions remain largely the same as those expressed in the DSIS.
- 8.6 The Council has completed a new sports and recreation study – Outdoor Leisure Facilities Assessment Report (2014) and Playing Pitch Strategy (2015) to replace that published in 2006. It concludes that there is a good supply of outdoor pitches for most sporting activities however these pitches are often associated with educational premises and are not subject to sufficient community use. There is pressure to convert a number of football pitches to smaller pitches to reflect the Football Associations model and push for junior size pitches. There are also some

reported shortages around cricket, rugby and hockey pitches and tennis courts. The full results of this study are incorporated into this update to the IDP – the highest priority actions identified within the Playing Pitch Strategy are replicated within Appendix A.

Infrastructure requirements not identified in the DSIS

- 8.7 Officers from Sportspace confirmed that the most pressing requirements are the redevelopments of Tring and Berkhamsted Sports Centres.
- 8.8 Tring Sports Centre is located on the site of Tring School and is used by the school for their educational needs. The existing facilities are in need of repair or rebuilding and do not meet the needs of the current population. . As set out within the education chapter, the School has been approved funding under the governments Priority Schools Building Programme (PSBP). The redevelopment of the school is expected to include the replacement of the existing sports hall and dry side changing facilities but will not extend to the replacement of the existing swimming pool and wet facilities. These facilities are all covered by a dual use agreement between Dacorum Borough Council and the school and are managed by Dacorum Sports Trust (DST)/Sportspace. The cost of replacing sports facilities on this site is estimated to be between £5m-£10m
- 8.9 Berkhamsted Sports Centre is also in a poor state of repair and is in need of significant refurbishment. DST/Sportspace do not have sufficient funding to refurbish the sport centre to current standards and are considering funding the development of a new facility via the redevelopment of the existing site. The use of Ashlyns School is one option with the feasibility of shared use of the site and new facilities under consideration.
- 8.10 Planning permission was granted for the provision of a new sports hall at Ashlyns School, Berkhamsted during 2014 (4/02293/13/MFA) and this is subject to a planning condition regards community use. Work has commenced on the construction of this sports hall and it is due for completion prior to the new term in September 2015. Whilst this will not act as a replacement facility for the existing sports centre, it will improve provision of indoor sports facilities accessible by the public in the town.
- 8.11 Sportspace also operate Little Hay Golf Course, and they have aspirations to deliver improvements to the course and functions facilities at the Golf Course. These improvements are not necessary to address any increase demand for sporting activity generated by growth but may support the long term use and viability of the course.

Funding

- 8.12 Community sports facilities throughout the borough are provided by Dacorum Sports Trust (DST) and Sportspace. Sportspace has a number of contributory funding sources, although it is rare for any one source to entirely fund a project. Funding sources include various lottery funding pots, DBC, HCC and developer contributions.

Chapter 9: Other Community Facilities

Introduction

- 9.1 This section covers the 'other social infrastructure' items from the DSIS Social Infrastructure report such as community buildings, libraries and cemeteries and adult care services which were added to the IDP.

Community Buildings

- 9.2 The DSIS identified a deficit in community space only within the settlement of Berkhamsted with a general over supply of community space Borough wide against a standard of 61sq.m per 1000.
- 9.3 There is a clear desire amongst community groups within the town of Berkhamsted to increase the provision of community space and buildings within the town. This view is strongly articulated by B-Hive (a group of local community organisations and residents) through their report of their recent consultation on the future of community assets within the town of Berkhamsted. Their report (available at <http://bhiveberko.org.uk/b-hive-report/>) was prepared in advance of the sale of the police station site and focused on the opportunities for the redevelopment of town centre sites for community uses.
- 9.4 The provision of additional community buildings between now and 2031 is likely to be limited to those secured alongside larger development proposals within the Borough and as set out in the Core Strategy.

Libraries

- 9.5 Hertfordshire County Council published its 'Inspired Libraries' strategy on the 14th July 2014. This sets out its vision and direction for libraries over the next ten years till 2024. This can be viewed under the following link:

<http://www.hertsdirect.org/docs/pdf/i/inspiringlibraries>

A separate 'Delivering Inspiring Libraries' paper sets out how these library services will be met by re-providing libraries in shared buildings with other services and through the improvement of priority sites. One such opportunity is Hemel Hempstead library.

- 9.6 The library service is going more digital. The County Council has secured opportunities to improve library services within the towns of Hemel Hempstead and Berkhamsted through the development of key sites within these towns.
- 9.7 Planning permission has been granted for the demolition of Hemel Hempstead library and the construction of a new Civic Centre ('The Forum') (4/03355/14/MFA) and the current building has already been vacated to allow for its demolition. The library is operating from its temporary home within the Civic Centre whilst the work is undertaken and does not anticipate occupying the Forum until 2017.
- 9.8 Planning permission is also expected to be granted for the demolition of Berkhamsted police station and library and the construction of a new extended

library and retirement houses (4/03286/14/MFA). This development will take place in two phases to ensure continuous use of the library facilities. The development is expected to be completed in May 2016.

- 9.9 The 'Delivering Inspiring Libraries' proposals are expected to save £2.5m per annum from the Library Service. These savings will be made by reductions in revenue expenditure through the re-profiling of staffing and library stock, by increasing library income and by seeking revenue savings through capital investment. These savings are predicated on capital investment up to £2m per year over three years and will be supplemented by Section 106 funding.

Cemeteries

- 9.10 The Council has undertaken long term planning beyond the Core Strategy period (2031) for the provision of additional cemetery space. Although the Council, as set out in the DSIS, requires only 12 acres of additional space to ensure an adequate burial space within the plan period, the opportunity has arisen for the Council to secure 30 acres of burial space ensuring sufficient capacity for approximately 50 years. Such longer term planning is preferred by the bereavement services manager at DBC who suggests that it is more appropriate to identify a larger site given the issues surrounding Rights of Burials and associated management issues.
- 9.11 The intention is to acquire land at Bunkers Farm from the HCA to provide cemetery facilities with complimentary land uses being undertaken in the short-medium term. The cost of preparing a new cemetery (including the cost of purchasing the site) is approximately £1.8m. This is expected to be delivered in the short-medium term.
- 9.12 There is sufficient burial space in the rest of the borough for the foreseeable future with the exception of Tring, where it is projected to run out before 2040. The Local Allocation at Icknield Way (LA5) in the Core Strategy is directly adjacent to Tring Cemetery, and it would be prudent to reserve part of the site for future expansion of the cemetery as part of this development. It has been assumed that the Borough Council will purchase this land to deliver an expansion to Tring cemetery. The bereavement services manager has suggested that a total of 4 acres are secured for the purposes of expanding the cemetery at Tring.

Health and Community Services

- 9.13 Hertfordshire County Council's Health and Community Services section is responsible for adult social care services for people who are older, have a physical disability, a learning disability or mental health problems.
- 9.14 Together with partners, HCS commission and in some cases directly provide support services in the community. HCS aim to keep people safe from harm and to help people to improve their health, wellbeing and independence and prevent them from getting to a point of crisis. HCS work closely with the National Health Service and District Councils through the Health and Wellbeing Board.
- 9.15 The Health & Wellbeing Board brings together the NHS, public health, adult social care and children's services, including elected representatives and Hertfordshire

Healthwatch, to plan how best to meet the needs of Hertfordshire's population and tackle local inequalities in health. The Health and Wellbeing Board Strategy 2013-2016 (<http://www.hertsdirect.org/docs/pdf/h/hwbstrategy.pdf>) includes a vision for 'A healthier and happier Hertfordshire' together with nine key health priorities and a commitment for the agencies responsible for health and wellbeing in Hertfordshire to work together.

9.16 The Care Act 2014 was brought into effect from April 2015. The Act required HCS to have Market Position Statements (MPS) in place by April 2015. MPS are intended to provide information to existing and potential providers of health and social care about services for adults across all care groups and to communicate our commissioning intentions for the future. In Hertfordshire five Market Position Statements have been prepared:

- Older People
- Mental Health
- Learning disability
- Carers
- Physical disabilities and sensory Impairments

These are available from:

<http://www.hertsdirect.org/your-council/hcc/healthcomservices/hscic/suporcarehe1/>

9.17 HCS strategy aims to reduce the proportion of older people who are supported in residential care. This will require an increase in Flexicare and other community services such as domiciliary care, short break care, equipment, telecare etc as well as integrated working with CCGs. However due to population growth there will still be an increase in the number of residential beds needed in across Hertfordshire.

9.18 Across the County older people in residential care and nursing are showing higher levels of need and long term conditions, this will mean more nursing beds are needed in the future and providers are to be encouraged to provide nursing rather than residential care, or being dual registered.

9.19 It is desirable for Care Homes in the future to be integral parts of the community providing services for the local community such as cafes, shops and venues that can be hired by community groups. Providers should also look at opportunities to provide domiciliary care to surrounding neighbourhoods.

9.20 Flexicare housing, sometimes called extra care housing, provides more support than sheltered housing and more independence than a residential care home. People live in their own flat with the privacy of their own front door, but have care available 24 hours a day if they need it.

9.21 HCC is committed to significantly increasing the level of Flexicare provision across the county over the next five years. This will involve working with providers to

identify new build schemes and supporting bids for capital funding. It will involve working with providers to identify existing sheltered housing schemes that are suitable for conversion to Flexicare.

Day Care

9.21 The need for day services for older people, people with learning disabilities, mental health problems or sensory needs should also be considered. This need can be met in existing community centres or in purpose built facilities. These premises would need to be accessible 52 weeks per year and comprise the following: 1 or 2 large multi-purpose rooms for 15-20 people and contain the following facilities:

- Kitchen
- Secure Storage
- Accessible bathroom and changing facilities (with overhead hoist)
- Mini-bus drop off spaces and car parking.

Day Centres for older people are being reviewed during 2015 to ensure that there is a range of high quality, cost effective activities available, during the day, that provide choice and control and allow individuals to lead fulfilling lives.

9.22 It seems likely that any community building arising from the significant residential developments within the town such as those at West Hemel Hempstead and Spencer's Park should consider the need to provide facilities for all members of the community including those of older people, people with learning disabilities, mental health problems or sensory needs.

Chapter 10: Sewerage and Waste Water

The DSIS Report

- 10.1 The DSIS Utilities and Physical Infrastructure report contains a section on the provision of sewerage infrastructure and the likely impact of the two development scenarios assessed. The report provides significant background information on sewerage infrastructure and provides an assessment of existing and committed sewerage infrastructure and forecasted demand for new infrastructure.
- 10.2 As identified in the DSIS report, Thames Water provide infrastructure over an area much wider than just Dacorum, which makes it difficult to draw clear conclusions about the impact of the development planned in Dacorum alone.
- 10.3 Much of the information in the DSIS report is updated here in accordance with the advice received by email from Thames Water on the 28th March 2013. This chapter is set out in the same order as the relevant section of the DSIS in order to make clear which parts of the DSIS report are still considered valid, and which have been superseded by new information.

Policy Drivers and Context

- 10.4 The UK Water and Flood Management Act (2010) tackles issues with surface water drainage and makes the County Council the relevant flood authority – Lead Local Flood Authority. Developers will be required to submit sustainable drainage plans alongside planning applications, and these must be approved by the Local Planning Authority in consultation with the County Council as Lead Local Flood Authority (as a statutory consultee) before the developer can commence development. The developer's automatic right to connect surface water to the public sewer network has ceased, and it will now be dependent on the drainage system being approved by the Local Planning Authority.

Existing and Committed Infrastructure Provision

- 10.5 Based on the information to date, Thames Water's modelling and analysis suggested that neither Maple Lodge STW or Blackbirds STW will require significant growth upgrades in AMP6 (2015 to 2020). Ongoing reviews will take place and upgrades may be necessary in AMP7 (2020 to 2025).

Estimating Future Demand

- 10.6 Thames Water use Local Authority housing and employment growth figures and census data to help project likely increases in sewage flows to its works. They also take into consideration a range of other factors, including data on wastewater flows entering the sewage works. Using this information they seek to ensure that their sewage works have sufficient capacity to cater for the growth being proposed. Where capacity constraints at sewage works are predicted, they will invest in their

sewage works at the appropriate time to ensure our treatment consents continue to be met.

- 10.7 Thames Water's investment programme is based on a 5 year cycle known as the Asset Management Plan (AMP) process. Thames Water have recently come to the end of the AMP5 period, which ran from 1st April 2010 to 31st March 2015. AMP6 covers the period from 1st April 2015 to 31st March 2020. As part of its five year business plan Thames Water advise OFWAT on the funding required to accommodate growth to ensure its treatment works can continue to meet the standard required by their treatment consents.
- 10.8 Where there are infrastructure constraints Thames Water may require an 18-month to three-year lead in time for provision of extra capacity to drain new development sites. If any large scale engineering works are needed to upgrade infrastructure the lead in time could be up to five years. Implementing new technologies and the construction of a major treatment works extension or new treatment works could take up to ten years.
- 10.9 Thames Water continually update their models and have recently been reviewing the Drainage Area Plans for some of the larger STW catchments such as Maple Lodge. Such tools do consider longer term growth and capacity; however there is less confidence in the accuracy of the model outputs, the further they look into the future.
- 10.10 DBC will continue to liaise closely with neighbouring Local Authorities and Thames Water, especially with regard to potential future high level modelling which would give an indication of the impact of proposed growth levels on local pipe-work and sewerage treatment works and their respective catchment areas.

Issues/Future Trends

- 10.11 This section of the DSIS report is still considered to be useful and valid.

Demand for Sewerage Infrastructure arising from Growth

- 10.12 See paragraphs 10.6 – 10.9 above.

Resulting Sewerage Infrastructure Requirements

- 10.13 Thames Water has confirmed that the infrastructure upgrades required as a result of the development planned in the Core Strategy is as follows:
- With the information that is available to date, Thames Water's modelling and analysis suggested that neither Maple Lodge STW or Blackbirds STW will require significant growth upgrades in AMP6 (2015 to 2020). However ongoing reviews will take place and upgrades may indeed be necessary in AMP7 (2020 to 2025) to cater for the growth envisaged.

- Berkhamsted's WWTW has recently been upgraded. There are no current plans to significantly upgrade the sewage treatment works but Thames Water will keep this under review to ensure the levels of growth can be catered for at the sewage works. Network upgrades are likely to be required and may require developer funding contributions.
- Tring is served by its own WWTW. There are no current plans to significantly upgrade the sewage treatment works but Thames Water will keep this under review to ensure the levels of growth can be catered for at the sewage works. Network upgrades are likely to be required and may require developer funding contributions.
- Bovingdon is served by the Chesham WWTW. There are no current plans to significantly upgrade the sewage treatment works but Thames Water will keep this under review to ensure the levels of growth can be catered for at the sewage works. . Network upgrades are likely to be required and may require developer funding contributions.
- Markyate WWTW is to be upgraded to improve site resilience and ensure compliance with consents. Network upgrades are likely to be required and may require developer funding contributions.

10.14 Overall Thames Water confirmed that, whilst the level of development programmed in the Core Strategy and recent Pre-submission Site Allocations Development Plan Document will create the need for some infrastructure upgrades, they are happy that such upgrades can be provided at the appropriate time.

Wastewater Network

10.15 The key issue will be to ensure that there is sufficient hydraulic capacity of the network to cater for the growth being proposed. This should be determined through drainage strategies and detailed discussions with the developer; where the point of connection to the existing network is appraised against the scale of development and its potential phasing.

10.16 Through the policies proposed above, and if necessary through the use of Grampian style planning conditions, drainage strategies and any subsequent infrastructure network upgrades should be provided by either the developer or Thames Water. This will ensure that sufficient hydraulic capacity is provided ahead of occupation of new development, and in so doing, avoiding any increased risk of sewer flooding. Where required Thames Water will seek a fair and reasonable contribution from developers for sewerage network infrastructure.

10.17 Thames Water supports the use of Sustainable Drainage Schemes in new development. SuDS not only help to mitigate flooding by controlling surface water through sustainable drainage systems, but over the lifetime of the development they can also help to:

- improve water quality
- provide opportunities for water efficiency

- provide enhanced landscape and visual features
- support wildlife
- provide amenity and recreational benefits.

10.18 Thames Water will work with the District Council, the Lead Local Flood Authority and the EA to ensure that SuDS opportunities are maximised, and that they are effectively adopted and maintained over their lifetime.

Chapter 11: Energy

Background

- 11.1 The DSIS provided an overview of the way the electricity and gas networks operate, the operating companies and the extent of the network coverage within Dacorum. Much of this report remains valid.
- 11.2 Energy infrastructure planning is undertaken over a much wider basis than just Dacorum and as such it is difficult to make any clear conclusions about the impact of development planned within the area.
- 11.3 Officers have attempted to contact UK Power Networks, National Grid and Southern Gas Network to update this section of the IDP. Limited information has been made available to them for this update.

Policy Drivers

Electricity

- 11.4 UK Power Networks (UKPN) manages the operation of the network previously operated by EDF Energy and providing much of the electricity infrastructure within the Borough. Dacorum falls within their Eastern Power Network (EPN).
- 11.5 UK Power Networks published their final business plan for the regulatory period entitled RIIO-ED1 on the 1st July 2013. The business plan covers the period 2015-2023 and covers the network planning process, the outputs they proposed to deliver for their customers and their estimates of costs and revenues.
- 11.6 The business plan utilises information from a variety of sources including comments made in stakeholder forums held between October 2012 and February 2013, the responses on their website, and the views collected from the customer willingness-to-pay surveys.
- 11.7 A full suite of documents that comprise UK Power Networks business plans on their website:

<http://www.ukpowernetworks.co.uk/internet/en/about-us/business-plan/>
- 11.8 The Regional Development Plan for the Elstree – Watford area, which forms part of the supporting information for the RIIO-ED1 Business Plan can be found by the following link. It should be noted that projects and timescales therein are subject to change depending on load growth and/or alternative reinforcement options:

http://library.ukpowernetworks.co.uk/library/en/RIIO/Asset_Management_Documents/Regional_Development_Plans/EPN/EPN_RDP_Elstree_Watford_South_Group.pdf

Gas

- 11.9 The Gas network is supplied by National Grid apart from a small area in Tring provided by Southern Gas Networks (SGN) Under the Gas Act 1986 (as amended) they are required to develop and maintain an efficient and economical pipeline system including providing gas connections to any premises subject to a reasonable request to do so.

Existing and Committed Infrastructure

- 11.10 According to National Grid local reinforcements to the network are likely to be required to serve new developments within the Borough. There are however no strategic issues with the gas network arising from the scale of planned development within the Borough.
- 11.11 UKPN confirmed that planning for future provision is complex and informed by many factors. Local development plans are one factor, but electricity usage trends and economic trends are also key factors. UKPN's planning is a mixture of proactive and reactive.

Estimating Future Demand

- 11.12 Both National Grid and UKPN confirmed that they plan over much wider areas than just Dacorum and therefore do not provide official forecasts of the additional demand arising as a result of growth planned in the Core Strategy. Furthermore, they do not assess the requirements of individual sites until they are approached by a developer who is willing to pay for the assessment. Such assessments for gas provision requirements are not necessarily carried out by National Grid as other specialist companies can often provide the assessment more cheaply.
- 11.13 SGN have confirmed that they would not develop firm extension or reinforcement proposals until they are in receipt of confirmed developer requests and/or sites identified, by the Local Authority, for development.
- 11.14 Neither UKPN or National Grid were prepared to make demand projections for the area for inclusion in the IDP.

Resulting Energy Infrastructure Requirements

- 11.15 The upgrades to the primary and grid substations within the Dacorum area identified as part of the RIIO-ED1 submission include

Hemel East: Installation of 1 x new 33kV circuit from Piccotts End Grid and installation of a new 12/24 transformer. £3.5m – Note major reinforcement at Hemel Hempstead is not currently planned but is expected to be triggered by the level additional development required.

Warners End: Installation of 1 x new 12/24MVA transformer £706k

Frogmore: Load transfers to Warners End (once reinforced). £336K

Berkhamsted: Installation of 2 x new 33kV circuits from Lye Green Grid and replacement of 11kV switchboard. £4.9m

- 11.16 Whilst UKPN are required to connect new developments to the electrical grid they are not necessarily responsible for paying for the provision of the infrastructure necessary to do so. Where a development triggers the need for a piece of infrastructure which is required to serve a much larger area than just the development, the developer would be expected to pay a fair proportion of the cost of provision.
- 11.17 National Grid previously indicated that the additional demands on the gas network arising from planned development can largely be accommodated by the existing network. Local upgrades to the low and medium pressure networks are likely to be required. National grid explained that where an individual development triggers the need for additional off-site infrastructure they (National grid) will usually conduct an economic assessment of whether to provide it based on cost of provision and likely future income generation. It is the norm for this assessment to show that off-site infrastructure is worthwhile and as such National Grid usually pays for the installation of this infrastructure. SGN confirmed this to also be the case in relation to the network around Tring.

Costs and funding

- 11.18 The costs associated with the necessary upgrades to the electricity substations are set out in paragraph 11.15. Additional costs of electricity infrastructure, as set out in the DSIS report are estimated as follows:
- New primary substation: £3m plus land
 - 33kV cabling: £500,000 per km
 - 132kV cabling: £1m per km
- 11.19 Similar information about the cost of providing upgrades to the gas network was not available.

CHAPTER 12: POTABLE WATER

Introduction and DSIS Report (2011)

- 12.1 Affinity Water is the main supplier of potable water in Dacorum. This was previously supplied by Veolia Water. When contacted about updating information within the Utilities and Physical Infrastructure chapter of the DSIS report (2011) for the previous 2014 Infrastructure Delivery Plan (IDP) update, Veolia Water confirmed that changes to the planned level of development within Dacorum from the scenarios assessed in the DSIS report would not alter the information provided regarding potable water supply. We have been unable to confirm this remains the case with Affinity Water now that they have assumed responsibility for water supply.
- 12.2 Therefore, as far as the Council are aware, the 'Water' chapter in the DSIS Utilities and Physical Infrastructure Assessment report remains entirely valid.

Background and Policy Drivers

- 12.3 As with other utilities infrastructure, the strategic planning undertaken by the providers is done for a much larger area than just Dacorum. This means that additional infrastructure requirements arising from the development planned in Dacorum are difficult to identify.
- 12.4 The DSIS report did not identify any specific requirements for potable water infrastructure that would be required as a result of planned development in Dacorum but did note that local network reinforcement would be likely to be required.
- 12.5 Affinity Water are required to prepare a Water Resources Management Plan (WRMP) under the Water Act 2003 and their most recent plan (published June 2014), which covers the period 2015-2040, was submitted to DEFRA and approved by the Secretary of State in May 2014¹.

Future Demand and Infrastructure Requirements

- 12.6 The Water Resources Management Plan (WRMP) sets out how Affinity Water will meet the needs for potable water from any future growth within the region (which extends beyond Dacorum's administrative boundaries). The Plan identifies that improvements to infrastructure are likely to be required to ensure the supply of water to impacted communities. Dacorum is located in Water Resources Zone 2 within the Water Resource Management Plan
- 12.7 Affinity Water have noted proposals for large scale development planned in and around Hemel Hempstead (and elsewhere within the Borough) and have concluded that such levels of growth may require reinforcement to the existing infrastructure in this area. However, they have not specified what infrastructure improvements would be required in order to deliver planned growth or indeed whether there are any infrastructure constraints to future growth.

¹ This is the first WRMP produced by Affinity Water and covers the entire company supply area. Previously, WRMPs were produced by three individual companies across three separate geographic areas.

12.8 Nevertheless, within the WRMP, the options for Water Resource Zone 2 include:

- Implementation of universal metering to improve water efficiency by 2019;
- Mains reinforcement in Bushey (re-commission reservoir) by 2027;
- Additional water efficiency for households by 2033;
- Leak reduction by active leakage control (ALC) between 2015-2040;
- Use of dual flush WCs by 2034;
- Source optimisation in St Albans by 2038; and
- Introduction of a peak licence scheme in north Watford by 2038.

12.9 Affinity Water rely on developers and information contained within local plans to plan for and direct where infrastructure upgrades are required in order to ensure the continued supply of potable water. Therefore, the Council will continue to work with the infrastructure provider to ensure the delivery of planned development.

CHAPTER 13: TELECOMMUNICATIONS

Introduction and Context

13.1 The previous version of the IDP did not include information on the impact of growth within the Borough on the need for new telecommunications infrastructure. This chapter addresses this omission.

13.2 The provision of telecommunications infrastructure is considered to be a central Government priority as the advancement in connectivity continues to revolutionise people's quality of life and the efficiency and growth potential of businesses. The Department for Culture Media and Sport (DCMS) plans to achieve a transformation in broadband provision in the UK by 2017 through the 'Broadband Delivery UK (BDUK)' project. This entails delivery of superfast broadband and better mobile connectivity to the nation through an investment of over £1 billion to improve the infrastructure.

13.3 The BDUK consists of three programmes¹ including:

- Superfast Broadband Programme:

This programme's ambition is to provide superfast broadband (i.e. speeds of 24 Megabytes per second (Mbps) or more) for at least 95% of UK premises and universal access to basic broadband (speeds of at least 2Mbps). Delivery will be achieved in three phases which seek to incrementally increase access to broadband.

- SuperConnected Cities Programme:

The Government are investing £150 million to support UK cities to develop the digital infrastructure capability to remain internationally competitive and attractive for investors, businesses and visitors. This programme includes three components: Broadband Connection Vouchers Scheme; Wi-Fi projects; and Innovative digital projects.

- Mobile Infrastructure Project:

The Government is investing £150 million in mobile infrastructure to improve coverage for voice calls and text messages for the remaining 0.3-0.4% of UK premises that don't currently have it.

13.4 Locally, Hertfordshire County Council and the adjoining Buckinghamshire County Council are part of a 'Connected Counties' programme in conjunction with BT which aims to facilitate achievement of the above-mentioned Government aims. Specifically, the programme seeks to provide superfast fibre broadband connectivity, with speeds of up to 80Mbps, to over 90% of homes and businesses within those authorities by April 2016. This equates to a total of 734,500 premises (682,000 from

¹ Information sourced from: <https://www.gov.uk/broadband-delivery-uk> (February 2015).

BT deployments and the remaining 52,500 as a result of the Connected Counties programme)². Additionally, the programme seeks to ensure that *everyone* in the two counties has access to a minimum of 2Mbps broadband speeds. As at February 2015, further funding is due to be secured by Connected Counties through a Superfast Extension Programme to facilitate the upgrading of new areas to fibre broadband to enable superfast broadband speeds.

- 13.5 A total of £18.06 million is being invested in the Connected Counties Programme³. This is being funded jointly by Buckinghamshire County Council (£3.7 million) and Hertfordshire County Council (£1.61 million), the Local Enterprise Partnerships (LEPs) for both counties (Hertfordshire LEP and Buckinghamshire Thames Valley LEP), BT (£8.6 million) and the Government's BDUK Team (£4.15 million).
- 13.6 Therefore it is evident that the importance of delivering telecommunication infrastructure within Dacorum aligns with both county and national level policy objectives. As such, the IDP Update for 2015 should seek to identify existing infrastructure capacity, where new or additional infrastructure is required to facilitate this provision, the cost of providing this infrastructure and how this should be funded.

Policy Drivers

- 13.7 The National Planning Policy Framework (NPPF) supports the provision of high quality communications infrastructure and recognises its necessity and contribution to sustainable economic growth, particularly the provision of high speed broadband technology and other communications networks.
- 13.8 In terms of planning for such infrastructure, the NPPF states that local planning authorities should set out the strategic priorities for the area within the Local Plan including (amongst others) the provision and delivery of infrastructure for telecommunications⁴.
- 13.9 In assembling a proportionate evidence base to demonstrate what infrastructure is necessary to deliver planned growth and the development objectives set out within the Council's Core Strategy and Pre-submission Site Allocations Development Plan Document (DPD), the NPPF also emphasises the need to work in collaboration with other authorities and providers. This includes a requirement to assess the quality and capacity of infrastructure for telecommunications taking account of the need for strategic infrastructure including that which might be nationally significant infrastructure within the Borough⁵.
- 13.10 Referring to sustainable economic growth, this aim was recently reiterated and strengthened within a letter to all local authorities in England from the DCLG and DCMS. The letter highlighted the vital role local planning authorities have in supporting the rollout of superfast broadband when updating Local Plans and

² Information sourced from: <http://www.hertsdirect.org/your-community/broadband/> (February 2015).

³ Information sourced from: <http://www.connectedcounties.org/home>.

⁴ Paragraph 156 of the NPPF.

⁵ Paragraph 162 of the NPPF.

determining planning applications, and the need to work collaboratively with providers to assess the quality and capacity of infrastructure of strategic priority.⁶

Existing Infrastructure Plans

- 13.11 Neither the Hertfordshire Infrastructure Investment Strategy (HIIS) (2009), Dacorum Strategic Infrastructure Study (DSIS) (2011) nor the 2014 Infrastructure Delivery Plan Update (IDP) has previously addressed the requirement to plan for telecommunication infrastructure delivery.
- 13.12 The Council has not previously been made aware of any infrastructure plans by the providers themselves despite there being a requirement on mobile telecommunications operators to provide local planning authorities with their annual reports identifying proposed development and areas where development pressures may arise in order to deliver required levels of coverage.

Infrastructure Provider

- 13.13 For fixed-line or mobile telecom services, *BT Openreach* (one of British Telecom Group's four lines of business) has a universal commitment and obligation under a licence to provide a phone line and network capacity upon request only. All the infrastructure work required to achieve that connection is at BT Openreach's expense. Where diversion work is necessary (i.e. an existing network needs to be moved) then this is chargeable and the developer must register a site three months prior to the commencement of the development in order to secure this work.
- 13.14 At present, the provision of telecommunication infrastructure is somewhat reactive insofar as the developer will approach BT Openreach after the grant of planning permission and at the point of construction to request the provision of infrastructure services. In response to this, BT Openreach usually reimburses the developer the costs associated with the installation of any requisite ducts or cabling as required by BT Openreach.
- 13.15 The main infrastructure requirements for mobile phone provision is sites for masts, however, this is dealt with through the development management process. Specifically, this is delivered by statutory undertakers through the rights inferred by Part 16 the Town and Country Planning (General Permitted Development) Order 2015 as set out in Schedule 2.
- 13.16 The mobile telecommunication operators active within Dacorum include:
- Three;
 - EE; and
 - Cornerstone Telecommunications Infrastructure Ltd (CTIL) – joint venture owned by Telefónica UK Limited and Vodafone Limited operating Vodafone and O2 networks.

⁶ Letter from Brandon Lewis MP (Minister of State for Housing and Planning) and Ed Vaizey MP (Minister of State for Culture and the Digital Economy) jointly from the DCLG and DCMS dated 19th March 2015.

Existing and Committed Infrastructure Provision

- 13.17 Although several attempts have been made to contact BT Openreach, as the principle infrastructure provider in the telecommunications market, the Council have been unsuccessful in getting a response. The purpose of engaging this provider was to establish the state of existing telecommunications infrastructure within Dacorum, what infrastructure improvements were planned for the coming year and to take account of the Borough's projected growth levels. This communication process was intended to be beneficial two-ways so that information relating to the Council's projected growth levels could assist BT Openreach in planning the provision of their services, including any new infrastructure, network upgrades and other improvements.
- 13.18 For mobile telecommunications, the Annual Network Update Plans for 2014/15 identify the extent of existing infrastructure within the Borough but do not identify any specific forthcoming or planned projects for this year.

Estimating Future Demand

- 13.19 BT Openreach own an extensive network of cables, cabinets and telephone exchange buildings across the UK and allow other telecommunications companies and Internet Service Providers (ISPs) to utilise this physical infrastructure so that customers have the ability to choose a provider on the open market competitively. This is referred to as '*open access infrastructure*'.
- 13.20 However, currently, BT Openreach are only obliged to provide a copper phone line to new premises (homes and other premises) as opposed to the more advanced fibre optics, which can offer faster connectivity speeds to consumers. There is a desire to revise this obligation so that fibre optic, instead of copper lines, are provided by BT Openreach as a minimum to enable open access infrastructure for the provision of fibre broadband to all premises in accordance with Government's aims.
- 13.21 More recently, BT has announced plans to deliver much faster broadband to homes and small businesses through '*G.fast*' which is a new standard for broadband connectivity that enables even higher connection speeds⁷. This innovative technology will be piloted during summer 2015 and, subject to the success of those pilots, is planned for deployment during 2016/17⁸. Therefore, the delivery of such infrastructure through development within the Borough is not likely to be achieved through this year's Infrastructure Delivery Plan.

Telecommunications Infrastructure Requirements

- 13.22 Whilst there is an ongoing need to raise the level of telecommunication infrastructure within the Borough, there are no specific scheme requirements which need to be

⁷ Information sourced from: <http://www.btplc.com/Thegroup/Ourcompany/TheBTstory/index.htm> (April 2015).

⁸ Information sourced from: <http://www.btplc.com/News/Articles/ShowArticle.cfm?ArticleID=C2B16D33-699C-4692-925C-26E05AB6192D> (April 2015).

identified within the IDP. This is because the provision of telecommunication infrastructure is wholly provided through the private sector and, as stated in paragraph 13.11, providers (including BT Openreach) have an obligation to provide a phone line and network capacity upon request. Therefore, the Council will encourage developers to contact and engage with BT Openreach at the earliest opportunity in the planning and development process.

13.23 In addition to this, throughout 2015 and into 2016, work will continue with the abovementioned Connected Counties Broadband Project to upgrade the network of cabinets with a view to achieving the target of providing 90% of homes and businesses with superfast fibre broadband.

13.24 Looking forward from March 2016, the Connected Counties Team are currently out to tender for an additional contract in order to extend this coverage of access to superfast broadband beyond 95%. The results of the appointed provider are awaited⁹.

Cost and Funding of Provision

13.25 The Connected Counties Programme has attracted a total investment of £18.06 million. This includes contributions from (amongst others) Hertfordshire County Council, Hertfordshire Local Enterprise Partnership and the infrastructure provider, BT Openreach. This investment is expected to deliver the target of providing superfast broadband to 90% of homes and business across both Hertfordshire and Buckinghamshire, which will include improvements within Dacorum, by March 2016. As such, it is likely that developer contributions will not be required as a result of the Council granting planning permission for development proposals. The Council has not identified telecommunications infrastructure as a beneficiary of CIL funding upon its Regulation 123 list.

⁹ Information sourced from: <http://www.connectedcounties.org/home> (April 2015).

Chapter 14: Conclusions

- 14.1 The assessment of infrastructure need provided by this IDP shows that the development planned in the Core Strategy and the Pre-Submission Site Allocations DPD can be supported by the necessary infrastructure. The requirements for new infrastructure and improvements to existing infrastructure provisions resulting from planned growth are set out in Appendix A.
- 14.2 The responses received to the consultation on the Pre-Submission Site Allocations DPD have informed discussions with infrastructure providers for this update. The information given by providers to this update has informed the Council's response to issues raised through the consultation.
- 14.3 Whilst a significant amount of new infrastructure is required to support the planned development, all infrastructure providers have confirmed that it will not present any insurmountable problems, i.e. there are no 'showstoppers'. The only significant projects added to the Infrastructure Delivery Schedule are those arising from the Outdoor Leisure Facilities Assessment Report (2014) and Playing Pitch Strategy (2015).
- 14.4 The biggest challenges will be the improvements required to the local transport network to ensure it continues to operate successfully, the timely provision of new primary schools, new and improved health services and the delivery of the upgrades to the WWTW necessary to support development in the wider sub-region.
- 14.5 The introduction of a Community Infrastructure Levy (CIL) in the Borough and changes to national policy about application of Section 106 (S106) Agreements means that the way development will contribute to the funding of infrastructure is changing. Whilst this presents further challenges, it also provides potential opportunities including the ability to acquire land for the delivery of infrastructure through CIL and the requirement to engage with local communities over local infrastructure priorities. The CIL Regulations 2010 (as amended) and Ministerial Statements have restricted the use of developer contributions paid through S106 since April 2015. The Council has developed a clear strategy to the delivery of infrastructure with a view to maximising the benefits of CIL and S.106. This is articulated through our Regulation 123 list, which can be found under the following link:
- [http://www.dacorum.gov.uk/docs/default-source/strategic-planning/cil-regulation-123-list-\(pdf-218-kb\).pdf?sfvrsn=0](http://www.dacorum.gov.uk/docs/default-source/strategic-planning/cil-regulation-123-list-(pdf-218-kb).pdf?sfvrsn=0)
- 14.6 The council intends to update the infrastructure requirements set out in Appendix A on an annual basis. The annual update will include monitoring the delivery of infrastructure, and will focus particularly on updating the associated schedules and estimated costs of delivering the infrastructure. Any key changes will be reported through the Council's Annual Monitoring Report (AMR).

- 14.7 The Council has purchased a new software package, Exacom, to monitor and administer both CIL and Section 106. More detail will be provided on the use of CIL and Section 106 through the AMR, a new Infrastructure Business Plan and via the Council's website including any external links.

CHAPTER 2: TRANSPORT

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Transport Infrastructure							
Bus	HHUTP	Improved bus stop locations	Ongoing	Variable	LTP, developer contributions, other improvement initiatives	Relevant funding allocated annually.	HCC
	HHUTP	Integrated timetabling between bus and rail, Hemel Hempstead	Review of bus timetables is ongoing	TBC	LTP capital, developer contributions/ external funding	Review funded from LTP revenue sources – ongoing.	Bus and train operators
	HHUTP	Better bus maintenance (inc. cleaning), Hemel Hempstead	From 2014	TBC	Bus operators	Unknown	Bus operators
	HHUTP LSTF bid	QNP Bus & Infrastructure Upgrades, county wide	2015	£1.8m	LSTF/ Developer Contributions GAF/	Part funded	HCC Highways
	Hemel Hempstead Town Centre Masterplan	Hemel Hempstead bus station relocation	2015	TBC	Capital funding from DBC	Funding secured from Cabinet 30 th April 2013	DBC/HCC
	HHUTP	Bus priority on key routes, Hemel Hempstead (Maylands/Town Centre/Railway Stations)	2019	£1m	LTP, developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Central Corridor bus priority scheme, Hemel Hempstead	2019	£1m	HCC/ operators	No funding secured	HCC Highways/ operators
	HHUTP	Increased bus frequencies, Hemel Hempstead	2019	TBC	HCC/ operators/ S106/DfT grants	No funding secured	Bus operators
	HHUTP	Extension of bus services, e.g. orbital service, Hemel Hempstead	2019	TBC	LTP, developer	No funding secured	Bus operators

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					contributions/ external funding		
	HHUTP	Subsidy to bus operators, Hemel Hempstead	2019	TBC	LTP, developer contributions/ external funding	No funding secured	HCC
	HHUTP	New road layouts e.g. Leverstock Green. Hemel Hempstead	2019	TBC	LTP, developer contributions/ external funding	No funding secured.	HCC
Walking/ cycling	HHUTP	Pedestrian guardrail review (e.g. rail station, London/Station Road, Waterhouse St, Heath Lane)	Ongoing	£1-5K per site	LTP, developer contributions/ external funding	No specific funding allocated – to be progressed as part of area improvement schemes.	HCC
	HHUTP	Tactile paving at crossings (e.g. London/Station Rd, Bridge St roundabout, Combe St roundabout)	Ongoing	£1-2K per crossing	LTP, developer contributions/ external funding		HCC
	HHUTP	Pedestrian environment improvements (e.g. Waterhouse Street, Leighton Buzzard Road)	Ongoing	TBC	LTP, developer contributions/ external funding	No funding secured. To be delivered as part of Hemel Hempstead Town Centre Masterplan.	HCC
	HHUTP	Informal and formal crossings/refuges, various locations, Hemel Hempstead.	Ongoing	£2-5K (informal) TBC (formal)	LTP, developer contributions/ external funding	Some funding secured. To be delivered through localised initiatives.	HCC
	HHUTP	Canal path seating (station to town centre, Grand Union Canal to Apsley)	Short term	£2K per seat	British Waterways/ developer contributions	?	Canal and River Trust
	Maylands Master Plan LSTF/	Maylands Avenue Urban Realm Improvements, Hemel Hempstead	2014-2016	£1.25 million	LSTF/S106/DB C Capital	Partially funded by S.106/DBC Capital	DBC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	Maylands Urban Realm Improvement Specification						
	HHUTP	Pavement widening (e.g. London/Station Road, Bennetts End Road). Hemel Hempstead	From 2014	£2.5-5K per 10m	LTP/ developer contributions/ external funding	No funding secured	HCC
	HHUTP	Pavement extension (e.g. Leighton Buzzard Road, Fishery Lane, London/Station Road, St. Albans Road). Hemel Hempstead	From 2014	£5K per 10m	LTP/ developer contributions/ external funding	No funding secured	HCC
	HHUTP	Junction re-design (e.g. Allandale). Hemel Hempstead	From 2014	£75-100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Change traffic priorities to favour pedestrians (e.g. Leighton Buzzard Road). Hemel Hempstead	From 2014	£15-20K per signals	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP LTP3	Improve access for pedestrians and cyclists into some areas (e.g. Apsley, Jarman Park). Hemel Hempstead	2016/17	£200K	LTP/ developer contributions/ external funding	Part funding from S106.	HCC
	HHUTP	Provide pedestrian and cycling links to employments zones from residential areas. Hemel Hempstead	From 2014	£15-300K per scheme	LTP/ developer contributions/ external funding	Delivery expected to be as part of wider improvement schemes.	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HHUTP	Canal access route/ramp (e.g. London/Station Rd, Fishery Lane). Hemel Hempstead	From 2014	£20K per 10m	British Waterways	Unknown	Canal and River Trust
	HHUTP	Shared cycle track (e.g. St Albans Road, Redbourn Road). Hemel Hempstead	From 2014	£10K per 10m	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Pavement/towpath widening (e.g. Queensway, Grand Union Canal). Hemel Hempstead	From 2014	£2.5-5K per 10m	HCC, British Waterways	Unknown	HCC/Canal and River Trust
	HHUTP	Improve access to schools on foot/cycle (e.g. Longdean School). Hemel Hempstead	From 2014	£20K per school	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	CCTV at cycle stands (Marlowes). Hemel Hempstead	From 2014	£25K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Lighting (e.g. Briery Way, Marlowes). Hemel Hempstead	From 2014	Up to £100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Junction redesign (e.g. Briery Way to Ellingham Rd link, Leverstock Green Road). Hemel Hempstead	From 2014	£75-100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Lighting (e.g. , Fishery Lane, Underpass to park, Briery Way, St Albans Hill). Hemel Hempstead	2019	Up to £70K	LTP/ developer contributions/	£30K secured for the delivery of improvements to the	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					external funding	Plough roundabout.	
	HHUTP	Pelican crossings (e.g. Longfield). Hemel Hempstead	2019	£50-70K (Pelican)	LTP/ developer contributions/ external funding	Likely to be delivered as part of wider improvements schemes	HCC
	HHUTP	Introduction of off-street cycle routes (e.g. Gade Valley). Hemel Hempstead	2019	£50K per 100m	LTP/ developer contributions/ external funding	Likely to be delivered as part of wider improvements schemes	HCC
	HHUTP	Green corridors for cyclists (e.g. The Wayside, Brickfield Ave, Longfield, Fourdrinier Way). Hemel Hempstead	2019	£50K per 100m	LTP/ developer contributions/ external funding	Some are part funded. Likely to be delivered as part of wider improvements schemes	HCC
	HHUTP	Improve Plough Roundabout to ensure cyclists' safety. Hemel Hempstead	2019	£500K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	DBLP	Completion of cycle route between Two Waters, Apsley and Nash Mills. Hemel Hempstead	2021	TBC	Developer contributions	Nominal Funding committed via S.106	HCC
	Dacorum Cycling Strategy	Maylands Avenue – shared pedestrian/cyclist paths. Part of Maylands Sustainable Transport Plan. Hemel Hempstead	2021	£40K for design. TBC for delivery	DBC/LTP/ developer contributions/ external funding	Funding secure for design work, delivery funding contingent on success of future bidding rounds.	HCC/Herts Highways
	HHUTP	Improvements to National Cycle Network Route 57 (Chesham to Nickey Line to Hemel Hempstead)	2021	£50K per 100m	LTP/ developer contributions/	No funding secured	Sustrans

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		town centre). Hemel Hempstead			external funding		
	Urban Park Project	Durrants Hill Rd footpath improvements. Hemel Hempstead	2017/18	£3K	GAF/ Developer Contributions	Funding not secured	DBC
	HCC Cycling Strategy	Implementation of HCC Cycling Strategy. Hertfordshire wide. The UTPs are the delivery mechanism, and the modal share strategy (underway) will integrate sustainable modes of travel.	Variable	£36m for all of Herts	LTP/ developer contributions/ external funding	No funding secured.	HCC
	NTBUTP	Pedestrian Crossing facilities at Hilltop and Ashlyns Road	?	£65K	LTP/LSTF/SRTs	No funds secured	HCC
	NTBUTP	Pedestrian Crossing facilities on Greenway, Berkhamsted	2016/17	£8K	LTP/LSTF/SRTS	N Part funded	HCC
	NTBUTP	Pedestrian Crossing facilities (zebra) on Bridgewater Road, Berkhamsted <ul style="list-style-type: none"> - Zebra crossing - Formal crossing points 	2016/17	£120K £50K £70K	LTP/LSTF/SRTS	Part funded	HCC
	NTBUTP	Pedestrian Crossing (zebra) on Grove Road, Tring nr Bunyan Close	?	£50K	LTP/LSTF/SRTS)	No funds secured	HCC
	NTBUTP	Improvements to footpath 48 to introduce mixed use (Safer Route to Goldfield School)	?	£50K	LTP/SRTS	No funds secured	HCC
	NTBUTP	Improvements to footpath 39, Tring <ul style="list-style-type: none"> - Remove clutter - Informal crossing point on London Road by Tesco Footpath along northern edge of London Road between path 39 and	?	£65K £10K £15K £40K	LTP	No funding secured	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Dunsley Farm.					
	NTBUTP	Improvements to footpath 41, Tring <ul style="list-style-type: none"> - Zebra crossing between Shugars Green and Silk Mill - Zebra crossing on Silk Mill Way - Introduce Shared Use 		£180K £60K £60K £60K	LTP/LSTF	No funds secured	HCC
	NTBUTP	Additional Cycle Parking in Berkhamsted and Tring <ul style="list-style-type: none"> - Key locations - Security - Replacement cycle racks – Berkhamsted - Signage to cycle parking 	2016/17	£50K £10K £20K £15K £5K	LTP	Partially funded/delivered.	HCC
	NTBUTP	Extend cycle facilities in Tring from London Road to connect to town centre <ul style="list-style-type: none"> - Segregated cycle track to Brook St - Provide alternative alignment via High Street - Improve link to High Street via market - Brook Street Zebra crossing - Shared facility during maintenance - 	2016/17	£133K £25K £20K £25K £55K £8K	Developer Contributions/LTP	No funding secured	HCC
	NTBUTP	Cycle Route from Tring Station to Pitstone <ul style="list-style-type: none"> - Off road link to Pitstone via Northfield Road - Marshcroft Lane link from 	2016/17	£355K £200K £150K	Developer Contributions/LSTF	Part funded	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Pitstone to Tring Station - Marketing		£5K			
	NTBUTP	Electric Bikes	?	Unknown	LSTF	No funds secured	HCC/DBC
	NTBUTP	Legibility initiatives in Berkhamsted and Tring - Signage in Berkhamsted - Signage in Tring - Signage to Berkhamsted Station - Signage to Tring Station - Chilterns Cycleway Inter-Urban Routes	?	£150K £20K £15K £30K £30K £25K £30K	Developer contributions/LTP	No funds secured.	HCC/DBC
	NTBUTP	Canal Towpath Improvements – Tring Cow Roast-Station Road	?	£40K	Developer Contributions	No funding secured	CARP
	NTBUTP	Canal Towpath Improvements – Berkhamsted - Park Street - Bridge 135 - St John Well’s Lane - Bridge 134 - Way Finding - Pedestrian Priority Signs	2015 onwards	£569K £75K £40K £180K £180K £10K £4K	Developer Contributions	Part funded/delivered	CARP
	NTBUTP	Cycle Improvements at Berkhamsted and Tring Gateways - Warning signs - Reconfigure Northchurch and Kingshill - Remove inadequate facilities, - Provide cycle facilities - Warning Signs -	?	£95K £6K £18K £60K £8K £3K	LTP	No funds secured	HCC/DBC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HHUTP	- Stabilise rail timetabling. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2014	TBC	Train Operating Companies (TOCs)	Unknown	London Midland
	LTP2	- DDA access scheme at Hemel Hempstead station	2016	Unknown	TOCs	No funding secured	HCC/TOCs
Rail	HHUTP	RTPI at stations. Hemel Hempstead	2019	Unknown	TOCs	Funds secured	TOCs
	HHUTP	Increased rail frequencies, Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2019	TBC	TOCs	Unknown	London Midland
	HHUTP	CCTV at rail stations. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2019	£250K	TOCs	Unknown	London Midland
	HHUTP	Increased track capacity on West Coast Mainline. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2029	TBC	DfT/TOCs	Unknown	Network Rail
	HHUTP	Longer trains. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2029	TBC	TOCs	Unknown	London Midland
	NTBUTP	Tring Station Improvements - Improvements to cycle provision - Cycle security Improve cycle conditions at Station Road bridge	?	£65K £30K-40K £15K-20K £5K	LTP/London Midland	Funding not secured	HCC
	NTBUTP	Berkhamsted Station Improvements - Taxi and Vehicle Drop Off zone - Junction Signage at Brownlow Road Expand parking restrictions to White Hill	?	12K	LTP/London Midland	Funds not secured.	HCC
	NTBUTP	Railway Underbridge Improvements (Brownlow Road and New Road) - Signage - Lighting	?	£38K £30K £8K	LTP	Funds not secured	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HHUTP	- Freight Travel Plans. Hemel Hempstead	Short term	£20K	LTP	No funding secured	HCC
	HHUTP	- Route maps for hauliers. Hemel Hempstead	Short term	£10K	LTP, adjoining highway authorities, the HA	No funding secured	HCC, CBC and HA
Road	DBC	Improve junction access from Three Cherry Trees Lane into Spencer's Park and associated highway works to deliver Spencer's Park scheme	2014-16	£1.5m	Developer/ GPF	Alongside development	Developer
	DBC	Boundary Way/Buncefield Lane access for the Maylands Gateway Site	2014-16	£2m	HCA/ Developer	Funding not secured	HCA/ Developer
	DBC	Boundary Way/Green Lane access to the Maylands Gateway site and associated Utilities infrastructure	2014-16	£2m	DBC/LEP	Funding not secured	DBC/LEP
	HHUTP	Lower speed limits (e.g. Breakspear Way). Hemel Hempstead	From 2014	£30K per link	LTP/ developer contributions/ external funding	No funding secured	HCC
	HHUTP	Traffic calming (e.g. Chaulden, Bunkers Lane). Hemel Hempstead	From 2014	£10K per 10m	LTP/ developer contributions/ external funding	No funding secured	HCC
	HHUTP	Road safety training. Hemel Hempstead	From 2014	£30K	LTP capital	?	HCC
	HHUTP	Review of new traffic lights on Leighton Buzzard Road. Hemel Hempstead	From 2014	£20K	LTP/ developer contributions/ external funding	No funding secured	HCC
	Identified by consultants, confirmed by	Signalise Kings Road/Kingshill Way/ Shootersway Berkhamsted	2016	£415K-500K	HCC/ developer contributions	Part funded	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HH/TNBUTP						
	TNBUTP	Improve operation of the junction of High Street and Kings Road, Berkhamsted	?	£8K to 12K	LTP/ developer contributions	No funding secured	HCC
	TNBUTP	Improve access and egress signage for A41 Bypass – change A41 egress signs and new sign at A41/A4251 junction	?	£25K	LTP /developer contributions	No funds secured	HCC
	TNBUTP	Improvements to the New Road corridor between the High St and South Bank Road <ul style="list-style-type: none"> - HGV limitations - Cycle/Walkway link to canal (£2-4K) - and Cycle link between Springfield Road and New Road 	?	£185K £30K-35K £2K-4K £100K-150K	LTP/LSTF/ developer contributions	No funds secured	HCC
	TNBUTP	Traffic calming and extension of 20mph zone at High St, Berkhamsted	?	£660K	HCC/LTP/deve loper contributions	No funds secured	HCC/DBC
	TNBUTP	Improvements to the Billet Lane corridor between Gossoms End and Bridgewater Road <ul style="list-style-type: none"> - Signal Upgrade to MOVA - New shared facility between canal and junction with Gossom End - ASL Signals 	?	£75K £45K £6K £6K £2K	LTP/LSTF/S.1 06	No funds secured	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		<ul style="list-style-type: none"> - New Railing - Informal crossing on Billet Lane - Signalised pedestrian crossing on Billet Lane arm 		<p>£6K £10K</p>			
	TNBUTP	Improvements to the junction of Durrants Lane and High Street <ul style="list-style-type: none"> - Traffic signals and Toucan - Replace Moor Road roundabout with priority junction - Bus Lay-bys on northern side of High St near Durrants Lane 	2016/17	<p>£468K £250K £200K £18K</p>	LTP/LSTF/S.106	Part funded	HCC
	TNBUTP	Speed Management – Aylesbury Road <ul style="list-style-type: none"> - Buffer zone - Off carriageway cycle 	?	<p>£165K £15K £150K</p>	LTP/LSTF	No funds secured	HCC
	TNBUTP	Speed Management – New Road, Northchurch <ul style="list-style-type: none"> - 20mph speed limit between High St and canal Rippleprint at entrance to 30mph zone 	?	<p>£44K £10K £34K</p>	LTP	No funds secured	HCC
	TNBUTP	Speed Management – Kings Road	?	£10K	LTP	No funds secured	HCC
	TNBUTP	Speed Management – Station Road	?	£15K	LTP	No funds secured	HCC
	TNBUTP	Speed Management – London Rd into Tring	?	£15K	LTP	No funds secured	HCC
	TNBUTP	Speed Management – Brook Street <ul style="list-style-type: none"> - Vehicle activated Sign 	?	<p>£44K £10K</p>	LTP/LSTF	No funds secured	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Roundels on Brook St - Ribbleprint at entrance into 30mph -		£34K			
	TNBUTP	Speed Management – Icknield Way	?	£14K	LTP	No funds secured	HCC
	TNBUTP	Traffic Calming and extension of 20mph to Gravel Path, Berkhamsted - Gateway features - Speed Humps - Surfacing	?	£84K £13K £65K £6K	LTP/LSTF	No funds secured	HCC
	TNBUTP	Traffic Calming and extension of 20mph into Castle Street/Mill Street, Berkhamsted	?	£18K	LTP	No funds secured	HCC
	TNBUTP	Speed Management – Tring Station	?	£14K	LTP	No funds secured	HCC
	TNBUTP	Speed Management – Northchurch High St	?	£10K per island £10K per VASR	LTP	No funds secured	HCC
	TNBUTP	Traffic Calming to 20mph at schools	?	£15K per school	LTP	No funds secured	HCC
		Speed Cushions to Silk Mill Way		£45K	LTP	No funds secured	HCC
	HHUTP	Junction improvements and roundabouts (e.g. Maylands & A414, Plough roundabout, Box Ln/Felden Ln. Hemel Hempstead)	2019	£500-750K per junction	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Re-design site entrances (e.g. Jarman Park)	2019	£500K	LTP/ developer contributions/ external funding	£90K secured towards pedestrian crossing to Jarmans.	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HHUTP	AQMA at J8 of M1 and Plough roundabout. Hemel Hempstead	2019	£80K	Unknown	Unknown	HCC Highways Agency
	HHUTP	Redesign roads and junctions (e.g. Bourne End slip road, Two Waters flyover). Hemel Hempstead	2019	£250-500K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	High Occupancy Vehicle (HOV)/HGV lanes (e.g. on M1, A414). Hemel Hempstead	2019	£250K	LTP/ developer contributions/ external funding	No funding secured.	Highways Agency
	HHUTP	Maintain highways (e.g. A414, Maylands Ave, Link Road). Hemel Hempstead	2019	£250K	LTP revenue funding	No funding secured.	HCC
	HHUTP	Redesign entrances and improve access for vehicles (e.g. Green Ln into Maylands, Redbourn Rd into Cupid Green, Woodhall Farm egress). Hemel Hempstead	2019	£500K per access	LTP/ developer contributions/ external funding	No funding secured apart from GPF funding for improved access to Spencers Park.	HCC
	HHUTP	Provide new roundabouts (e.g. Leverstock Green Road/Bedmond Road). Hemel Hempstead	2019	£500K each	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Make roads narrower (e.g. Leighton Buzzard Road). Hemel Hempstead	2019	£5K per 10m	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Redesign roundabouts (e.g. A414). Hemel Hempstead	2019	£100-500K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	HGV park in Maylands. Hemel Hempstead	2019	£200K	LTP/ developer	No funding secured.	Maylands Partnership

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					contributions/ external funding		
	HHUTP	Lorry Bans (e.g. in residential areas). Hemel Hempstead	2019	£100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Low Emission Zone (e.g. along A414). Hemel Hempstead	2019	£500K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Designated Lorry Routes (e.g. into Maylands). Hemel Hempstead	2019	£500K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Freight transshipment facilities (e.g. into Maylands). Hemel Hempstead	2019	£5m	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Introduce home zones (e.g. Adeyfield). Hemel Hempstead	2019	£500K per street	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	New traffic signals (e.g. on A414 with Green Lane, with Maylands Ave)	2019	£40K per junction	LTP/ developer contributions/ external funding	Part funded	HCC
	HHUTP	Designate “Red Routes” to ban stopping and parking (e.g. Queensway). Hemel Hempstead	2019	£300K	LTP/ developer contributions/ external	No funding secured.	HCC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					funding		
	Identified by consultants, confirmed by HH	London Road/Station Road junction improvements. Hemel Hempstead	2021	£200,000	LTP/ developer contributions/ external funding	No funding secured.	Hertfordshire Highways
	DBLP Core Strategy LTP3 HHUTP	North East Hemel Hempstead Relief Road. Hemel Hempstead	2029	£3-5m per km	Developer contributions	No funding secured.	HCC
	HHUTP	New bridges (e.g. over canal). Hemel Hempstead	2029	£2-5m per km	LTP/ British Waterways/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Congestion charging/road pricing. Hemel Hempstead	2029	TBC	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Provide roundabouts (e.g. Shenley Rd/ Redbourn Rd). Hemel Hempstead	2029	£500K each	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Leisure and destination Travel Plans (e.g. Jarman Park, Station, Hospital). Hemel Hempstead	Short term	£30K per site	HCC or DfT capital	No funding secured	DBC/HCC
	HHUTP	Safer Routes to School, Hemel Hempstead	From 2014	£6K-£10K per school in TNBUTP £250K	LTP/ developer contributions/ external funding LTP/ LSTF developer	Unknown	HCC

Infrastructure Delivery Plan 2015

Appendix A – Transport

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					contributions/ external funding		
	HHUTP	Prevent/discourage pupils/parents from driving to school. Hemel Hempstead	Ongoing	£100K £150K per annum+	LTP/ developer contributions/ external funding	No funding secured.	HCC
	TNBUTP	Smarter Travel Plans - Travel Plans - Marketing Sustainable Transport - Car Share and Car Club schemes	On-going	£120K start up costs	LTP/ external funding LSTF/LEP	No funds secured	HCC
	NTBUTP	Real Time Information for - town centre bus stops - Station - bus stops in Berkhamsted, Northchurch - along route 500	?	£155K £80K £15K £60K tbc	LTP/LSTF and Private	Part funded	HCC
	HHUTP	Provide easier access for mobility impaired (e.g. dropped kerbs). Hemel Hempstead	On going	£3K per dropped kerb	LTP/ developer contributions/ external funding	Some locations have received part funding. Delivery will be as part of wider improvement schemes.	HCC
Community Transport measures	HHUTP	Allow more taxis to collect at railway station. Hemel Hempstead	Ongoing	£10K	LTP/ developer contributions/ external funding	No specific budget allocated – to be delivered as part of improvements to station forecourt.	DBC
	HHUTP	Taxis for home to school/hospital. Hemel Hempstead	From 2014	TBC	LTP/ developer contributions/ external funding	No funding secured.	DBC
	HHUTP	Expand Dial-a-Ride. Hemel	From 2014	TBC	LTP/	No funding secured.	DBC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Hempstead			developer contributions/ external funding		
	HHUTP	Demand Responsive Transport to serve the hospital. Hemel Hempstead	From 2014	TBC	LTP/ developer contributions/ external funding	No funding secured.	DBC
	HHUTP	Remove Parking around schools. Hemel Hempstead	Ongoing	£20K per school	HCC	Unknown	DBC
	TNBUTP	Review of double yellow lines on junctions and white lines	2019	£8K	LTP	No funds secured	HCC
	TNBUTP	Increase parking restrictions along Beggars Lane	2016	£6K	LTP	No funds secured	HCC
Parking	TNBUTP	Bridgewater Road parking restrictions	2016	£3K	LTP	No funds secured	HCC
	TNBUTP	Improvements to parking in Northchurch Local Centre	?	£45K	LTP	No funds secured	HCC
	TNBUTP	Review parking arrangements and implementation of yellow lines at Cow Lane, Tring	2019	£6K	LTP	No funds secured	HCC/DST
	TNBUTP	Review of Parking in Town Centre - replacement signs additional signs	2019	£8K	LTP	No funds secured	HCC
	TNBUTP	Variable Message signs for Town Centre (Berkhamsted)	2019	£100K	LTP/S.106	No funds secured	HCC
	HHUTP	Provide Motorcycle parking (e.g. railway stations, Maylands, Marlowes)	From 2014	£50K	TBC	No funds secured	DBC
	HHUTP	Provide additional parking for disabled drivers	From 2014	£50K	TBC	No funds secured	DBC
	HHUTP	- Provide additional parking for disabled drivers	From 2014	£50K	TBC	No funds secured	DBC
	HHUTP	Provide Motorcycle parking (e.g. railway stations, Maylands, Marlowes)	From 2014	£50K	TBC	No funds secured	DBC

CHAPTER 3: EDUCATION

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Education Infrastructure							
Early years education	HCC	Expansion of existing Children Centres D3 (Berkhamsted South) D4 (Warners End and Chaulden) and D6 (Grovehill and Woodhall Farm) D7 (Adeyfield, Highfield and St.Pauls)	2014 onwards	£2.38m+ £500,000 £1.5m £388,000 Unknown	HCC/ developer contributions/ external funding sources	Funds not secured	HCC
Primary education	HCC	Hemel Hempstead North East Primary Planning Area: Plans for an additional 2.f.e provided by expansion of existing schools or through the provision of a new school on a site owned by HCC	Post 2016	£8.32m	HCC/ developer contributions/ external funding sources	Funding not secured	HCC
	HCC	Hemel Hempstead East Primary Planning Area: one new 2 f.e. school	Dependent on the scale of housing in DBC and SADC	£7.64m + land	HCC/ developer contributions/ external funding sources	Funding not secured	HCC/academy/ free school
	HCC	Hemel Hempstead South East Primary Planning Area: one new 2 f.e. school (EZ/1)	Post 2016	£7.64m + land	HCC/ developer contributions/ external funding sources	Funding not secured	HCC/academy/ free school
	HCC	Hemel Hempstead West and North West Primary Planning Area: one new 2 f.e. school as part of LA3	Dependent upon the phasing of housing	£7.64m	Developer	Funding not secured	Developer/HCC/ academy/ free school
	HCC	Hemel Hempstead Town Centre Primary Planning Area: one new 2 f.e.	Post 2016	£7.64m + land	HCC/ developer	Funding not secured	Developer/HCC/ academy/ free

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		school (MU/1)			contributions/ external funding sources		school
	HCC	Berkhamsted Primary Planning Area: two new 2 f.e. schools (EZ/2 and EZ/3)	Dependent upon outcome of current consultation regarding change to 2 tier education	£15.28m	HCC/ developer contributions/ external funding sources	Funding not secured	Developer/HCC/ academy/ free school
Secondary education	HCC	Possible expansion of Tring Secondary School and relocation of playing fields	Post 2016	Unknown	HCC/ developer contributions/ external funding sources	Funding not secured	HCC
	HCC	Expansion of Ashlyns School, Berkhamsted from 7 f.e to up to 10 f.e (EZ/2)	Post 2016	Unknown	HCC/ developer contributions/ external funding sources	Funding not secured	HCC
Further education	WHC	Redevelopment of West Herts College Hemel Hempstead campus	2015/16	£18-22m	Uplift in value from redevelopment of site	Funding secured not	West Herts College

CHAPTER 4: HEALTHCARE

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Healthcare Infrastructure							
Emergency & Urgent Care		Redevelopment of Hemel Hempstead General Hospital	From 2018	Depending on the nature of provision	DfH, CCG and uplift from redevelopment of the site.	Unknown	West Hertfordshire Hospitals NHS Trust/ NHS Hertfordshire
GP Premises		New GP premises associated with LA3	From 2021	Unknown	S.106	Funding not secured	HVCCG/NHS England/DBC
Mental Health		16-18 mental health beds, Hemel Hempstead	On-going	Unknown	Herts Valley CCG	Funding not secured	Hertfordshire Partnership NHS Foundation Trust
Day Care		New Community/Day Centre associated with LA3	From 2021	£1.17million	S.106	Funding not secured	HCC/DBC

CHAPTER 5: OPEN SPACE

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Open Space Infrastructure							
Play space	DBC	Programme of Play area Improvements	Ongoing	£30K-50K per play area	DBC capital budget and developer contributions.	Funding not secured.	DBC
	DBC	Water Gardens Play Area	2016/17	£200K	DBC/HLF	Funds Secured	DBC
	DBC	Play on the Way, Marlowes, Hemel Hempstead.	2014-15	£100K	DBC capital plus s106,	Funding secured.	DBC
	BTC	Provision of play facilities at the Moor, Berkhamsted	2016 onwards	£50K	Developer Contributions	Funding not secured	BTC/DBC
	DBC	Improvements to George Street play area. Berkhamsted	Dependent on delivery of development and receipt of S106 money.	£50K	Developer Contributions	£10.4K of funding secured through S106 subject to expected revision to planning application.	DBC
	DBC	Improvements to Markyate play area. Markyate.	Dependent on delivery of development and receipt of S106 money.	£40K	Developer Contributions	£40K of funding secured through S106 subject to expected revision to planning application.	DBC
	DBC	Improvements to Grovehill/Woodhall Farm play area. Hemel Hempstead.	Dependent on delivery of development and receipt of S106 money.	Unknown	Developer Contributions	£28,371 of funding expected from Redbourn Road development.	DBC
	DBC	Improvements to Adventure Playgrounds	2018 onwards	£1 million per playground	Unknown	Funding not available	DBC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	DBC	New play area at Cherry Trees Lane. – 1 or 2 Hemel Hempstead.	Alongside Development	n/a	Provision required as part of development		Developers
	DBC	Two new play areas at Manor Estate. Hemel Hempstead.					
	DBC	New play area at Sappi development. Hemel Hempstead.					
	DBC	New play area at Green Lane. Hemel Hempstead.					
	DBC	New play area at Land West of Tring (Local Allocation). Tring.					
Play Space	BTC	New play area at Chiltern Park Estate, Berkhamsted	TBC	40K-50K plus land			BTC/DBC
	DBC	New Play area(s) at Land to the West of Hemel Hempstead	Alongside Development	n/a	Provision required as part of the development		Developers
	DBC	New Play area at Spencer's Park					
Natural Green Space and Local Nature Reserves		Target 3 existing Natural Green Spaces for access and interpretation improvements: Woodhall Wood, High Wood and Howe Grove. Hemel Hempstead.	Ongoing	Unknown	TBC	Funding not secured	DBC
		Consider designating Local Nature Reserves at High Wood, Maylands Wood, Widmore Wood and Woodhall Wood. Hemel Hempstead.	Ongoing	Unknown	TBC	Funding not secured	DBC
		Designate Dundale as Local Nature Reserve and continue to support the Friends Group Tring.	2015/16	Unknown	TBC	Funding not secured	DBC
		Ashridge: improved green access – as described in DBGIP. Borough wide	TBC	£100K - £500K	TBC	Funding not secured	DBC/HCC
Other		Improvements to open space at Two			GAF,DBC/		DBC/ Box Moor

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Waters (Urban Park) comprising three projects: Hemel Hempstead.			developer contributions/ British Waterways/ Box Moor Trust/ external funding sources		Trust/ British Waterways/ Boxmoor and District Angling Society/ Dacorum Heritage Trust/ 1 st Apsley Scouts
		- Heath Park Gardens (environmental improvements and improvements to access) in conjunction with Box Moor Trust	Phase 1 - 2015/16 Phase 2 – 2016 onwards	£130K Unknown		Funds Secured for Phase 1. Funds to be secured from S.106/CIL	
		- Boxmoor improvements, which includes upgrades to the canal towpath in conjunction with British Waterways	2014-16	£1.86 million		Funding has been secured from CART (£214K) Additional funding has been requested from the LEP and from S.106.	
		- Environmental and accessibility improvements to lakes and green space at Apsley	2014-16	£500K+		£300K secured from GAF, external funding options for remainder being explored.	
		Improvements at Gadebridge Park - River Gade walk and cycleway - Splash Park - Events Space - Remodelling or restoration of the River Gade - Improvements to historic assets (White Bridge, Charter Tower, Walled Garden, Bury and Roman Villa)	TBC	£4.5 million	Parks for People (Heritage Lottery Fund/Big Lottery Fund) and Your Heritage/Heritage Grants. DBC Capital Funding	Funding bid to be revised in accordance with HLF advice	DBC/Dacorum Heritage Trust
		Refurbishment of Water Gardens Hemel Hempstead	2015- 2017	£3.6m	Heritage Lottery Fund (HLF) and	Funding secured	DBC

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					DBC Capital.		
		Expansion of Bunkers Park	2016/17	£700K + land	DBC/ developer contributions	Part funded.	DBC
		Tring Park Enhancements – as described in DBGIP Tring.	On-going	£100K- £500K	Heritage Lottery Fund	£329,400 secured from the Heritage Lottery Fund,	Woodlands Trust and Natural History Museum
		Aldbury Nowers habitat restoration and enhancement – as described in DBGIP	TBC	£100K - £500K	Unknown	Unknown	?
		Grand Union Canal enhancement – as described in DBGIP and HSGIP Borough wide	TBC	£2m +	HCC/BTC and CARP	Unknown	?
		River Valleys project – Gade, Bulbourne and Ver – as described in DBGIP and in the HSGIP (as Thames Tributaries, River Valleys and corridors) Borough wide	TBC	£100K - £500K	Unknown	No funds secured	?
		River Bulbourne - River Channel Enhancement at Bullbeggars Lane	TBC	Unknown	Unknown	Unknown	Unknown
		- Cannel Restoration at Boxmoor	2015/16	Unknown	Boxmoor Trust and Chilterns Chalk Stream Projects	Funded	Boxmoor Trust
		- Bulbourne Moor Weir Modifications	TBC	Unknown	Unknown	Unknown	Boxmoor Trust
		River Gade - Improve fish passage at Noake Mill	TBC	Unknown	Unknown	Unknown	Unknown
		- Repair flood relief structure at Bury Mill	TBC	Unknown	Affinity Water	Unknown	Affinity Water
		- Restore sustainable river flows	2018	Unknown	Unknown	Funded by Affinity Water	Affinity Water

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Rural villages and common links – as described in DBGIP Borough wide	TBC	Up to £100K	Unknown	Unknown	?
		Urban greening for Hemel Hempstead – as described in DBGIP and in HSGIP (as Urban GI Heritage) Hemel Hempstead.	TBC	At least £500K	Unknown	Unknown	?
		‘Green Hertfordshire’ interactive map project – as described in DBGIP and the HSGIP Borough wide	From 2016.	£50K - £100K	HCC	HCC has funded the plotting of Woodland info on the interactive map project.	HCC
		Projects to support the policies and actions in the Green Space Strategy	Variable	Variable	Variable	Variable	Variable

CHAPTER 6: EMERGENCY SERVICES

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Agency	Delivery Agency
Policing & Community Safety Infrastructure								
Staffing	Hertfordshire	29.5 Police staff	2006 - 2031	£237,107	Hertfordshire Constabulary/ CIL monies	Funding not yet secure	Hertfordshire Constabulary	Hertfordshire Constabulary
Facilities	Constabulary: Assessment of the Impact of Growth – Dacorum Local Authority	151 sqm of police floorspace		£472,357				

CHAPTER 7: WASTE

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Waste Collection and Recycling Infrastructure							
Waste Disposal Authority	Municipal Waste Strategy	The draft Municipal Waste Strategy identifies the need for an Organic Waste Treatment Facility (OWTF) situated in the Hemel-Watford corridor to serve Dacorum, Watford and Three Rivers.	None identified.	Unknown	Not identified	Funding not secure	Private Sector
		Expansion of Hemel Hempstead Household Waste Recycling Centre	2016 onwards	£1.2 million	HCC Capital	Funding Secured	HCC
Waste Collection Authority		Two additional collection rounds (comprising 4 vehicles and associated staff)	TBC	£1.08 million plus running costs.	DBC Core budget and contributions	Funding not secured	DBC
		Expansion/re-organisation of Cupid Green Depot, Hemel Hempstead.	TBC	TBC	DBC core budget/ developer contributions	Funding not secure	DBC

CHAPTER 8: SPORTS FACILITIES

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Sports Facilities Infrastructure							
Sports Centres		Replacement of Tring Sports Centre Tring	Unknown	£5-10m	Lottery Iconic Facility Funding, DBC, HCC, Tring School, Tring Town Council and Sportspace.	Tring School has secured Priority Schools Building Project funding.	DBC/DST/Tring School
		Refurbishment/redevelopment of Berkhamsted Sports Centre Berkhamsted.	Unknown	£5-10m	Lottery Iconic Facility Funding, DBC, HCC, value from redeveloping existing site and Sportspace.	No funding secured.	DBC/DST
	Dacorum's Playing Pitch Strategy (2015)	Pendley Sports Centre, Tring: Improvement to the quality of existing changing facilities and clubhouse, and development of a dedicated training area to reduce the occurrence of overplay on the existing football and rugby pitches.	2020	£50-250k	Pendley Trust The FA RFU Tring Athletic FC Tring Tornadoes FC Tring Bowls Clubs	No funding secured	Pendley Trust

Little Gaddesden Playing Fields project cost of £250k+ is the total required incorporating football, cricket and bowls.

§ Tring Secondary School project cost of £50-250k is the total required incorporating infrastructure for football, cricket, rugby, netball, tennis and the AGP.

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Football pitches (grass)	Dacorum's Playing Pitch Strategy (2015)	Little Gaddesden Playing Fields: Improvement to pitch quality and provision of changing room facilities (unusable due to vandalism) used by Little Gaddesden Rangers FC.	2017	£250k+ [#]	The Football Association (The FA)	No funding secured	Little Gaddesden Parish Council / The FA
	Dacorum's Playing Pitch Strategy (2015)	Grovehill Playing Fields, Hemel Hempstead: Improve the quality of the changing room facilities to ensure appropriate access for clubs.	2017	£50-250k	DBC The FA	No funding secured	DBC / The FA
	Dacorum's Playing Pitch Strategy (2015)	Astley Cooper School, Hemel Hempstead: Replacement of pitches or increase capacity for play at other local sites (e.g. Grovehill Playing Fields).	2017	£50-250k	HCC The FA	No funding secured	HCC / The FA
	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: Reconfiguration of adult and youth/midi pitches and improve quality of existing youth pitches to cater for demand.	2020	£50-250k [§]	HCC The FA	No funding secured	Tring Secondary School / HCC
Cricket pitches	Dacorum's Playing Pitch Strategy (2015)	The Meadow, Northchurch: Improve pitch quality in order to help sustain overplay and consider use of Bridgewater Middle School to support Northchurch Cricket Club.	2017	£50-250k	English Cricket Board (ECB)	No funding secured	Northchurch Sports Association / ECB

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Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	Dacorum's Playing Pitch Strategy (2015)	Little Gaddesden Playing Fields: Improvements to the existing 12 grass wickets and site as a whole used by Little Gaddesden Cricket Club.	2017	£250k+ [#]	ECB	No funding secured	Little Gaddesden Parish Council / ECB
	Dacorum's Playing Pitch Strategy (2015)	Astley Cooper School, Hemel Hempstead: Improve quality of cricket pitch to make it accessible for the school.	2017	£50-250k	HCC ECB	No funding secured	HCC / ECB
	Dacorum's Playing Pitch Strategy (2015)	Leverstock Green Tennis and Cricket Club, Hemel Hempstead: Improve quality of pitch to accommodate overplay.	2017	£50-250k	ECB DBC	No funding secured	DBC / ECB
	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: Improve pitch quality.	2020	£50-250k [§]	HCC ECB	No funding secured	Tring Secondary School / HCC
Tennis courts	Dacorum's Playing Pitch Strategy (2015)	The Meadow, Northchurch: Improve court quantity/quality and/or install floodlighting in order to increase the capacity to meet demand for increased level of membership at Northchurch Tennis Club.	2017	£50-250k	Northchurch Tennis Club Lawn Tennis Association (LTA) Northchurch Parish Council	No funding secured	Northchurch Sports Association / LTA
	Dacorum's Playing Pitch Strategy (2015)	Langley Tennis Club, Hemel Hempstead:	2017	£50-250k	LTA	No funding secured	LTA

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Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	Strategy (2015)	Retain quality of courts (indoor and outdoor) and install floodlighting (subject to planning permission).					
	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: Maintain quality of courts for school and community use.	2020	£50-250k [§]	HCC LTA	No funding secured	Tring Secondary School / HCC
Bowls Greens	Dacorum's Playing Pitch Strategy (2015)	Little Gaddesden Playing Fields: Develop changing facilities and storage linked to above (<i>see football pitches and cricket pitches</i>) in line with increased membership.	2017	£250k+ [#]	Unknown	No funding secured	Little Gaddesden Parish Council
Baseball Parks	Dacorum's Playing Pitch Strategy (2015)	Grovehill Playing Fields, Hemel Hempstead: Improve quality of pitch to accommodate Herts Baseball Club's activity.	2017	£50-250k	Unknown	No funding secured	DBC
Rugby pitches	Dacorum's Playing Pitch Strategy (2015)	Hemel (Camelot) RFC, Hemel Hempstead: Development of a dedicated training area in order to reduce overplay and/or improvements to pitch drainage on existing pitches. Potentially through a land swap with the Boxmoor Trust.	2017	£250k+	RFU	No funding secured	Hemel (Camelot) RFC / Boxmoor Trust / RFU
	Dacorum's Playing Pitch Strategy (2015)	Astley Cooper School, Hemel Hempstead: Improve quality of pitch for school use and develop ancillary facilities	2017	£50-250k	HCC	No funding secured	Astley Cooper School / HCC

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Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		with improved access to encourage community use.					
	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: Improve quality of pitches to allow regular use by Tring RFC.	2020	£50-250k [§]	HCC RFU	No funding secured	Tring Secondary School / HCC
Netball	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: Maintain quality of courts and make improvements to enable Dacorum Netball Forum to use for league fixtures or Back to Netball activities.	2020	£50-250k [§]	HCC Dacorum Netball Forum England Netball Association	No funding secured	Tring Secondary School / HCC
Artificial Grass Pitches (AGP)	Dacorum's Playing Pitch Strategy (2015)	Tring Secondary School: With high demand from both football and hockey clubs, retain AGP as a sand-based surface and maintain quality of pitch. Ensure provision of funding for future refurbishments as the need arises.	2020	£50-250k [§]	HCC The FA England Hockey	No funding secured	Tring Secondary School / HCC

Little Gaddesden Playing Fields project cost of £250k+ is the total required incorporating football, cricket and bowls.

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CHAPTER 9: OTHER COMMUNITY FACILITIES

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Libraries Infrastructure							
		Re-provision of Hemel Hempstead town centre library as part of The Forum development. Hemel Hempstead.	2016/17	TBC	HCC/ developer contributions	Funds secured	DBC/HCC
Community Space							
	DSIS, BTC and BHIVE	Provision of a Community Hall in Berkhamsted	Unknown	£1.17m	Developer contributions and external funding	Funding not secured	BTC/DBC
		Community hall/space at Spencer's Park	Alongside development	£1.17m	Provision required as part of the development	Funding not secured	Developers/DBC
		Provision of a community space at land at West Hemel Hempstead (LA3)	Alongside development	£1.17m	Provision required as part of development	Funding not secured	Developers/DBC
Cemeteries							
		New cemetery site, 30 acres Hemel Hempstead	2016/17	£1.8m plus land	DBC – see note on Bunkers Park	Funding not secure – possible £460K secure via CSSG.	DBC
		Reserve a minimum of 4 acres of land for the extension of cemetery Tring	Alongside development	N/A	DBC/ developer contributions	N/A	DBC/Landowner
Adult Care Services							

Infrastructure Delivery Plan 2015

Appendix A – Other Community Facilities

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Services for Older People		18 additional places in residential care homes Borough wide	Up to 2030	At current rate	HCC	Funding to be confirmed as demography develops	HCC/ Care Home providers
		Additional care workers/support workers to support independent living Borough wide	Up to 2030	At current rate	HCC	Funding to be confirmed as demography develops	HCC/ Healthcare providers
		266 additional flexicare places Borough wide	Up to 2030	At current rate	HCC	Funding to be confirmed as demography develops	HCC
Services for people with learning disabilities		Additional care workers to enable supported living Borough wide	Up to 2030	At current rate	HCC	Funding to be confirmed as demography develops	HCC/ Healthcare providers
Services for people with physical disabilities		Additional care to provide residential and nursing care	Up to 2030	At current rate	HCC	Funding to be confirmed as demography develops	HCC/ Healthcare providers

CHAPTER 10: SEWERAGE AND WASTE WATER

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Sewerage and Waste Water Infrastructure							
		<p>Upgrades to Blackbirds or Maple Lodge WWTW to serve development at Hemel Hempstead and Kings Langley.</p> <p>With the information previously available, Thames Water modelling and analysis suggests that neither WWTW's will require significant growth upgrades in AMP6.</p> <p>Ongoing reviews will take place.</p> <p>Upgrades may indeed be necessary post-AMP6 (i.e. 2020-2025).</p>	Likely 2020 to 2025.	Unknown			
		<p>Improvements to capacity of sewerage network serving Tring.</p> <p>No upgrades currently in the AMP6 plan period.</p> <p>To be assessed on an ongoing basis based upon confidence of delivery of development, phasing, etc.</p>	To support new development		Thames Water revenue from customer bills & developer contributions (network only)	Thames Water Business Plan and developer contributions.	Thames Water
		<p>Improvements to Bovingdon pumping station.</p> <p>No upgrades currently in the AMP6 plan period.</p> <p>To be assessed on an ongoing basis based upon confidence of delivery of development, phasing, etc.</p>	To be confirmed	Unknown			

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Sewerage and Waste Water Infrastructure							
		<p>Increase capacity of Markyate WWTW via expansion of reed beds.</p> <p>The reed bed solution was not planned to increase available capacity but to improve site resilience and reduce the risk of non-compliance. This solution is no longer being delivered however an alternative solution of dosing and alternative tertiary treatment will shortly be installed.</p>	2015				
		<p>Borough wide – localised improvements/upgrades to sewerage infrastructure and network.</p> <p>Network upgrade plans will be prioritised as development comes forward. It is crucial for developers to engage early with Thames Water to ensure infrastructure can be aligned with new development.</p>	To support new development				

CHAPTER 11: ENERGY (ELECTRICITY AND GAS)

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Electricity Infrastructure							
		Upgrades to Hemel East primary substation: Installation of 1 x new 33kV circuit from Piccotts End Grid and installation of a new 12/24 transformer. Hemel Hempstead.	Unknown – Depending on load growth	£3.5m	UKPN and developers	Unknown	UKPN
		Upgrades to Warners End primary substation: Installation of 1 x new 2 transformer. Hemel Hempstead.	2018	£706k	UKPN and developers	Unknown	UKPN
		Alterations to Frogmore primary substation: Load transfers Warners End (once reinforced). Hemel Hempstead.	Following necessary reinforcements	£336K	UKPN and developers	Unknown	UKPN
		Upgrades to Berkhamsted primary substation: Installation of 2 x new 33kV circuits from Lye Green Grid and replacement of 11kV switchboard. Berkhamsted	2023	£4.9m	UKPN and developers	Unknown	UKPN
Gas Infrastructure							
		Local network reinforcement	As necessary to support development	n/a	National Grid/Southern Gas Network	Unknown	National Grid/Southern Gas Network

CHAPTER 12: POTABLE WATER

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Potable water infrastructure							
		Local network reinforcement	As necessary to support development	n/a	Veolia Water/ Thames Water	Unknown	Veolia Water/ Thames Water

CHAPTER 13: TELECOMMUNICATIONS

Category	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency(s)
Telecommunications							
Digital infrastructure (ICT, broadband)	External funding secured.	Connected Counties Programme – to roll out superfast broadband to 90% of homes and businesses in Hertfordshire and Buckinghamshire.	March 2016	£18,060,000	Department of Culture Media & Sport – Broadband Delivery UK (BDUK) Hertfordshire County Council Buckinghamshire County Council; Buckinghamshire Thames Valley LEP Hertfordshire LEP	Funding secured and Connected Counties Programme underway.	Hertfordshire County Council Hertfordshire Local Enterprise Partnership British Telecom (BT) Buckinghamshire County Council Buckinghamshire Thames Valley Local Enterprise Partnership Buckinghamshire Business First