



# **DACORUM INFRASTRUCTURE DELIVERY PLAN UPDATE**

**JUNE 2012**



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## Chapter 1: Introduction

- 1.1. This Infrastructure Delivery Plan (IDP) 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. It complements and updates the Dacorum Strategic Infrastructure Study (DSIS) (February 2011) which assessed the infrastructure required for two different levels of development.
- 1.2. The assessment has mainly been informed by discussions with infrastructure providers and their published plans and strategies; however, it is supplemented by the standards of provision established in the DSIS where necessary. It provides information about the amount and type of infrastructure required, and the location and timescales for provision. It also sets out the cost of provision (or an estimation of cost based on standard charges established in the DSIS), how it will be funded and who will be responsible for delivery.
- 1.3. The DSIS sets out information regarding providers' plans and programmes and also outlines established standards of provision for different types of infrastructure. This information is still largely valid and may be referred to in this IDP report and it is made clear where any information reported in the DSIS is no longer valid.
- 1.4. The Hertfordshire Infrastructure and Investments Strategy (HIIS) (November 2009) considered the strategic infrastructure required to accommodate the growth planned in the county in the East of England Plan. It concentrated on the growth areas and the Key Centres for Development and Change (KCDC), of which Hemel Hempstead was one. The HIIS found that the infrastructure costs for Dacorum were £354.2m, of which £228.9m was due to growth planned at the KCDC, and the vast majority was required for strategic infrastructure as opposed to local infrastructure<sup>1</sup>. Elements of the HIIS are currently being updated with the levels of growth now planned across the county by. The link between growth and infrastructure requirements will be updated. New information regarding the relationship between strategic and local infrastructure and the management of infrastructure planning and delivery will be considered. The refresh of the HIIS is likely to be published towards the end of 2012.

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<sup>1</sup> The HIIS considered strategic infrastructure to be that which provides for needs that cross a number of Districts – individual items may be local but the overall provision of the service considers needs on a strategic scale.

- 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.
- 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. It provides a key piece of evidence and will further provide a robust basis on which the Council will seek to influence public, private and agency funding and priorities.
- 1.7. The IDP represents infrastructure requirements at a point in time; the information within it will be updated on a regular basis to ensure it reflects an up to date position. It is intended that the Infrastructure Delivery Schedule will be updated annually alongside the Annual Monitoring Report (AMR) as set out in chapter 13.

### **Dacorum Strategic Infrastructure Study (DSIS)**

- 1.8. The DSIS was undertaken by consultants URS for Dacorum Borough Council during 2010, and was published in February 2011. A full description of the methodology used and assumptions made can be found in the DSIS Executive Summary report (available on the Council's website).
- 1.9. The DSIS considered two different levels of residential development because Dacorum were left in a position of uncertainty after the housing target was quashed following the successful High Court challenge to the East of England Plan. The lower level of development was the amount considered to be achievable within the urban areas in the borough. The higher level of development built upon this with four green belt sites on the edge of Hemel Hempstead and was approximately equal to the target in the East of England Plan. Hertfordshire County Council (HCC) provided population projections for both of the housing development scenarios which were used to inform the infrastructure assessments in the DSIS.
- 1.10. The DSIS considered a single level of development for offices, industry and warehousing based on the housing target in the East of England Plan. Two development scenarios were considered for retail and leisure development to reflect the two levels of housing development.
- 1.11. Much of the information within the DSIS is still valid, and it is not the intention of the IDP to supersede the DSIS, rather to add to and update its conclusions. The details of how providers plan for the future, the standards used for provision and cost, and many of its conclusions still remain and have been used to inform the IDP.

## Infrastructure Delivery Plan (IDP)

### Methodology and assumptions

- 1.12. The methodology and assumptions used in the IDP have been largely driven by the level of growth planned in the Core Strategy, and the assumptions used in the evidence base which informed the Core Strategy.
- 1.13. There have been some key changes to circumstances since the work on the DSIS was undertaken. These apply both to the Council and to many of the infrastructure providers and have arisen largely as a result of changes introduced by the Coalition Government.
- 1.14. With the government's localism agenda, the Council was able to develop its own housing programme and target. The housing target is the level of housing which the Council expects to achieve and exceed. It is expressed as an average of 430 dwellings per year in Core Strategy policy CS17, which equates to 10,750 dwellings over the plan period. The housing programme is the Council's prospective distribution of housing which is guided by the settlement hierarchy and provides a useful indication of where housing will occur. It is important to note that the housing programme is at a point in time and is updated annually in the AMR.
- 1.15. The level of housing within the programme is higher than the housing target as there are slight differences in the elements of housing supply included in each as shown in table 1.1. Further information about table 1.1 can be found in the Core Strategy, chapter 14.

**Table 1.1: The make-up of the housing target and the housing supply (2006-2031)**

Element of Supply	Included in the housing target	Included in the housing programme
Completions	✓	✓
Commitments		
(a) Defined urban sites	✓	✓
(b) Defined locations in Hemel Hempstead	✓	✓
(c) Rural housing sites	✓	✓
(d) Gypsy and traveller pitches	✓	
(e) Windfall		
(i) For 10 years (from Core Strategy adoption)		✓
(ii) After the first 10 years	✓	✓
Local Allocations	✓	✓

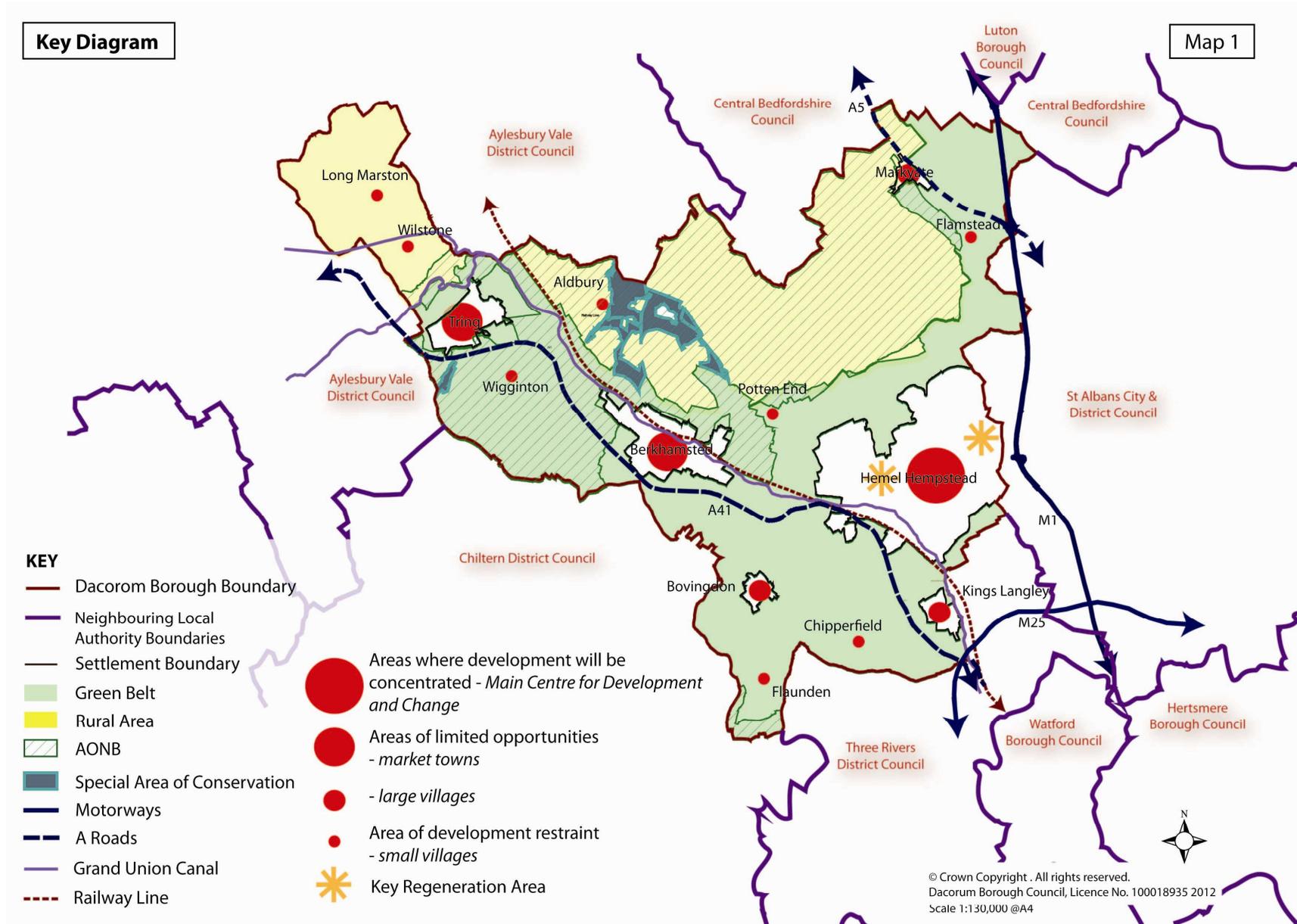
1.16. The IDP uses the housing programme rather than the housing target as it is more useful for infrastructure planning. The housing programme estimates 11,320 dwellings over the period 2006-2031, which is in between the two scenarios considered in the DSIS. The changes between the scenarios considered in the DSIS and the housing programme are shown in table 1.2.

**Table 1.2: Changes in the level of residential development planned in Dacorum (dwellings)**

	Hemel Hempstead	Berkhamsted	Tring	Bovingdon	Kings Langley	Markyate	Rest of Dacorum	Total
<b>DSIS 2009 – 2031</b>								
High	14,021	797	305	83	83	124	329	<b>15,742</b>
Low	7,221							<b>8,942</b>
<b>IDP 2006 – 2031 (based on housing programme)</b>								
2006 – 2031	8,800	1,180	480	130	110	200	420	<b>11,320</b>
Completed 2006 – 2010	875	382	61	19	22	21	59	<b>1,439</b>
2011 – 2031	7,925	798	419	111	88	179	361	<b>9,881</b>

1.17. The pattern of development planned in Dacorum is shown on Figure 1.1: the Key diagram overleaf, which is also shown in the Core Strategy.

Figure 1.1: Key Diagram



1.18. The levels of commercial development planned have also changed according to the new housing target.<sup>2</sup> Whilst the DSIS made assumptions about the distribution of offices, industry and warehousing floorspace, this has not been done for the IDP as the Employment Land Study (2011) suggests that this is not appropriate. 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. The IDP does not consider a particular level of leisure development, as this is not set out in the Core Strategy. Furthermore, during the course of the DSIS it became apparent that the level of leisure development did not have a significant impact on infrastructure demand as it is too variable to model properly. The differences in the levels of non-residential development considered in the DSIS and the IDP are shown in table 1.3 below.

**Table 1.3: Changes in the level of non-residential development planned in Dacorum (sqm)**

	Hemel Hempstead	Berkhamsted	Tring	Rest of Dacorum	Total
<b>DSIS 2009 – 2031</b>					
Offices	164,574	9,143	9,143	n/a	182,860
Industry	- 49,579	- 2,754	- 2,754	n/a	<b>-55,088</b>
Warehousing	69,557	3,864	3,864	n/a	<b>77,286</b>
Retail high	61,418	5,004	2,339	n/a	<b>68,761</b>
Retail Low	48,158	5,004	2,339	n/a	<b>55,501</b>
Leisure high	23,017	1,279	1,279	n/a	<b>25,574</b>
Leisure low	12,889	1,279	1,279	n/a	<b>15,447</b>
<b>IDP 2006 – 2031</b>					
Offices				n/a	<b>131,000</b>
Industry				n/a	<b>0</b>
Warehousing				n/a	<b>0</b>
Retail	53,500	7,000	3,250	n/a	<b>63,750</b>

1.19. The DSIS used population projections to model and inform infrastructure requirements, however, this approach has not been taken for this IDP update as the Council does not currently have an agreed population model. This is explained further in the Council's note 'Population Projections and the Core Strategy'<sup>3</sup>. Instead 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. Where providers were not happy with this arrangement, the Council suggested that the ONS

<sup>2</sup>See the Dacorum Borough Council Employment Land Update 2011 (July 2011), Roger Tym & Partners and the Retail Study Update, Dacorum Borough Council (October 2011), GL Hearn.

<sup>3</sup> Available at <http://www.dacorum.gov.uk/pdf/Population%20Update%20Paper%20-%20September%202011.pdf>

population projections were used at a proportion equal to the proportion of dwellings in the CLG household projections planned.<sup>4</sup>

- 1.20. 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.
- 1.21. Meetings were held with most infrastructure providers during December 2011 – February 2012 to discuss their requirements over the plan period. The meetings also covered their forward planning procedures, the costs of provision and their funding sources and mechanisms. The meeting notes, which were agreed by the providers, have been used to inform this IDP.
- 1.22. Two of the providers told the Council that nothing had changed for them since the DSIS was undertaken and that therefore there was no need to meet. The providers were Southern Gas Networks (SGN) and Velolia Water and further details are provided in chapters 11 and 12 respectively.

### **Limitations of the Study**

- 1.23. 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. There is more certainty about the infrastructure planned in the short to medium term, than that planned in the longer term.
- 1.24. Some providers were difficult to contact and subsequently meetings could not be arranged. Where this was the case further emails were sent to the provider (after the initial email). This was the case for the East of England Ambulance Service and the Fire and Rescue Service.
- 1.25. Because of the uncertainties involved in infrastructure planning and continuing changes to circumstances of providers, and the economy more generally, it is important that the Council maintain links with providers. This will be done formally through email correspondence and meetings, and informally through the Hertfordshire CIL reference group, that a number of the providers attend on a regular basis.

### **Funding of Infrastructure**

- 1.26. 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

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<sup>4</sup> Advice note prepared for providers – can be provided upon request.

provision, Section 106 (S106) payments or the Community Infrastructure Levy (CIL), which are all delivered via the planning process.

- 1.27. Other potential sources of funding include that of the infrastructure providers themselves, which are set out in the relevant chapters, government grants and grants from other organisations such as the Big Lottery Fund. The grants are difficult to predict and therefore cannot be taken into account in the infrastructure planning process, however, they do provide a significant funding mechanism.
- 1.28. Responsibility for co-ordinating funding and delivery of infrastructure is set out in the Infrastructure Delivery Schedule.

## Chapter 2: Transport

### The DSIS Transport Report

- 2.1 The DSIS contains a report regarding the transport network and the impact upon it from the two development scenarios assessed. The report contains a baseline assessment of transport conditions in Dacorum which is still valid and is used for this IDP. The report also identifies a number of interventions which are planned by either Dacorum Borough Council or the main transport agencies<sup>5</sup>; most of these interventions are still valid, although this IDP report provides an update.
- 2.2 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 manage 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 good enough proxy.
- 2.3 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.
- 2.4 Since the DSIS report was written, Planning Policy Guidance Note 13 has been replaced by the National Planning Policy Framework (NPPF). The NPPF emphasises the importance of sustainable modes of transport and the use of technology in the creation of sustainable development. It expects local authorities and transport providers to develop strategies for the provision of infrastructure to support sustainable development. It also expects all development that generate significant amounts of movement to be supported by a Travel Plan.

### The transport baseline

- 2.5 The full assessment of the transport network baseline can be found in the DSIS Transport Report. In general, the transport network functions well, but some issues were identified; these are summarised below.
- 2.6 The road network is currently under stress at key locations such as the A41, A414 and A4146 within Hemel Hempstead, the A41 south of Berkhamsted, and the A5 west of Markyate. There is also stress on the Strategic Road Network, particularly the M25. The growth in patronage means that the rail

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<sup>5</sup> the Highways Agency, Hertfordshire Highways, Hertfordshire County Council and Network Rail

network is at capacity and no significant improvements are planned in the foreseeable future. Consultation with the rail industry suggests that it is unlikely that the proposed High Speed 2 rail system will alleviate this as it will not reduce the number of passengers on regional trains throughout stations in Dacorum.

- 2.7 The bus network is generally well developed in Hemel Hempstead and adequate in other locations with the exception of Markyate where it is considered unreliable and poorly integrated with larger local towns. A particular issue identified with bus services is that there are inadequate links between Hemel Hempstead rail station, Maylands and Hemel Hempstead town centre. The walking and cycling network broadly caters for current demand but there are localised issues, in part caused by an unattractive environment due to by congestion. Routes to stations are inadequate.

### **Published strategies**

- 2.8 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.
- 2.9 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 does not assume a particular level of growth because at the time of writing the full county-wide picture was not known. LTP3 aims to address existing transport issues and the extra demand upon the network arising from planned development by making better use of the existing road network. Two key elements of the plan are increased use of 'intelligent transport systems', which includes optimising traffic signals and providing real time information, and promotion of sustainable travel to reduce growth in car traffic.
- 2.10 LTP3 states that major new road schemes will normally only be built through external funding where new development generates significant new traffic flows. There is strong support for new development to be located and designed so that maximum use can be made of sustainable modes, including bus travel, to access services. It is also proposed that residents of new developments should be fully informed of sustainable transport options using new technologies. The Plan states that developers will be expected to help fund the provision of facilities and services for sustainable travel and contribute to the long term maintenance of special highway features.
- 2.11 Because of the approach described above, it is difficult to be clear about which schemes are required purely because of new development as opposed to existing problems with the transport network. However, it is clear, that the measures proposed are required to support housing and

employment growth, and these will be complemented by measures required to mitigate the impact of specific development sites. The county highways authority's aim to achieve a modal shift will free-up capacity of the network and thus help mitigate the impact of new development; therefore the measures targeting the modal shift, including technological measures, are necessary to support growth.

- 2.12 LTP3 identifies specific schemes which the County Council and partners aim to deliver over the period 2011/12 – 2012/13 in the Two Year Programme. It also gives an indication of the major schemes and programmes that may be delivered over the period 2011 – 2031. The schemes in the Two Year Programme in Dacorum are included in the Infrastructure Delivery Schedule in Appendix A. None of the schemes identified in the major category are in Dacorum. A number of 'other significant named projects' are identified, none of which are specific to Dacorum. There are however two county-wide projects: Intelligent Transport Systems (ITS); and Quality Network Partnerships (QNP). The Hemel Hempstead North East Relief Road is identified as a further proposal, for which a timescale has not been set.
- 2.13 LTP3 points to urban transport plans for the identification of the majority of schemes. 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. It only covers the urban area of Hemel Hempstead, and considers current issues with the transport network, the impact of planned development and measures that will influence travel patterns. Schemes identified in the HHUTP are included in the Infrastructure Delivery Schedule in Appendix A.
- 2.14 The HHUTP recognises that there is a need for transport modelling to assess the impact of planned development in the town. This modelling was subsequently undertaken and is discussed in paragraphs 2.18 to 2.21 below.
- 2.15 LTP3 has a number of 'daughter documents' which contribute to meeting LTP3's goals and challenges. The daughter documents published so far are the HHUTP, the Walking Strategy (2011), the Rail Strategy (2011), the Rights of Way Improvement Plan 2011/12 – 2015/16 (2011), the Road Safety Strategy (2011), the Bus Strategy (2011), the Intalink Strategy (2011) and the Intelligent Transport Systems Strategy (2011). The daughter documents contain measures which are critical to achieving the aims of LTP3; in particular the aim of reducing car use. The measures listed are extensive, and many do not have timescales or costs associated with them; however they are an important consideration for future infrastructure planning. Further daughter documents expected include UTPs for Berkhamsted and Tring, a Cycling Strategy, a Sustainable Modes of Travel Strategy, a Speed Management Strategy, a Rural Strategy, a Transport

Asset Management Plan and an Inter Urban Route Strategy. Work on the latter is currently underway.

- 2.16 Dacorum Borough Council has an adopted Cycling Strategy (2009) which aims to improve cycling infrastructure in the borough and increase cycling rates. It contains policies and measures to achieve these aims, which are an important consideration for future infrastructure planning. The measures are not listed here because they do not have indicative timescales or costs associated with them; those considered as a priority by Hertfordshire County Council will be picked up by urban transport plans.
- 2.17 Urban transport plans for Berkhamsted and Tring are currently being developed and are expected to be published in 2012/13. These plans will include a number of measures required to make better use of the existing transport networks in and between Berkhamsted and Tring, which are required to support growth.

### **Transport Models and Assessment Framework from DSIS**

- 2.18 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 and one for the Highways Agency.

#### *Hemel Hempstead Urban Transport Model*

- 2.19 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. Although it was commissioned to test the level of development planned by the East of England Plan, it is still relevant as it tests development within the town and greenfield growth options separately. The level of development tested within the town was very similar to the level proposed in the Core Strategy. The Local Allocations at Hemel Hempstead were tested in the Western Hemel Spatial option.<sup>6</sup>
- 2.20 The studies assumed that within Hemel Hempstead 5,272 dwellings would be built by 2021, and a further 1,960 by 2031. With regard to the Local Allocations, it was assumed that development at Marchmont Farm will be built by 2021, and that development at West Hemel Hempstead will be phased so that half is built by 2021 and the rest by 2031. In reality the timescales for development are likely to be later than this due to alternative sources of housing land supply. The level of employment development

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<sup>6</sup> The reports referred to are the Hemel Hempstead Urban Transport Model Future Year Issues (June 2009) and the Hemel Hempstead Urban Transport Model LDF Option: Western Hemel (August 2010). Both of which are available on DBC's website.

assumed was higher than is planned in the Core Strategy; it was assumed that 220,265 sqm of B1 development and 15,815 sqm of B8 development would be built by 2031. The Core Strategy assumes that approximately 131,000 sqm will be built between 2006 and 2031, and that there will be no net loss of B2/B8 floorspace over the period.

2.21 The broad conclusion of the study testing the impacts of development within Hemel Hempstead urban area was that the additional traffic demand can be accommodated on the road network with a number of infrastructure upgrades. The main threats identified to the operation of the road network are:

- Lack of capacity on the St Albans Road/Breakspear Way corridor;
- Lack of capacity on the A4147/Redbourn Road corridor;
- Significant congestion at junctions on the St Albans Road/Breakspear Way corridor to the M1;
- Significant congestion at the Redbourn Road/St Agnells junction;
- Congestion along the London Road corridor;
- Congestion at the Plough roundabout

The minimum upgrades required are:

- North East Relief Road;
- Improvements to A414/Maylands Avenue roundabout;
- Improvements to A414/Green Lane roundabout;
- Improvements to Redbourn Road/St Agnells Lane roundabout;
- Improvements to Shenley Road West/Redbourn Road junction;
- Modifications to Holtsmere End/Redbourn Road junction;
- Improvements to St Johns Road/Station Road junction;
- Optimisation of traffic signals across network to future year traffic levels.

2.22 The broad conclusions of the study into the impact of development at the Local Allocations at Hemel Hempstead were that the traffic impacts on the wider road network would be minimal in 2021, although there may be localised queuing in the area around the Buxtred Road/Warner's End Road junction. By 2031, the development would have more of an impact on the wider road network, causing lower network speeds, with associated higher journey times and delays. The model identified that there may also be significant issues by 2031 as the junctions at Queensway/Warner's End Road/Leighton Buzzard Road and at Leighton Buzzard Road/Coombe Street might not have sufficient capacity. This was largely due to the scale of development at the West Hemel Hempstead site, but the problems can be resolved via minor junction redesigns and possibly signalisation.

### *The DIAMOND model – Strategic Road Network*

- 2.23 The Highways Agency have undertaken modelling to assess the impact of housing and employment development across 6 Hertfordshire authorities (Dacorum, Hertsmere, St Albans, Three Rivers, Watford and Welwyn Hatfield) on the Strategic Road Network (SRN). The model assumes the level of growth planned in the Core Strategy (for Dacorum) and runs two scenarios; one with all the planned development built by 2031 and the other with no development built by 2031. This approach allows the cumulative impact of development in southwest Hertfordshire to be assessed against a reference baseline.
- 2.24 The SRN routes within southwest Hertfordshire and contained within the modelling are the M1, M25, A1, A1(M) and the A5. It is considered that the A5 will be de-trunked by 2031 following the completion of the A5-M1 Dunstable Northern Bypass. The traffic impacts are forecast to be more concentrated upon the non-strategic road network, as traffic will have dispersed by the time it gets to the SRN. Within the non-strategic road network the routes that are forecast to experience the highest increase in flows by 2031 (with development) include the A414 (St Albans Road and Two Waters Road) and the A4146 (Leighton Buzzard Road). The sections of the SRN which are forecast to experience increases in stress include the M1 between J9 and 10 and between 6A and 7 in the AM peak and the M1 between J7 and 8 in the PM peak. Further work in respect of junction analysis has found the M25 Junction 20 (A41) has a history of congestion. In the future (2031) during the AM peak the junction will continue to create significant queues on the A41 approach to the junction (southbound). In the PM peak the queues will continue to occur on the anticlockwise off slip causing an obstruction on the M25. Increases in capacity will be necessary to facilitate further development in Hemel Hempstead (one of the major growth areas in Hertfordshire).
- 2.25 The impact on the road network is assessed according to average speed achieved and the number of Passenger Car Units (PCUs) kilometres and hours during peak hours. In Dacorum the average speed achieved is expected to decrease by 1-2 KM/hr in the peak hours as a result of development by 2031. The number of PCU kilometres and hours is expected to rise by 11-16% during the peak hours as a result of development by 2031.

### *Assessment undertaken for DSIS*

- 2.26 The outcome of the assessment undertaken for the DSIS is described in full in the DSIS Transport Report. The key impacts forecast to arise from the high growth scenario assessed in the DSIS are set out below:

- An additional 4,700 cycling and walking trips at peak times in Hemel Hempstead will put pressure on crossing facilities in the town centre and at Maylands.
- There will be a significant impact on bus services between Berkhamsted and Tring. Bus trips within Hemel Hempstead are predicted to rise by 1,300, with a significant proportion of these being for orbital and cross-town journeys. This will give rise to the need for a bus interchange in Hemel Hempstead town centre, better bus services to Maylands and to the train stations in the town.
- Up to an additional 1,400 rail trips will result from the high growth scenario – mainly at Hemel Hempstead and Apsley stations. This increased pressure on the rail line is likely to lead to over crowding as well as increased pressure on the road, bus and pedestrian networks. Improved facilities for walkers and cyclists at stations will be required.
- There is likely to be minimal impact on the road networks of Tring, Bovington, Kings Langley, Markyate and the rural parts of the borough. An additional 36 vehicles a minute are estimated at peak times in Berkhamsted, which will impact junctions near the station and along the High Street. The impact on the road network in Hemel Hempstead is likely to be significant under both scenarios. The main impact within the town will be on the ‘central box’ (A414/A4147/ A4146), which opens up opportunities to encourage modal shift. Significant impacts are also forecast on routes to and from Maylands, the town centre and the train stations. The impact forecast from development at West Hemel Hempstead and Marchmont Farm (which formed part of the additional development for the high growth scenario) is mainly on orbital and cross-town routes as well as roads around the Local Allocations. The impact on the strategic road network (SRN) is forecast to be minimal, although there will be an impact on local roads leading to the SRN such as the A414.

2.27 The key impacts forecast in the DSIS are shown in figure 2.1



town centre to successfully achieve the development planned in the Core Strategy are:

- relocation of the bus station to the Marlowes and Bridge Street;
  - relocation of the taxi ranking to Waterhouse Street;
  - implementation of a one-way system in the Old Town;
  - access improvements for cyclists and pedestrians between Hemel Hempstead station and the town;
  - improved cyclist and pedestrian links along the River Gade through the town centre; and
  - improvements to signage for pedestrians, cyclists and motorists throughout the town centre and between the town centre and key locations.
- 2.30 A Masterplan already exists for development of the Maylands Business Park, which includes a movement strategy, and aims to establish Maylands as a 'well connected green business park'. The short – medium term elements of the movement strategy are being taken forward via the HHUTP, the Maylands Area Travel Plan 2011 – 2016 (2011) and the Maylands 5 Year Improvement Plan.
- 2.31 The travel plan provides a programme of initiatives that will encourage those travelling to and from the Maylands Business Park to use more sustainable methods of travel. The 5 Year Improvement Plan is due to be adopted in 2012 and will set out a series physical improvements to the urban realm, which will improve the environment making walking and cycling a more attractive means of transport.
- 2.32 Significant residential development (approx. 900 dwellings) is planned at Spencers Park, east Hemel Hempstead, and this is expected to make contributions towards transport infrastructure required to mitigate its impact, including towards the North East Hemel Hempstead Relief Road. The Hertfordshire Local Economic Partnership (LEP) has been allocated £10.7m from the Growing Places Fund (GPF) for infrastructure required to unlock key development sites. The LEP awarded portions of the money following an evaluation of bids including one by DBC to unlock development sites at Maylands Business Park. DBC have initially been awarded £1.5m and a further £2m subject to further conditions being met by November 2012. The infrastructure schemes due to be delivered via GPF funding are included in the Infrastructure Delivery Schedule (appendix A).
- 2.33 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.

## **Discussion with highways authorities**

- 2.34 A meeting was held between officers from Dacorum Borough Council (DBC), Herts County Council (HCC) and Hertfordshire Highways (HH) on 16<sup>th</sup> January 2012 to discuss this IDP and to start initial discussions regarding the Community Infrastructure Levy (CIL). Full notes of the meeting can be made available on request; the key points of discussion are outlined below.
- 2.35 HCC's role primarily relates to the impact of individual development schemes, while HH are responsible for developing the overarching highways policies, prioritising investments and implementing projects. It was agreed that the role of the IDP is to identify the infrastructure required to support the development planned through the Core Strategy, and to set out how it will be funded and delivered. It is important to ensure consistency between the IDP and the transport policy documents such as UTPs and LTP3. The information in the IDP will naturally be more accurate for schemes to be delivered in the near future, and it is important that it is updated regularly with input from officers from HCC and HH.
- 2.36 The overall impact of the development planned through the Core Strategy is picked up through the LTP3 daughter documents discussed in paragraph 2.14. Some specific impacts were discussed and officers from HCC and HH confirmed the following:
- The impact of the level of development planned at Tring can be accommodated on the existing road network.
  - Regarding the Strategic Site and Local Allocation planned at Berkhamsted, HH have undertaken preliminary design work for 3 options for the Kingshill Way/ Shootersway junction. They are currently developing the design for a new footpath link at Kings Hill Road, which is needed to support the development at the Egerton Rothesay site.
  - Further discussion is needed with the landowners regarding access for the Local Allocation planned at West Hemel Hempstead. For the Local Allocation planned at Marchmont Farm there will be an access to the Link Road, but there is currently uncertainty over whether the access to Grovehill should be vehicular or pedestrian. For the Local Allocation at Hemel Old Town, access will be on to Fletcher Way.
  - The two main road schemes under consideration for East Hemel Hempstead are an additional access road from the A414 to Maylands Avenue and completion of the North East Relief Road. The North East Relief Road is a proposal from the Dacorum Local Plan and was modelled in the Hemel Hempstead Urban Transport Model. HCC will revisit the need for the additional access road on to Maylands Avenue.

- 2.37 The main sources of funding for the provision of new transport infrastructure by the county highways authority are the 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). HH have submitted a bid for various schemes to the LSTF, much of which is for match funding for schemes where some developer contributions have been attained.
- 2.38 The provision of new transport infrastructure by the county highways authority is heavily reliant on developer contributions, and the best approach in the future is likely to be a mixture of funding from CIL and S106, along with other sources outlined in paragraph 2.36. It will be important for officers from DBC, HCC and HH to identify which schemes would be suitable for receiving CIL monies, and which would be more suited to S106 contributions.
- 2.39 A meeting was held between officers from DBC and the Highways Agency (HA) on 30<sup>th</sup> November 2011. The aforementioned DIAMOND modelling was discussed and it was confirmed by the HA that there will be no new (strategic) road building in Hertfordshire in the foreseeable future. The HA confirmed that the Hicks Road development will lead to the requirement for signalisation of the A5. They also confirmed that a northern Dunstable bypass is expected, connecting the M1 and A5 (M1 – A5 Link Road), in which case the A5 will be de-trunked. De-trunking of the A5 in Hertfordshire has been agreed with Hertfordshire County Council.



## **Chapter 3: Education**

### **The DSIS Report**

- 3.1 The DSIS Social Infrastructure report contains a section on the provision of education and the impact of the two development scenarios assessed. The report considers early years, primary, secondary and further education (which includes sixth forms). It sets out the policy context and an assessment of existing provision for each, and this is followed by committed future provision and an assessment of future demand. The costs of provision associated with committed future provision and future demand are provided as an estimate. The scope of this report is slightly wider than the DSIS report as it considers early years, primary and secondary education (including Key Stage 3 and Key Stage 4 Education Support Centres), and sixth form and special needs education. It also considers Further Education.
- 3.2 Officers from Herts County Council (HCC) fed into the DSIS report and their forecasts were used where possible, although assumptions and standards were used to forecast the needs for early years and Further Education. The information in DSIS report is not repeated here, but is updated where circumstances have changed. This report takes a different approach to the DSIS in that it discusses the existing provision and future requirements for the different types of education provision individually and then discusses how they might be funded together to avoid repetition.
- 3.3 The information in this chapter is based on information in published strategies, other documents and discussions with providers. A meeting was held between officers from DBC and HCC on 09/02/12 where early years, primary, secondary and elements of further education were discussed. A meeting was held between officers from DBC and West Herts College (WHC) on 13/02/12 to discuss college further education requirements.
- 3.4 As in the DSIS 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.

### **Changes to school provision**

- 3.5 Officers from HCC confirmed that there are a number of uncertainties for the education system at present that make planning future provision difficult. Whilst HCC still have a statutory requirement to ensure provision of school places to meet demand, the way new schools are provided will change. Where the need for a new school is identified, HCC must undertake a

competitive process with the opportunity for the school to be a free school or academy first before they can provide a community school.

### **Primary Education**

3.6 Primary education is the first stage of compulsory education and is typically from the ages of 4 (reception) to 11 (year 6), although provision is different in the three tier system currently operated in Berkhamsted. Subject to the above the information regarding policy context and existing provision of primary schools in the DSIS report is still correct. The information regarding the adequacy of existing infrastructure is refreshed annually in the Meeting the Rising Demand document where Childrens' Services forecast the demand for school places. The most recent version of Meeting the Rising Demand can be viewed at the following link:

<http://www.hertsdirect.org/mm/15520666/15744560/cabinetitem4app120111219.doc>

3.7 The attached report to HCC Education and Skills Cabinet Panel on 10<sup>th</sup> May is also relevant and demonstrates the changing landscape in relation to the provision of school places:

<http://www.hertsdirect.org/mm/15529307/15744647/item3edskills100512.doc>

3.8 The Core Strategy identifies two education zones at Berkhamsted and HCC are currently considering options for progressing development of the northern zone in the short term. This does not necessarily equate to a new school immediately; it may allow for expansion of Bridgewater middle school and the provision of a new primary school in the future. Development of this zone should relieve the existing capacity problems identified in primary education in Berkhamsted.

3.9 In Hemel Hempstead the forecast shortage of 2 f.e. in 2012/13 identified in the most recent 'Meeting the Rising Demand' (2011) is concentrated in the eastern side of the town. The document identifies that the shortage will be met by permanent expansion of Tudor and Hammond primary schools by 1 f.e. each. Tudor school has subsequently been expanded by 1 f.e. and planning permission exists for the 1 f.e. expansion of Hammond primary school.

#### *Future Requirements*

3.10 The requirements for additional primary 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 entitled 'Infrastructure Provision in Hertfordshire – Dacorum Borough Council' provided to DBC by HCC and discussions between officers

at the meeting on 9<sup>th</sup> February 2012. 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.

- 3.11 Table 3.3 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 using information in the 'Infrastructure Provision in Hertfordshire' document, which is repeated in tables 3.1 and 3.2.

**Table 3.1: Cost of providing new primary schools**

Number of f.e.	Pupils	Cost £million	Area (sqm)
1 f.e.	210	£4.89	1,434
2 f.e.	420	£7.64	2,278
3 f.e.	630	£10.8	3,270

*Source: Infrastructure Provision in Hertfordshire – Dacorum Borough Council (HCC)*

*NB. Costs are average Hertfordshire build costs as of January 2011 and are subject to revision and review.*

**Table 3.2: Cost of extending primary schools**

Size extension	Pupils	Cost £million	Area (sqm)
0.5 f.e.	105	£2.82	828
1 f.e.	210	£4.16	1,219

*Source: Infrastructure Provision in Hertfordshire – Dacorum Borough Council (HCC)*

*NB. Costs are average Hertfordshire build costs as of January 2011 and are subject to revision and review.*

**Table 3.3: 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 provision of primary
Hemel Hempstead North East	10.4 – 17.6. f.e.	2 f.e.	Re-opening of Barncroft (1 f.e.) and either its expansion to 2 f.e. or expansion of Brockwood (+1 f.e.) <sup>7</sup>	£8.32m (based on expansion of 2 f.e. estimate)
Hemel Hempstead East to serve development in Hemel Hempstead and St Albans.		2 f.e.	New 2 f.e. school (may be in DBC or SADC administrative area)	£7.64m plus land
Hemel Hempstead South East		2 f.e.	New 2 f.e. school	£7.64m plus land
Hemel Hempstead West and North West		2 f.e.	New 2 f.e. school as part of LA3	£7.64m plus land
Hemel Hempstead Town Centre		2 f.e.	New 2 f.e. school	£7.64m plus land
Hemel Hempstead Reserve Sites		4 f.e.	Sites for 2 new schools	Subject to review
Berkhamsted	1.4 – 2.4 f.e.	4 f.e.	Two new 2 f.e. schools	£15.28m plus land if required

<sup>7</sup> Currently HCC anticipate that the Dacorum Educational Support Centre may be relocated to Barncroft school from the present location on the West Herts College site as a short term measure. It is anticipated that Barnfield school may be bought back into main stream education use post 2016 (with potential expansion to 2fe)

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 provision of primary
Tring	0.6 - 0.9 f.e.	N//A	Through existing latent capacity	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 – there may be costs associated with refurbishment and/or expansion if required
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
<b>Total</b>	<b>13.4 – 22.6 f.e.</b>	<b>14 f.e. (+4 f.e. in reserve)</b>	<b>5 new 2 f.e. schools Re-opening of 1 school Expansion of 2-3 schools</b>	<b>£54.16m plus land</b>

### *School and site requirements*

3.12 HCC policy is to provide 2 f.e. primary schools, plus nursery, where possible, however, there are variations in provision – for example in rural areas where smaller schools are appropriate, or in areas where there is a three tier system. 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.

3.13 The preferred standards for the primary school sites are:

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

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

### **Early years Education**

3.15 Early years education is full or part-time education from the start of the term following a child’s third birthday up to compulsory school age. All children in this age group are entitled to 15 hours a week of free early years education although there is no obligation for parents to enrol their children.

3.16 The Education Bill 2011 introduced a new statutory requirement for the provision of early years education for the most disadvantaged two-year olds from September 2013. HCC are currently working to assess the likely impacts of this change in legislation and expect that it will be felt by both maintained and PVI (Private, Voluntary and Independent) providers. Otherwise the information in the DSIS regarding policy context and existing provision is still correct.

3.17 Since the DSIS report was written, DBC have received information from HCC about the adequacy of existing provision in the document ‘Infrastructure Provision in Hertfordshire – Dacorum Borough Council’. Dacorum is divided into 10 Children Centre Areas which are categorised according to their capacity sufficiency, which is based on the difference between the number of 3 and 4 year olds in the are and the number of early years places. This information is shown in table 3.4.

**Table 3.4: Sufficiency levels of Children Centre Areas**

Children's Centre Area	Current Capacity	Sufficiency level
Tring	+62	Very sufficient
Berkhamsted North	-14	Near to sufficient
Berkhamsted South	-25	Near to sufficient
Warners End and Chaulden	-174	Severely insufficient
Hemel Hempstead Central	-22	Near to sufficient
Grovehill and Woodhall	-91	Severely insufficient
Adeyfield, Highfield and St Paul's	+72	Very sufficient
Bennetts End and Leverstock Green	+29	Very sufficient
Bovingdon and Chipperfield	+231	Very sufficient
Kings Langley, Bedmond and Nash Mills	-79	Severely insufficient

*Source: Infrastructure Provision in Hertfordshire – Dacorum Borough Council*

#### *Future provision*

- 3.18 Provision of early years education is more flexible than that of primary or secondary education as it may be provided in schools, day nurseries or in nursery classes attached to primary schools. Furthermore, it is provided by the private and voluntary sectors as well as by the local education authority (HCC). It is difficult to forecast future requirements, partly because there is a short period of forewarning and partly because parents can choose whether to enrol their children or not. A number of factors influence whether parents choose to enrol their children, for example, the downturn in the economy led to an increase in the proportion of parents enrolling children in settings other than independent schools.
- 3.19 HCC have not provided forecasts for future requirements of early years provision, but they do anticipate that demand will rise in part due to the increase in provision from 12.5 hours to 15 hours per week per child<sup>8</sup> and in part due to the new requirement to ensure provision for disadvantaged two-year olds. The DSIS considered the requirement for primary school provision to be a good proxy for the requirement for the provision of early years places. Whilst, the difference in attendance time at school and nursery means that there may be differences in the quantities required, there are spatial synergies between requirements. HCC propose to meet the potential requirements for early years education through the provision of children's centres and pre-schools alongside new schools.
- 3.20 The costs of providing early years education varies considerably depending on how it is provided. For example, there are very different costs associated

<sup>8</sup> This change was introduced in 2010.

with decorating a previously unused room, building an extension and building a new facility.

## **Secondary Education**

3.21 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 6<sup>th</sup> form for pupils in years 12 and 13, however this is not compulsory and is considered under further education. Subject to paragraph 3.5 the information regarding policy context, existing and committed provision of secondary schools in the DSIS report is still correct.

### *Future Requirements*

3.22 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 at the meeting on 9<sup>th</sup> February 2012. In short, HCC consider that the secondary school aged child yield from new developments in Dacorum will be approximately 1 f.e. per 850 dwellings.

3.23 Table 3.5 shows the requirements for additional secondary school provision arising from the growth planned in the Core Strategy and how they will be met.

**Table 3.5: Requirements for additional Secondary School Provision to 2031**

<b>Area</b>	<b>Estimated Pupil Yield arising from housing planned in the Core Strategy</b>	<b>How it will be met</b>
Hemel Hempstead	10.4 f.e	Through capacity within existing secondary schools. However, contributions may be required to expand existing schools if necessary.
Berkhamsted	1.4 f.e.	
Tring	0.6 f.e.	Through capacity within existing secondary schools. However, Tring secondary school may require extending – if so detached playing fields will be required and contributions will be sought accordingly.
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 many pupils from Markyate travel to Harpenden secondary schools, contributions may be required to extend schools there.
Countryside	0.5 f.e.	Through capacity within existing secondary schools. However, contributions may be required to expand existing schools if necessary.
<b>Total</b>	<b>13.2 f.e.</b>	<b>Largely through capacity within existing secondary schools, although some extensions may be required.</b>

3.24 For information purposes the cost of building new and extending existing secondary schools is provided in tables 3.6 and 3.7. The information is taken from the Infrastructure Provision in Hertfordshire document and relates only to build costs.

**Table 3.6: Cost of providing new secondary schools**

Number of f.e.	Pupils (inc 50% 6 <sup>th</sup> forms SOR)	Cost £million	Area (sqm)
6 f.e.	1,008	£18.5	8,603

Source: *Infrastructure Provision in Hertfordshire – Dacorum Borough Council (HCC)*

NB. Costs are average Hertfordshire build costs as of Q1, 2006 (BCIS) and are subject to revision and review.

**Table 3.7: Cost of extending secondary schools**

Size extension	Pupils (inc 50% 6 <sup>th</sup> forms SOR)	Cost £million	Area (sqm)
4 f.e.	660	£20.5	6,000
5 f.e.	825	£24.6	7,200

Source: *Infrastructure Provision in Hertfordshire – Dacorum Borough Council (HCC)*

NB. Costs are average Hertfordshire build costs as of January 2011 and are subject to revision and review.

#### *School and site requirements*

3.25 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.

3.26 The preferred standards for the secondary school sites for 6 – 8 f.e. schools are:

- 13 – 15 hectares
- Sustainably located
- Flat
- Accessible to pedestrians, vehicles and public transport
- Free from site constraints

3.27 It should be noted that free schools do 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**

3.28 Further Education caters for students generally aged 16 – 18. A range of options are open to students in further education including GCSEs, A-levels, Diplomas, Apprenticeships and work experience schemes. Specifically, Further Education offers students the opportunity of pursuing a vocational

alternative to traditional school sixth forms, with the focus on developing professional skills for careers and work.

3.29 As noted in the DSIS, the Education and Skills Act (2008) raised the participation age to require young people to continue in education or training until the end of the academic year in which they turn 17 from 2013 and until their 18th birthday from 2015. 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.

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

3.31 There have been changes to the funding of non-school Further Education. Officers from WHC confirmed that the central government funding previously for adult (aged 19+) education has been reduced, and redirected towards apprenticeships. The role of the Young Person's Learning Agency (YPLA) transferred to the Education Funding Agency (EFA) in April 2012. The EFA has responsibility for the direct funding of academies and Free Schools and all 16–19 provision including that in Further Education colleges, sixth form colleges and independent provision. The EFA will also distribute school funding resources to local authorities for them to pass on, to those schools that are not yet academies.

3.32 Academic pathways are predominantly catered for by 6<sup>th</sup> forms in secondary schools which provide for A-levels and some diplomas. Vocational pathways are predominantly catered for by Further Education colleges, specialist learning providers and employers.

#### Apprenticeships

3.33 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.

3.34 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.

- 3.35 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

- 3.36 As set out in the secondary education section, no new secondary schools are planned in Dacorum over the plan period and therefore no significant expansion of 6<sup>th</sup> form provision is planned. However, this may change once the increase in participation age has come into effect. It is worth noting that current secondary school forecasts show that from 2018 there will be more secondary school aged children than places.
- 3.37 The 6<sup>th</sup> form facilities at Kings Langley secondary school are of a poor quality and HCC have supported an intention to develop a new 6<sup>th</sup> form block at the school via representations to the pre-submission Core Strategy. At the current time the proposals are dependent on external funding. The new block would expand the existing capacity of the 6<sup>th</sup> form and provide students with a greatly improved environment in which to study.

##### Non-school Further Education provision

###### West Herts College

- 3.38 The Hemel Hempstead campus of West Herts College (WHC) is the only Further Education college in Dacorum. As stated in the DSIS report, WHC aims to redevelop its facilities in Hemel Hempstead town centre. The need for redevelopment is driven by the divergence between the existing facilities (both quality and quantity) and facilities required to serve the educational needs of the town. The educational needs of the town are driven by the size of the population of young people and the demand for skills to meet local employer requirements.
- 3.39 The campus in Hemel Hempstead town centre currently has about 50,000 sq ft of operational floorspace, however a number of the buildings are not in use

as they are not fit for purpose. Ideally, WHC would like the planned redeveloped to provide 80-90,000 sq ft of operational floorspace. The type of space required is determined by the type of education for which funding will be available, which means that there is a focus on apprenticeships.

- 3.40 The new provision must 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. The current vocational/practical offer at the Hemel Hempstead campus is dominated by typically male courses such as construction. WHC aim to increase the range of vocational/practical courses on offer to include more typically female courses such as health and beauty, social care, and care and early years. They would also like to provide a range of higher level learning (higher education) such as higher level apprenticeships (e.g. for youth work and counselling) and enterprise opportunities in terms of self employment and scope for experiencing and understanding setting up a business.
- 3.41 The current construction courses on offer at the Hemel Hempstead campus are fairly outdated, and do not focus enough on sustainable methods of construction. WHC aim to modernise its offer to rectify this, as sustainability is becoming increasingly important in the construction industry.

#### Dacorum Borough Council's role

- 3.42 DBC are refreshing the skills strategy to reflect the Governments vision for reform of the further education and skills system to improve the skills of the workforce, the performance of the economy and engagement in learning.
- 3.43 DBC promotes the interaction of further education providers and employers through the Employment Skills and Partnership Board, as discussed in the Job Brokerage section of chapter 9. DBC encourage employers to take on apprentices, and liaise with employers and providers to ensure that the type of training on offer matches the skills gap in the local economy. Further education organisations who sit on the board include Adeyfield School and Youth Connexions Hertfordshire.

#### *Funding new provision*

#### HCC educational facilities

- 3.44 HCC receive capital funding from central government for providing additional pupil places, which is known as Basic Need funding. The level of funding is calculated according to annual demand for places and can vary substantially. It is decided on an annual basis, and so the future level of funding is unknown, but the current level will meet approximately half the costs of the current primary school expansion programme. S106 funding is

vital to supplement the Basic Need funding in meeting the costs of additional school places arising from new housing development. However, given the forthcoming limitations to the pooling of S106 monies, it is envisaged that CIL revenues will play a significant role in the funding of new schools in the future; both for the buildings and the land. The implications for use of CIL revenues for the provision of schools as academies and free schools rather than community schools is currently unknown and further liaison between DBC and HCC will be required.

- 3.45 Officers from HCC confirmed that where the requirement for a new school or expansion of an existing school is triggered by a single development, the norm is for the developer to bear the cost of the building and the land. However, where the requirement for a new school or expansion is triggered by cumulative levels of development, the provision of the land is complex and variable. Sometimes HCC owned land can be used, but it is more common for HCC to acquire the land – in some cases via compulsory purchase. The alternative use of the land heavily influences its value, so land that might alternatively be used for housing will be a lot more valuable than land whose alternative use is agriculture.
- 3.46 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. This leads to a lot of uncertainty for the timescales of projects such as the redevelopment of 6<sup>th</sup> form facilities at Kings Langley secondary school which rely on external funding.
- 3.47 Because of the unstable nature of demand for early years education, and the flexibility in forms of provision, it is difficult to say with certainty how it 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

- 3.48 The cost of the redevelopment of the Hemel Hempstead campus will be in the region of £18-22m. The college is exploring partnerships to generate the required capital by using some of the College's land for non-educational use, while retaining a sufficient footprint to deliver a new modern campus.

#### Dacorum Borough Council Funding

- 3.49 DBC have committed to use £100K (over 2 years) of its core reserves to fund initiatives aimed at providing apprenticeships for 16-24 year olds. 80% of this will be used to provide apprenticeships in the voluntary sector, and the remaining 20% will be used for initiatives promoted by the Employment and Skills Partnership Board.

## Chapter 4: Healthcare

### The DSIS Report

- 4.1 The DSIS Social Infrastructure report contains a section on the provision of primary and secondary healthcare and the impact of the two development scenarios assessed. The report sets out the policy context and organisational structure, it then considers the provision requirement standards and gives an assessment of existing provision. This is followed by committed future provision, an assessment of future demand and an estimate of the costs of future provision.
- 4.2 The organisation of the health service, and in particular how health services are commissioned has undergone significant change since the DSIS report was written and a full update is provided below. The information in the update has been provided by a consultant employed by the PCT, and officers from the Hertfordshire Partnership NHS Foundation Trust at a meeting with DBC on 6<sup>th</sup> February 2012.
- 4.3 For simplicity, the format of this section is the same as the healthcare section of the DSIS report, and information is repeated where it is still valid.
- 4.4 The quantitative forecasts of future demand for GP services arising from development planned in the Core Strategy have not been provided, however, the PCT are currently producing the forecasts and they will be included in the annual update to the IDP.

### Primary Healthcare

- 4.5 Primary healthcare includes General Practice (GP), community nurses, dentists and opticians.

### Introduction

- 4.6 As of 1<sup>st</sup> April 2010, East & North Hertfordshire Primary Care Trust (PCT) and West Hertfordshire PCT merged to create one PCT for Hertfordshire: Hertfordshire NHS. It is responsible for arranging healthcare for everyone who lives in Hertfordshire. Its healthcare providers include GPs, hospital trusts, dentists, community pharmacists, community health services, and mental health trusts.
- 4.7 Four months prior to merging the two Hertfordshire PCTs laid out their joint vision of what services will be commissioned over the next few years in their *Five Year Strategic Plan*.<sup>9</sup> The *Five Year Strategic Plan* seeks to improve

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<sup>9</sup> East & North Hertfordshire and West Hertfordshire PCTs Five Year Strategic Plan, January 2010.

health, improve people's experiences of healthcare and ensure services of the highest quality. The plan was published in 2009 and refreshed early in 2010.

- 4.8 The 2012 Health and Social care Bill will see the disbandment of most PCTs by March 2013. In their place will be new organisations to guide the delivery and development of health services. In all areas Clinical Commissioning Groups (CCGs) will take over the majority of the responsibility for commissioning existing and future NHS provision. CCGs will be led by local clinicians (Doctors and Nurses) supported by administrators. They will be accountable to and performance managed by A National Health Commissioning Board (NHCB) with regional and local offices.
- 4.9 At the time of writing there are three shadow CCGs covering Hertfordshire, these are expected to reduce to two; East and North Herts CCG and the Herts Valley CCG who will commission services in the Dacorum area. An important exception to the commissioning remit of the CCG is the exclusion of primary care infrastructure and contracts these will be commissioned by the NHCB to avoid any conflict of interest.

### **Policy Context**

- 4.10 The Core Strategy highlights that the provision of healthcare is a key priority and includes the aim of reducing healthcare inequalities across the borough by making sure that the facilities are in the most accessible places.
- 4.11 Health need and deprivation is not uniform across the Dacorum area. The Index of Multiple Deprivation (IMD) 2007 demonstrates that the highest rates of deprivation are in Hemel Hempstead including Highfield & St. Paul's, Grovehill and Woodhall wards.<sup>10</sup> Areas with high deprivation indicators will have a greater need for healthcare provision.

### **Organisational Structure**

- 4.12 The Herts Valley CCG will continue the work begun by the DacCom Practice Based Commissioning group to ensure a local focus on the services provided to the District. Part of the NHS reforms will see Public Health Consultants transfer into local authorities enabling more joined up prioritisation of resources to areas of greatest health need.
- 4.13 *Delivering Quality Healthcare for Hertfordshire (DQHH)*<sup>11</sup> is a 'whole systems' approach to future service delivery and is at the heart of the established *Strategic Plan*. The reforms are now well underway and whilst

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<sup>10</sup> DacCom commissioning plan 2009/10

<sup>11</sup> Delivering Quality Healthcare, NHS Hertfordshire. 2007

CCGs may review and reflect on future developments, the rationalisation of acute services to two key sites in Hertfordshire (Lister in Stevenage and the West Herts Hospital in Watford) is almost complete.

- 4.14 The key objective is to move appropriate aspects of healthcare provision closer to home, away from acute hospitals to delivery in people's homes or in more local facilities. The last two years have seen successful delivery of many of the changes outlined in *DQHH*, including investment in urgent care networks, local general hospitals and chronic disease pathways. However, this has not yet resulted in the planned reduction of acute activity. This may require additional capacity in primary care based services.

### **Primary Care Provision Requirement Standards**

- 4.15 Primary care includes a range of clinicians (Doctors, Nurses, Dentists, Therapists etc) However access to these and hospital 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. GP Premises are funded through a separate stream rather than included within the service charge as in other primary care contracts.
- 4.16 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 list<sup>12</sup>. GPs are 'Independent Contractors' that is to say not employed by the NHS, they have a contract for service but the recruitment and retention of staff is a matter for the practice to manage. Service Commissioners are not able to place any requirement on a practice as to the ratio of patients to staff; however they can enforce service delivery standards if service quality or access times fall below acceptable levels.
- 4.17 There are new styles of GP provision being developed under new contracts. 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.
- 4.18 The majority of GPs in Hertfordshire do not operate out of NHS owned premises. 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. In addition to buildings certain other elements of infrastructure provision (Information Management Technology and Business Rates for example) are also reimbursed. This reimbursement is determined by Commissioners and is a far more appropriate measure of capacity than

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<sup>12</sup> 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.

staffing as without a consultation room to work from a practice cannot recruit a GP or nurse to meet increased demand.

- 4.19 NHS Hertfordshire and the local Commissioning groups have worked with Guildhouse UK Ltd developing a capacity planning tool for existing practices. This uses a proxy measure of patients on the list per metre squared of reimbursed floor space. By comparing the figure to the average utilisation for Hertfordshire a relative estimate of capacity (registrations before the average is met) or constraint (registrations above the average) can be provided.
- 4.20 Whilst the current average is an appropriate measure for assessing the capacity of existing practices, where a new practice (or branch surgery) is required to serve a significant development it is not. New clinical premises are required to be fully compliant with the latest guidance and will be significantly less well utilised than existing premises. For example the current (2012) figure of existing Hertfordshire Surgeries is 22 patients per metre squared, for premises commissioned in the last two years it is only 13.

## **Existing and Committed Provision**

### **Existing Provision**

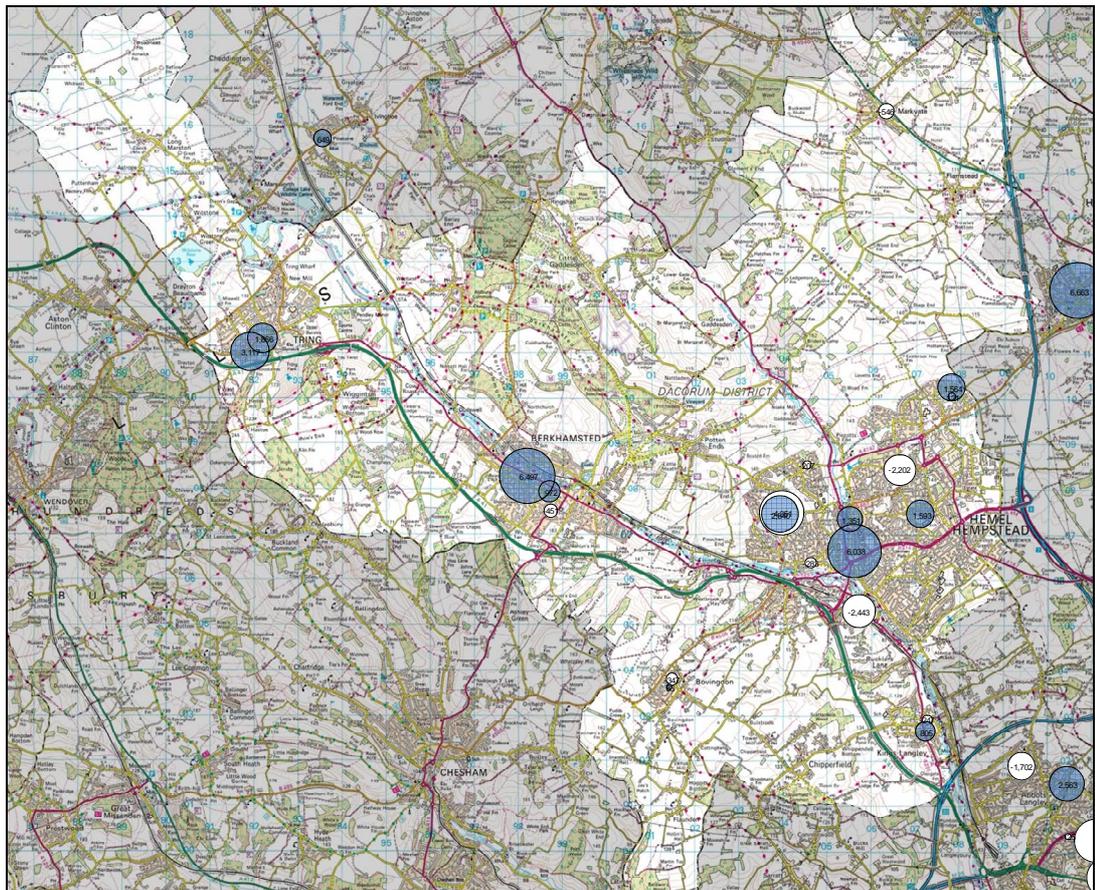
- 4.21 There are 168 GP sites across the whole of Hertfordshire, which are strategically located to serve residential communities.<sup>13</sup>
- 4.22 There are 29 GP surgeries<sup>14</sup> with around 100 GPs and associated staff which serve Dacorum and surrounding area. GP main and branch surgeries are indicated on Figure 4.1, indicating whether they have capacity to expand (in blue) and by how many registrations. Where a practice is already above the average levels of utilisation these are indicated by a white circle with a negative figure indicating how far above average utilisation they are in registrations.

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<sup>13</sup> East and North and West Hertfordshire PCT Five Year Strategic Plan, refreshed 2010

<sup>14</sup> Commissioners Investment and Asset Management Strategy, 2010. NHS Hertfordshire.

**Figure 4.1: GP sites and relative capacity or constraint in Dacorum (Oct. 2011)**



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Source: Guildhouse UK Ltd. 2012

4.23 With regard to figure 4.1:

- The main settlements are well served by practices with additional capacity to expand. Some areas have practices with capacity alongside those with constraint. Larger development proposals will need to consider the 'net' capacity of the area.
- Proposals outside of the main settlements may be more difficult to service from existing provision. Health Commissioners are discouraged from supporting single handed practices (following the Shipman Enquiry) and a two GP surgery will require at least 2,600 patients to run cost effectively. This would suggest a development of over 1,000 dwellings. The alternative will be for patients to have to travel some distance to register with a practice. Existing practices may be persuaded to provide a service in a temporary, suitably adapted or purpose built premises where costs can be offset or discounted whilst the service demand builds up.

- The ability to register patients is not only dependent on premises capacity, Clinical Staff will need to be recruited and in some cases the quality of existing premises may fall below required standards.
- Practices based within one locality may operate branches outside of the area.
- Practices in neighbouring localities may have either capacity or constraint which may impact on development proposals. This can be illustrated by the Redbourn Medical Centre which lies just over the boundary in St Albans and has significant capacity.

4.24 Herts valley CCG works with the outgoing PCT to commission health services for a registered population of around 156,000 people in Dacorum.<sup>15</sup> It should be noted that the number of people registered with GPs in the borough is higher than the borough's population, indicating that people from outside the borough are registered in Dacorum.

4.25 DacCom indicated that the borough's 100 GP staff comprised of 80 principal GPs, 16 salaried GPs and 4 retainer GPs. They were not able to provide a whole time equivalent (WTE) figure. NHS Hertfordshire publishes information rating local GP surgery services across a range of measures using a 'Balance Scorecard'<sup>16</sup>. Dacorum's practices achieve good levels of access and generally high quality performance.

### **Adequacy of Existing Provision**

4.26 The estimated capacity of each of the existing main and branch surgeries (Oct 2011) is shown in figure 9-2 below. Those to the top of the graph have increasing levels of additional capacity before reaching average utilisation. Those to the bottom are increasingly constrained when compared to the average.

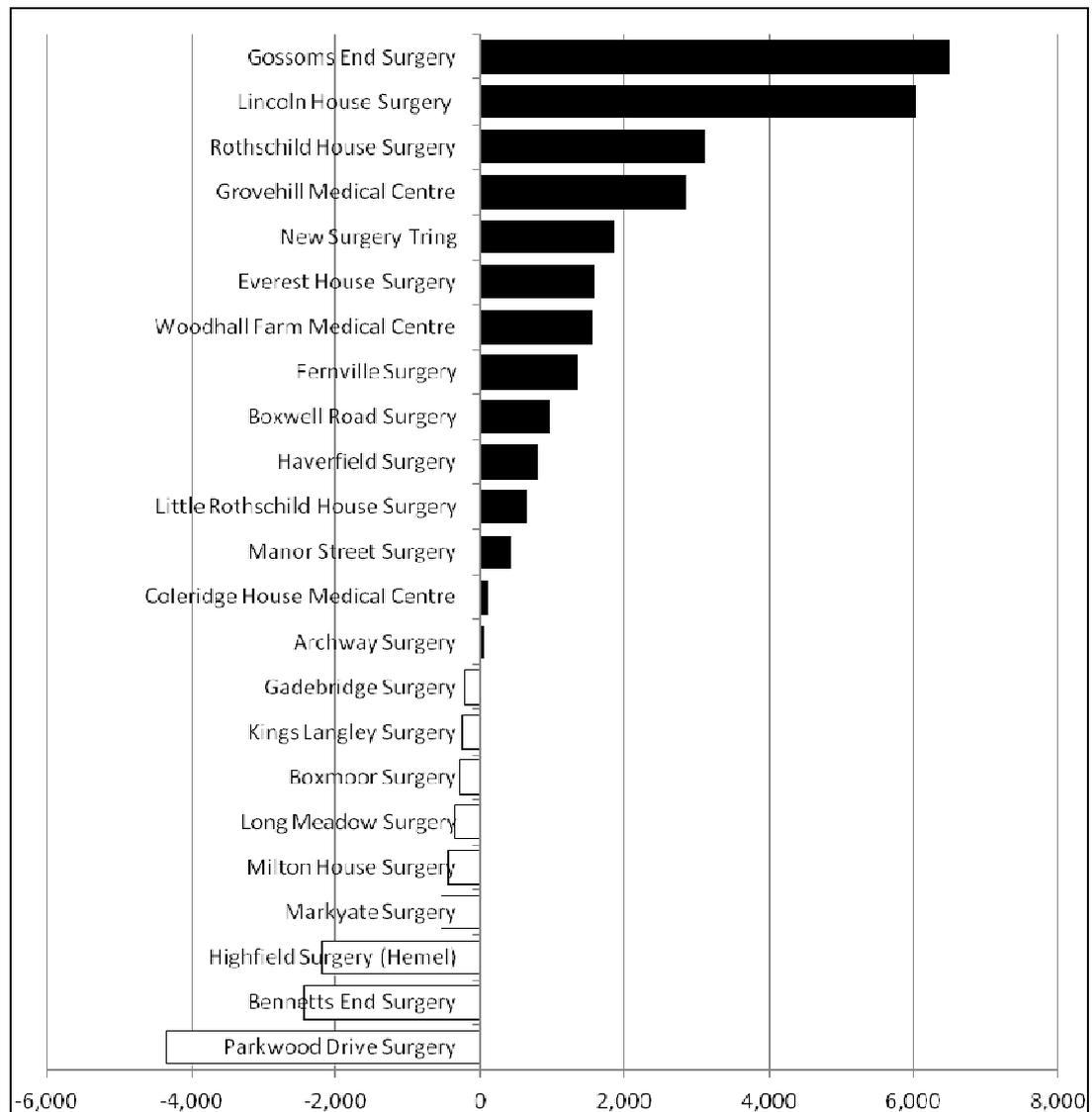
4.27 The condition of the premises and their ability to recruit and retain staff will be a factor in achieving additional registrations. In order to expand or improve existing premises, practices will need to make a successful business case to the service Commissioners. Prioritising the limited funds available may include a range of additional performance measures not simply physical capacity.

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<sup>15</sup> NHS Hertfordshire, October 2011.

<sup>16</sup> NHS Hertfordshire (2010) <http://www.hertfordshire.nhs.uk/resource-centre/nhs-hertfordshire-publications/234-gp-balanced-scorecard.html>

**Figure 4.2: Registration Capacity at Average Utilisation (Practice Name)**



Source: Guildhouse UK Ltd. 2012

4.28 Summarising the information in Figure 4.2 by settlement;

- Hemel Hempstead:** The net capacity is around 4,000 additional registrations although some wards are less able to sustain growth than others. The west of the town (Boxmoor, Chaulden, Gadebridge and Warners End) being least able to support growth. Centrally there is good provision for growth and the West Herts Medical Centre at the Hospital (not mapped/graphed) offers a service that supplements traditional practices across the area and has additional capacity for up to 4,000 registrations.
- Bovingdon and Markyate:** These areas are currently unlikely to support growth in the area without investment.

- **Berkhamsted:** Is well placed to support growth with up to 7,000 registrations possible if premises were fully utilised. Some caution should be exercised as much of this capacity relates to the generous proportions of the Gossom End (PCT owned) Premises.
- **Tring:** Both practices should be able to support growth up to a combined total of 5,000 new registrations.
- **Kings Langley:** Moderate growth up to 500 registrations might be supported but consideration should be given to cross border pressure from Three Rivers (Abbots Langley).

4.29 Hertfordshire NHS' estate is 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**

4.30 There have been a number of investments in the Dacorum area over the last few years that are reflected in the figures above. These include the development of the West Herts Medical Centre as part of the National Equitable Access Initiative (2009) and the relocation of the Lincoln House Surgery (August 2011).

4.31 The Core Strategy refers to the new Urgent Care Centre and GP-led Health Centre on the hospital site in Hemel Hempstead. It states that further redevelopment plans for the site will lead to the delivery of a new local general hospital.

#### **Assessment of Future Demand**

4.32 The DSIS report on primary healthcare included a quantitative analysis of the future supply/demand gap up to 2031 based on the two development scenarios tested. A similar assessment is currently underway by the PCT for the level of housing growth planned in the Core Strategy. Although the results of the assessment are not yet available, they are expected to suggest that the while the level of growth planned will lead a requirement for some additional GP services, the level of additional demand will not be insurmountable.

4.33 It is worth noting that the baseline information regarding GP provision indicates that there is capacity in existing Hemel Hempstead practices to register up to 9,000 patients. In Berkhamsted practices there is capacity to register up to 7,000 more patients and in Tring practices there is capacity to register up to 5,000 more patients. This existing capacity will help to absorb

the impact of new housing on GP services, although the extent to which it will do so is dependent on how close it is to new housing.

### **Costs of Provision**

- 4.34 New build health facilities are currently being constructed at about £2000 per m<sup>2</sup> (excluding fees) converted into a lease cost this equates to around £200 per m<sup>2</sup>. PA<sup>17</sup>. An alternative assessment of cost, as set out in the DSIS is based on cost per GP. URS estimated this to be £300,000 per GP or £0.9 million for a three GP practice. This assumes that GPs are congregated in a clinic of three GPs in a single clinic. These costs include fixed furniture, fittings and equipment, fees (at a rate of 13%) and are based on a new build. However, they exclude the cost of land purchase, any loose furniture fixtures and equipment and any temporary accommodation requirements during the (re)build. Once future GP requirements are known, this cost estimate can be used to assess their likely cost.
- 4.35 It is important to stress that this cost will be indicative only. Costs 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. Instead, the estimate should be viewed as a core cost for the provision of a GP practice, to which additional costs would need to be added should a centre include additional health services.

### **Summary**

- 4.36 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.
- 4.37 An assessment of future additional demand arising from planned growth will be provided shortly by the PCT and included when the information in the IDP is updated. In line with the location of planned growth, a large proportion of this demand will be at Hemel Hempstead, with smaller levels of additional demand expected at Berkhamsted and Tring. The additional demand will be partially offset by existing capacity which exists at the three towns.
- 4.38 The application of a standard per-GP cost will be used to estimate the indicative cost associated with additional demand. In addition to identified

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<sup>17</sup> Guildhouse UK Ltd 2012 based on recent Hertfordshire schemes

capital costs there may be service costs which mean that 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**

### **Introduction**

- 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 areas than primary healthcare, which is provided at a local level.

### **Organisational Structure and Existing Provision**

- 4.42 Residents can access acute services at hospitals both within and outside Hertfordshire. Nearly 98% of Hertfordshire residents live within 30 minutes of an acute hospital by car, based on modelled travel times.<sup>18</sup>
- 4.43 The key facilities and agencies relevant to the strategic planning and provision of secondary healthcare in Dacorum are discussed below.

#### *Clinical Commissioning Groups and NHS Hertfordshire*

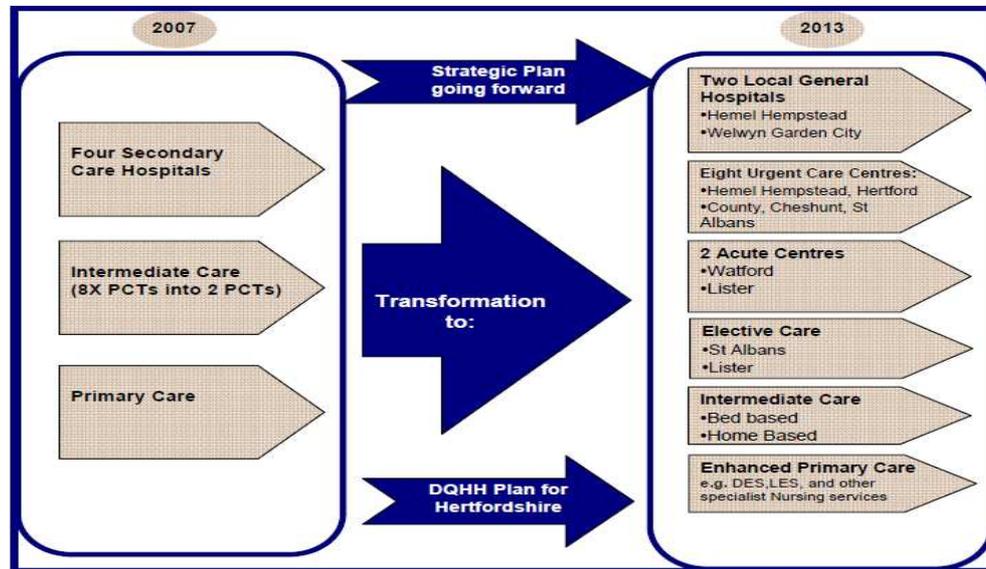
- 4.44 As outlined earlier the secondary care Commissioning responsibilities of NHS Hertfordshire (the PCT for Hertfordshire) are expected to transfer to the Herts Valley CCG by April 2013. They will then be responsible for arranging healthcare for everyone who lives in West Hertfordshire.
- 4.45 The current Strategic Plan for NHS Hertfordshire PCT sets out plans for the transformation of acute services in Hertfordshire through the Delivering Quality Healthcare for Hertfordshire (DQHH) programme. DQHH includes goals for each of the PCT's key strategic areas including acute centres, urgent care centres, elective care, local general hospitals, intermediate care and shifts to primary care. DQHH aims to deliver the transformational

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<sup>18</sup> Source: Three Rivers District Council Infrastructure Delivery Plan, May 2010

change illustrated in Figure 4.3, including improved patient safety through the centralisation of specialist care; improved patient experience through better access to urgent care services; more care closer to home; and improved access to planned care.

**Figure 4.3: Strategy for Transformation of Acute Care in Hertfordshire**



Source: East & North and West Hertfordshire PCTs' Five-Year Strategic Plan, 2010

*West Hertfordshire Hospitals NHS Trust*

- 4.46 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.
- 4.47 Hemel Hempstead Hospital is the only hospital in Dacorum and occupies a significant area of land within the town centre. A new 24/7 Urgent Care Centre opened at the hospital in October 2008, 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.
- 4.48 There are 232 beds at the Hemel Hempstead Hospital. The hospital is currently undergoing a major redevelopment programme to considerably improve the general environment for patients. Full Accident and Emergency (A&E) services transferred from Hemel Hempstead to Watford General

Hospital in March 2009, which coincided with the opening of a major expansion programme at Watford General.<sup>19</sup>

4.49 The DQHH strategy envisaged a new Local General Hospital, on the current Hemel Hempstead Hospital site in Hillfield Road. A similar proposal on the QEII hospital site in Welwyn Garden City has just received planning permission. The vision for Hemel is that the new Local General Hospital will provide some or all of the following in new or refurbished accommodation:

- A full range of outpatient services with Consultants, Specialist Nurses and Therapists
- Facilities for minor operations
- Diagnostic facilities (X-ray, ultrasound, mobile MRI unit hook up facility, point of care testing, blood tests)
- Therapies (physio, speech & language, dietetics, podiatry and occupational therapies).

*The Hertfordshire Partnership NHS Foundation Trust*

4.50 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<sup>20</sup>:

- 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 12 beds are allocated to 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

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<sup>19</sup> In March 2009 emergency services centralised at Watford General Hospital, making Watford the main acute hospital in west Hertfordshire. The specialist emergency service at Watford now includes a newly expanded A&E Department, a new 120-bed Acute Admissions Unit, a state-of-the-art 19-bed Intensive Care Unit, and a dedicated Children’s Emergency Department. Watford also offers a comprehensive range of specialist and general services, including one of the safest maternity services in the country.

<sup>20</sup> Source: <http://www.hertspartsft.nhs.uk/>

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**

4.51 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. Completion is planned for the end of 2014.

4.52 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.<sup>21</sup>

### **Assessing Future Demand**

4.53 Planning of secondary healthcare services is complex and the DQHH strategy lays 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.

4.54 Hertfordshire Partnership NHS Foundation Trust indicated that recent forecasts of future provision for mental health care showed a need for 16 mental health beds in Hemel Hempstead. The trust is still working to determine exactly where these beds will be provided but it is likely to be a location within close proximity to the town centre.

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<sup>21</sup> Source: Pers. Comm. Hertfordshire Partnership NHS Foundation Trust

- 4.55 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.
- 4.56 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.
- 4.57 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 (as exemplified in Hertfordshire by the redevelopment of Hemel Hempstead hospital and the concentration of acute services at Watford) and reducing demand for services in institutional settings by improving prevention and care in the community. The DacCom Estates Plan<sup>22</sup> refers to the Polyclinic Model explored as part of Lord Darzi's review of the NHS which recognises that grouping services around patient and users needs lead to improved services.

### **Costs of Provision**

- 4.58 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**

- 4.59 A number of agencies are involved in the provision of secondary healthcare facilities to Dacorum residents, including NHS Hertfordshire, the Hertfordshire Partnership NHS Foundation Trust and West Hertfordshire Hospitals NHS Trust.
- 4.60 A major redevelopment of Hemel Hempstead local general hospital is underway. Acute services previously provided there have moved to Watford. The redevelopment includes a new urgent care centre and outpatient, therapy and diagnostics services/departments. Completion is planned for the end of 2014.

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<sup>22</sup> Estates Plan, Guildhouse Ltd UK, September 2009

- 4.61 NHS Hertfordshire have set out a Five-Year Strategic Plan (2010) covering secondary healthcare, and it can be assumed that the Hemel Hempstead hospital redevelopment has been planned with due consideration to the future healthcare requirements of residents in the borough. However, there is evidence that a strategic planning process which considers the demand for and supply of healthcare infrastructure in the long term is weak. The absence of this process could be related to the fact that NHS funding operates on a relatively short (usually three year) cycle.
- 4.62 The lack of information 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.
- 4.63 The proposed transfer of the Public Health function from PCTs to local authorities should greatly improve the ability to integrate health and land use planning. It is recommended that DBC persist in engaging with secondary healthcare providers in order to emphasise the importance of medium to long term strategic planning, and to ensure that secondary healthcare requirements are built into the wider strategic planning and planning obligations process.



## **Chapter 5: Open Space**

### **The DSIS Report**

- 5.1 The DSIS Social Infrastructure report contains a section on the provision of open space and the impact of the two development scenarios assessed. The report sets out the overall policy context and an overview of existing provision of open space. This is followed by a more detailed assessment of existing provision, planned provision, future demand arising from growth and estimated costs of provision for the following types of open space: leisure space (including child play space), natural green space and allotments. This IDP report considers the same typologies of open space as the DSIS report
- 5.2 The policy context and baseline assessments of open space provision in the DSIS report is still valid and as such the information is not repeated in this chapter, but is updated where appropriate. The report also identifies a number of interventions which are planned by Dacorum Borough Council or other open space providers; most of these interventions are still valid, although this IDP report provides an update.
- 5.3 The DSIS report used recognised standards to determine the future demand for each typology of open space associated with each development scenario. The impact of the growth was examined 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, which may increase capacity. 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 remain an appropriate proxy.

### **Policy Context**

- 5.4 Since the DSIS report 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 advises against building on open space and allows communities to designate, through local or neighbourhood plans, green areas of particular importance as Local Green Space to safeguard them from development. It states that planning policies should be based on assessments of the quantitative and qualitative needs for open space and opportunities for new provision. The NPPF expects local planning authorities to plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.
- 5.5 At a more local level, since the DSIS was written, Green Infrastructure Plans have been published for Hertfordshire and Dacorum; the Hertfordshire

Strategic Green Infrastructure Plan (HSGIP), and the Dacorum Borough Green Infrastructure Plan (DBGIP). The key points from the plans are summarised below and links to the full documents are provided.

- 5.6 The HSGIP and the DBGIP provide overviews of existing strategic green infrastructure assets in Hertfordshire and Dacorum respectively, they assess the ability of green infrastructure to perform multiple functions and consider opportunities for enhancement and creation of green infrastructure. They then outline a series of potential projects to deliver multiple functions and benefits, and provide advice on taking green infrastructure proposals forward. The projects which fall within Dacorum are included in the Infrastructure Delivery Schedule in Appendix X. The full HSGIP report can be accessed on the County Council's website: <http://www.hertsdirect.org/services/envplan/greenissues/gi/ginf/>. The full DBGIP report can be accessed on Dacorum's website: [http://www.dacorum.gov.uk/default.aspx?page=1884#Green\\_Inf](http://www.dacorum.gov.uk/default.aspx?page=1884#Green_Inf)
- 5.7 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. Other open space schemes may also be planned and delivered during the plan period, and these will be included within the update to the Infrastructure Delivery Schedule as appropriate.
- 5.8 The Green Space Strategy, which was in draft form at the time the DSIS was written has since been adopted by the Council (2011). The Green Space Strategy is a vision and plan to deliver improved public spaces within the Borough over the period 2011-2016. It is intended to be used as a management tool to guide DBC's work programme and to direct funding and resources. The strategy is underpinned by an assessment of the needs of local communities, the availability of resources and the quality, quantity and accessibility of green spaces. This information was used to establish priorities for the Borough and to develop local standards for provision, design and management of new green spaces. The strategy includes general and specific recommendations and an action plan setting out how the recommendations in the strategy will be delivered.
- 5.9 The Strategy identifies 6 policies which set the framework of the overall approach to the management and development of green space. Each policy is supported by identified actions to guide the work programme over the next five years. Policy 6 is *'to use development opportunities to improve the quality and provision of open space'*. The strategy states that new

developments should provide sufficient open space for their community, and be landscaped to provide a quality setting and to enhance the surrounding area. New developments should contribute to the strategic development of the Borough's green space resource forming a well designed network of interconnected sites. Provision will ideally be on-site from developments of a sufficient size, but contributions towards off-site facilities will also provide a significant contribution towards the borough's green space from developments of all sizes where on-site provision is not practicable.

- 5.10 The policies and actions in the action plan of the Green Space Strategy are supported in this IDP report, but are not listed individually as they pertain to specific schemes and general approaches. There is also a lack of information regarding timescales and costs. The Council are considering reviewing the Green Space Strategy during 2012; any updates will be picked up in the annual update to this IDP.

### **Changes for providers**

- 5.11 Since the DSIS was written the providers of some forms of open space have faced significant falls in their funding. The Children's Services team at DBC, who operate the adventure playgrounds in Hemel Hempstead have had cuts to both the amount of central government and local government funding that it receives. This has put pressure on external funding sources and it is much more difficult to get external funding for any particular scheme. This has led to a reduction in the services run from the adventure playgrounds, for example youth clubs now run once a week from each playground, rather than twice a week.
- 5.12 The external funding that was previously available to DBC for play area improvements has now ceased; the sources of this external funding included the Big Lottery Fund and the Playbuilder Fund. Funding sources for allotment provision have also decreased.

### **Schemes that have been delivered**

- 5.13 A number of the schemes identified as planned in the DSIS report have subsequently been delivered. The schemes which have been delivered are:
- Play improvement programme – improvements to existing facilities at Woodhall Farm, High Street Green, Durrants Hills and Mortimer Hill
  - New allotment site at Grovehill
  - Reinstatement of allotment plots at Bennetts End
  - Apsley Fitness Trail
  - Margaret Lloyd Park Pond Refurbishment
  - Refurbishment of Northchurch Recreation Ground



## **Chapter 6: Emergency Services**

### **The DSIS Report**

- 6.1 The DSIS Social Infrastructure Report contains a section on the Emergency Services, with chapters on Fire and Rescue services, Police services and Ambulance services. The three services were contacted to input to this update, however, no response was received from the Fire and Rescue Service or the Ambulance Service. It has been assumed that the information in the DSIS report regarding these services remains valid; conclusions for both are repeated at the end of this chapter. The information in the DSIS report regarding police services is updated below following a meeting between officers from DBC and officers from Hertfordshire Constabulary on 10<sup>th</sup> January 2012.
- 6.2 There have been significant changes to police services nationally and locally since the DSIS report was written and therefore this chapter provides a complete update to the information within the DSIS report.

### **Changes to the Police Service**

- 6.3 Since the coalition government came to power (May 2010) police services across the country have seen a cut to their funding. Hertfordshire Constabulary's funding has been cut by 17% over the period 2011/12 to 2014/15; which equates to a reduction of £36m over that period.
- 6.4 A future change to police services across the country is the plan to replace Police Authorities with elected Police and Crime Commissioners as set out in the Government's Police Reform and Social Responsibility Act. There will be one commissioner for Hertfordshire, and elections will take place in November 2012. This represents a big change to the way police are run; the Commissioner will have responsibility for setting the strategic policing priorities and for setting the budget. The Commissioner will also appoint the Chief Constable, who will then be accountable to the Commissioner.
- 6.5 This forthcoming change for the police service leaves the constabulary in a position of slight uncertainty about its future direction and requirements.

### **The baseline provision**

- 6.6 As noted in the DSIS there are three police stations in Dacorum, which are located in the borough's three towns: Hemel Hempstead, Berkhamsted and Tring. However, recent changes to the police stations have taken place; the station in Hemel Hempstead has lost its custodial facilities and the station in Berkhamsted has moved into the Civic centre building. The custodial

facilities previously provided at Hemel Hempstead police station are now provided at Watford.

## Planned provision

- 6.7 The Estates and Facilities Plan review confirms that there are no closures of police stations planned in Dacorum. The only change in provision currently being considered is the relocation of the police station in Hemel Hempstead town centre to the new Public Service Quarter (PSQ) building planned as part of the town centre redevelopment. These proposals are at a relatively early stage and will be subject to the development of a suitable business case which meets operational and efficiency requirements for subsequent consideration and approval by the Police and Crime Commissioner. Subsequently at this stage it is not clear how the floorspace of the police station planned in the PSQ will compare.

## Future Demand arising from planned growth

- 6.8 Herts Constabulary use an Association of Chief Police Officers (ACPO) approved toolkit to assess the impact of additional housing and employment development on their service. The toolkit is used to estimate the number of police staff, floorspace and costs required due to the development planned in the Core Strategy.
- 6.9 The toolkit applies the existing incident rates, staff and floorspace requirements per 1,000 population, to the level of development planned in order to assess the impact. The toolkit used Herts Constabulary's methodology for converting planned residential development into projected population. 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
<b>Total cost of requirements: £709,464</b>			

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

- 6.10 Officers from Herts Constabulary explained that the toolkit projects cumulative requirements over a long period of time (i.e. the plan period) and it is not appropriate to include timescales for the projected requirements.

6.11 Given the uncertainties about the future direction of police services and phasing of new infrastructure explained above it is not practicable to relate the outputs of table 6.1 into physical infrastructure. However, 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.

## **Funding**

6.12 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.

6.13 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.

6.14 Hertfordshire Constabulary are not currently reliant on S.106 monies. However, in the future the grant funding received by Herts Constabulary will decrease significantly. As result, Herts Constabulary will rely on other sources of funding including CIL monies to provide the infrastructure required to support operational needs. Any CIL funding they do receive is likely to be used for capital expenditure, and it is now anticipated that this is more likely to be for adaptation of existing buildings than the building of new ones.

## **Conclusions regarding additional demand for Fire and Rescue services**

6.15 The key conclusions from the DSIS report regarding the above are:

- Hertfordshire Fire and Rescue Service (HFRS) have commented that the scale of growth is not as important as the location of the growth with regard to fire cover, due to response times.
- According to discussions with the HFRS, the existing stations should be able to cope with the additional level of demand arising from growth under both scenarios
- Some of the building stock used by HFRS with Dacorum is dated and in need of replacement or refurbishment. Whilst there are no proposals to change the locations of current stations, there may be some reorganisation of estates should opportunities to improve building stock arise.

## **Conclusions regarding additional demand for Ambulance services**

6.16 The key conclusions from the DSIS report regarding the above are:

- Demand for ambulance services can be linked to population growth but the relationship is complex. While the PCT has a forecasting tool it uses to plan ambulance services, details of their methodology were not available.
- No information was available on future plans for provision.

## **Chapter 7: Waste**

### **The DSIS Report**

- 7.1 The DSIS Utilities and Physical Infrastructure report contains a section on the provision of waste services and the likely additional waste generated as a result of the two development scenarios assessed. The report considers the collection and disposal of Local Authority Collected Waste (LACW) and sets out the policy context and an assessment of existing waste management infrastructure. This is followed by a summary of planned future provision of infrastructure in the context of the requirements arising from the two development scenarios. The costs of provision associated with committed future provision and future demand are provided as an estimate.
- 7.2 Officers from Hertfordshire County Council (HCC) and Dacorum Borough Council (DBC) fed into the DSIS report and their future plans for provision were used rather than quantitative standards. The information in DSIS report is not repeated here, but is updated where circumstances have changed.
- 7.3 The information in this chapter is based on information in published strategies and discussions with providers. A meeting was held between officers from DBC and HCC on 05/12/11, and between officers from DBC on 21/12/11 where waste disposal and collection was discussed respectively.

### **Changes to policy drivers**

- 7.4 Although the Hertfordshire Waste Local Plan is still in place, the Waste Core Strategy and Development Management Policies Document (WCS) underwent public examination in November 2011. The inspector's report has been delayed to allow for further representations to be made in light of the National Planning Policy Framework (NPPF) and is expected later in 2012. The WCS will set out the spatial vision and strategic objectives for waste planning in Hertfordshire and associated policies. It will also set out development management policies to inform decisions for waste planning applications.
- 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.
- 7.6 It should be noted that although most Planning Policy Statements (PPS) have been superseded by the NPPF, PPS10 Sustainable Waste Management remains in place.

## Waste Management Infrastructure

7.7 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.

7.8 In terms of future planned/committed infrastructure, the following are required to meet needs of the future population:

- There is now a planning application under consideration for the additional waste management facility identified as required in the DSIS. The proposal is for a Recycling and Energy Recovery Facility (RERF) to manage the majority of the LACW from across Hertfordshire. The proposed development will have a capacity of 380,000 tonnes annually and be located at New Barnfield, Hatfield.
- Organic Waste Treatment Facility (OWTF) to serve Dacorum (post 2018), Watford and Three Rivers (as acknowledged in the DSIS and the WCS). Ideally, this should be for a new facility to treat 40-50,000 tonnes of organic waste per annum and be operational by 2014.<sup>23</sup> From a waste collection point of view, 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. HCC aim to start procurement procedures for an OWTF in 2013, and it will be up to the market to decide what type of facility is most appropriate.
- An expanded HWRC to replace the facility at Eastman Way is desirable, however, there are a number of issues both with expanding the existing site and with relocating. HCC have yet to decide how best to resolve capacity issues.
- 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). A review of

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<sup>23</sup> Although it is desirable for this facility to be operational by 2014 as that is when the current arrangements for Watford and Three Rivers compostable waste management expire. Dacorum's current compostable waste management arrangements expire in 2018.

the rounds will be undertaken in 2012 to ensure that the most efficient routes and number of rounds are used by the service.

- 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 times 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.
- It is likely that both DBC and HCC will aim to increase recycling rates in the future, and this will lead to a need for more vehicles and transfer facilities. It is currently uncertain how far and how quickly increases will be pursued over the plan period (i.e. to 2031) so it is difficult to predict what level of increased demand will result.

7.9 In addition to the requirements set out above, the Hertfordshire Waste Partnership (made up of the County Council and all district councils) are undertaking the 'Herts Waste Study' which aims to find more efficient solutions to collection, treatment and disposal of waste. It is looking at the potential for joint collection arrangements between districts and at the possibility of locating multiple waste management facilities on single sites. Facilities that may be co-located include a Waste Collection Authority depot, waste transfer and/or dry recycle bulking facilities and a HWRC.

7.10 As the outcome of the Herts Waste Study is not yet known, the potential for the above measures and the likely cost savings are unclear. For this reason, they are not considered to be commitments, or to be required as a result of future development in this report. However, if the study shows the measures in paragraph 7.9 to be optimal way of providing waste collection and disposal services in the future, then they may be considered to be at least partly required as a result of new development.

## **Costs and Funding**

7.11 The day to day costs of waste disposal and collection are funded through HCC's revenue budget and their Waste Infrastructure Capital Grant (WICG) and DBC's Core Budget respectively. Funding sources for new facilities varies. For waste collection, bins and recycling boxes (for households) are funded by DBC's capital budgets, as are new vehicles and investments to improve operations at Cupid Green Depot. For waste disposal, new facilities tend to be funded by those who want to develop them, and this has historically been partly funded by the redevelopment of the previous facility's site. The forthcoming RERF will be funded by the contractor under PFI

(Private Finance Initiative), and the OWTF will be funded by a private operator, although the exact mechanism is not yet known.

7.12 The costs of the requirements set out in paragraph 7.8 has been estimated by officers at DBC and HCC as:

- The proposed RERF at New Barnfield, Hatfield is estimated at £200M
- 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.
- The cost of providing an expanded HWRC, whether on the existing site or a new site, will be determined by many factors. A modern HWRC would need a rectangular concreted area of 70-90m x 50-70m with good road access. The cost of developing a 'flat' site (i.e. no clearance or demolition required) would be in the order of £2M.
- 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.
- The cost of expanding and/or re-organising Cupid Green Depot is unknown as the extent of expansion/re-organisation is unknown.
- The cost of accommodating increased recycling rates is unknown because it is currently uncertain how far and how quickly increases will be pursued.

## **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.
- 8.3 A meeting was held between officers from DBC and Sportspace on 09/12/11 where planned future provision of sports facilities and the impact of the residential development planned through the Core Strategy was discussed.

### **Changes to policy context**

- 8.4 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.
- 8.5 The Council have recently adopted a Sports Policy Statement (April 2012) outlining its 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.

- 8.6 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.

### **Schemes that have been delivered**

- 8.7 A number of the schemes identified as planned in the DSIS report have subsequently been delivered. The schemes which have been delivered are:
- The XC extreme sports facility at Jarman Park
  - Full size synthetic turf pitch at Ashlyns School, Berkhamsted
  - 5-a-side synthetic turf pitch at Hemel Hempstead Football Club

### **Infrastructure requirements not identified in the DSIS**

- 8.8 Officers from Sportspace confirmed that the most pressing requirements are the redevelopment of Tring and Berkhamsted Sports Centres.
- 8.9 Tring Sports Centre is on the Tring School site, is in a poor state of repair and is expensive to maintain. The existing facilities are suitable for use by the school but are not suitable for use by the whole town, although the type and quantity of facilities are about right for the needs of the town. Sportspace estimate that without refurbishment, they would have to consider closing the facility in around 2 years. Ideally, Sportspace would like to demolish the building(s) and replace with a new facility on the same site, which is estimated to cost approximately £3-5m.
- 8.10 Berkhamsted Sports Centre is also in a poor state of repair and is in need of significant refurbishment. 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 redevelopment of the existing site. Ashlyns School, Berkhamsted, have expressed their desire to build a new sports centre on their site for school and community use and have approached Sportspace to discuss the potential development of a shared facility. This is at a very early stage of discussion, and it is not yet clear whether it would work with the future needs of the school, or whether it is feasible financially, or in planning terms.
- 8.11 Sportspace also operate Little Hay Golf Course, and they have aspirations to develop function space and spa facilities at the Golf Course. However, it is considered that these are required to meet existing demand, rather than as a result of new development.

## **Funding**

8.12 There are a number of private sports clubs in the borough, which are largely funded through membership. Community sports facilities throughout the borough are provided by Sportspace, a Sports Trust and registered charity which works closely with the Council. 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

### The DSIS Report

- 9.1 The DSIS Social Infrastructure report contains a section on the provision of 'other social infrastructure' which considers provision of community buildings, libraries, job brokerage services and cemeteries. For each type of infrastructure, the report sets out the policy context and an assessment of existing provision for each, followed by committed future provision and an assessment of future demand. The costs of provision associated with committed future provision and future demand are provided as an estimate where appropriate.
- 9.2 The impact of the two development scenarios on provision requirements were assessed for community buildings and libraries. The future requirement for job brokerage was not assessed quantitatively due to the complex relationship between the level of housing and the demand for services. The impact of the two development scenarios on the future requirement for cemetery space was not differentiated due to the way cemetery need is identified and planned for.
- 9.3 Officers from Herts County Council (HCC), DBC and Job Centre Plus fed into the DSIS report and their forecasts were used where possible, although they were supplemented by assumptions and standards where useful. The information in DSIS report is not repeated here, but is updated where circumstances have changed.
- 9.4 This report provides an update of the assessment in the DSIS for libraries, job brokerage and cemeteries, and also provides an assessment of adult care services, which was not considered in the DSIS report.
- 9.5 The assessment of community buildings in the DSIS concluded that there is currently a surplus of community space in the borough and that DBC does not have any plans to increase provision in the foreseeable future. As nothing has changed in terms of community space provision or the Council's intentions since the DSIS was written, the assessment has not been repeated for this updated IDP.
- 9.6 The information in this chapter is based on information in published strategies, other documents and discussions with providers. Meetings were held between officers from DBC and HCC on 23/01/12 where libraries were discussed and between officers from DBC regarding cemeteries on 01/12/11. A teleconference was held between officers from DBC, Jobcentre Plus and DWP (Department for Work and Pensions) regarding job brokerage on 03/02/12.

## **Community Buildings**

9.7 No change to information within DSIS – see paragraph 9.5.

### **Libraries**

- 9.8 Much of the information in the DSIS report regarding libraries remains valid. However, due to cuts to the funding of public services, libraries across Hertfordshire have been subjected to reduced opening hours, thus reducing the average hours per 1,000 population, which was already below the recommended standard.
- 9.9 The DSIS report used the recommended 30 sqm per 1,000 population standard of provision to assess the library floorspace required as a result of new development. Whilst this approach is useful, and still considered valid, officers from HCC libraries explained that although the increase in population arising from new development has a direct impact on the demand for library services, other factors also influence future requirements.
- 9.10 The suitability of the existing building to meet the needs of the population is a consideration; the size, location and state of repair are all important. Planned development in central locations also influences the library service's plans for future provision. One reason for this is that it is important for the library to remain central in any town or village, so if a planned town centre development would shift the focus of the town centre away from the current centre, the library service would need to consider moving its premises. Whilst the library service takes a proactive approach to planning future provision, it can also be reactive, and take advantage of planned developments. For example, the planned town centre regeneration in Hemel Hempstead, provides an opportunity for a new library in the town centre.
- 9.11 Officers from HCC libraries, confirmed that a new library for Hemel Hempstead town centre is high on its priority list as the existing library is around half the size required for the population of the town. The planned regeneration of Hemel Hempstead town centre, and the provision of a Public Service Quarter (PSQ) provides an opportunity for a new library to serve the town. Both HCC and DBC share the aim of providing a new library as part of the PSQ in Hemel Hempstead town centre.
- 9.12 Ideally, a new library for Hemel Hempstead would have approximately 2,000 sqm of floorspace. It is unlikely that this amount of floorspace will be available to the library as part of the PSQ, however, the ability to share community space and community IT facilities with other services in the PSQ means that the needs of the community can be met with less than this. The total floorspace of the planned PSQ, and how it will be divided between the occupiers is still under consideration.

- 9.13 The cost of providing the library element of the PSQ is currently unknown as it is dependent on a number of factors including the amount of floorspace.
- 9.14 With regards to funding new library provision, HCC confirmed that they are heavily dependent on developer contributions as funding from the HCC capital programme has reduced significantly, as has availability from external funding pots such as the Big Lottery Fund.

### **Job Brokerage**

- 9.15 The section on job brokerage within the DSIS report was written with input largely from Jobcentre Plus (JCP), and considered their requirements for future provision. Whilst JCP remain one of the key providers of job brokerage services in Dacorum, the Council now also play an active role in its provision.
- 9.16 As mentioned above the DSIS does not attempt to identify the quantitative future requirement for job brokerage services arising from new development. It is not considered appropriate to do so as the demand for services is not straight forward to model and is influenced by a number of factors, including the level of new development.
- 9.17 The level and type of commercial development has a big influence on the need for job brokerage services. Job brokerage services are required to support successful growth of the local economy as a well trained and suitably qualified workforce is attractive to employers. However, it is a symbiotic relationship as new employment development provides opportunities for training schemes such as apprenticeships as discussed below.

#### *Jobcentre Plus*

- 9.18 Officers from JCP confirmed that currently there are no plans to alter the existing provision of services in Dacorum. However, it is important to note that the impact on JCP floorspace requirements of switching to the Universal Credit is unclear, and until it is known it is difficult to forecast future need for floorspace. A physical JCP presence in Hemel Hempstead town centre is considered important and certain to remain for the foreseeable future.
- 9.19 Another change for JCP is the incremental digitisation of many of their services, which allows advisors to spend more time with clients who can't access services remotely. It also means that their floorspace requirements may fall, although this is not certain at the moment.
- 9.20 JCP confirmed that their services are funded entirely by central government, through the Department for Work and Pensions (DWP), and that presently they do not rely on developer contributions.

### *Dacorum Borough Council's role*

- 9.21 There is a degree of crossover between provision of further education and the job brokerage services provided by West Herts College and DBC. This section should be read in conjunction with the further education section of chapter 3.
- 9.22 One of the aims of the Core Strategy is to promote a vibrant and prosperous economy, and it is recognised that there are skills gaps that will need to be filled if the local economy is to reach its full potential. This is supported by Policy CS14: Economic Development, which states that *'Initiatives that help the local workforce adjust to change and develop their skills will be supported.'*
- 9.23 DBC consider the promotion of learning and skills to be a key part of economic recovery and the maintenance of a strong economy. An Employment and Skills Partnership Board has been set up comprising employers, key stakeholders and DBC. The partnership brings together a range of organisations and aims to use labour market intelligence to respond better to the changing needs and expectations of individuals and employers. There will be co-ordination of business support, the local workforce and funding priorities to improve the skills and employment opportunities of people across Dacorum.
- 9.24 DBC are also developing/refreshing a/the skills strategy to reflect the Governments vision for reform of the further education and skills system to improve the skills of the workforce, the performance of the economy and engagement in learning. Working in partnership with employers, training providers and key stakeholders the strategy will ensure that Dacorum's economy remains competitive in the global context and most notably in the development of a skilled workforce competitive on a global stage.
- 9.25 The approach described above supports the economic growth planned in Dacorum, and as such it is considered appropriate to seek developer contributions towards the ESP Board's activities. As ESP Board and the skills strategy are at an early stage of development, a programme of activities with associated costs and phasing is not yet available.

### **Cemeteries**

- 9.26 The DSIS identified that 12 acres additional cemetery space would be required by 2013 to ensure adequate burial space to the end of the plan period (2031). However, since then, the Council has designated an additional area of expansion at Woodwells cemetery whilst a site for a new cemetery is identified and prepared. The cemeteries manager at DBC also confirmed that it is preferable to plan for longer time periods when providing

cemetery space, and suggested that it is more appropriate to identify a larger site to ensure burial space for around 50 years.

9.27 Based on current internment rates, the existing burial space is expected to be sufficient until 2016/17. In order to continue to provide burial space for another 50 years, a site of approximately 30 acres is required. The cost of preparing a new cemetery site (excluding the cost of purchasing land) is approximately £1.8m.

9.28 The Council have considered a number of options and Bunkers Park has emerged as the preferred location for a new cemetery subject to landowner agreement to sell the land for the use.

9.29 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 in approximately 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.

### **Health and Community Services (formerly Adult Care Services)**

9.30 The term Health and Community Services covers the needs of older people, people with disabilities and people with mental health problems who require assistance, either to live independently, or to live in some form of residential care.

9.31 The Health and Community Services Plan 2009/12 states that HCC aim to enable people requiring adult care to live independently for as long as possible and they provide a range of community services to meet this aim. However, in many instances people cannot live independently and require some form of residential care. HCC provide residential care for those who cannot afford private care either through use of buildings they own, but are managed by Quantum Care and Runwood, or by 'purchasing' beds in privately run homes.

9.32 The Health and Community Services (HCS) team at HCC have provided DBC with a district profile which shows the projected population of adults who require support from HCS. It also shows projected service requirements to 2030, which are set out in table 9.1.

**Table 9.1: Projected Adult Care Services requirements 2010 – 2030**

Type of support		2010 - 2015	2015 - 2020	2020 - 2030	Growth over 20 years
Older people – residential (HCC funded)	Total	264	280	383	
	Additional	-101	16	103	18
Older people – nursing (HCC funded)	Total	151	182	250	
	Additional	42	31	68	142
Older people – flexicare (HCC funded)	Total	215	296	406	
	Additional	139	81	110	330
Learning disability – residential + nursing	Total	46	47	48	
	Additional	-43	1	1	-41
Learning disability – supported living	Total	162	165	167	
	Additional	56	3	2	61
Physical disability – residential + nursing	Total	29	30	31	
	Additional	20	1	1	22

*NB. 'Additional' refers to the increase in provision from current levels  
Source: Mini Profile District Summaries Dacorum, HCC*

9.33 As shown in table 9.1, the demand for Adult Care Services in Dacorum is projected to increase over the next 20 years, particularly for 'older people'. It is not clear from the information provided how the demand will be distributed across the borough, but it is anticipated that the greatest level of demand will be in Hemel Hempstead.

9.34 The greatest increase in demand is for flexicare housing, which is semi-communal living where residents live in their own apartment. There are communal areas, such as lounges, so people can meet up with friends or join in with social activities if they want to. Some of the larger or newer flexicare housing schemes also include facilities that help to promote a wider sense of community, such as internet cafes, hairdressing, telehealth suites and treatment rooms. Flexicare housing is permanently staffed, and can cater for people with different levels of care need; as such it reduces the need for places in residential care homes.

## **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 defines sewerage infrastructure as sewage treatment works, pumping stations, sewers, maintenance and control equipment, IT and buildings. The report sets out the policy context and an assessment of existing and committed sewerage infrastructure. This is followed by an estimate of future demand arising from the two growth scenarios and the potential sewerage infrastructure upgrades identified in the Water Cycle Study Scoping Study. The report outlines the planning process for Thames Water (the provider) and potential costs for the required improvements/upgrades to sewerage infrastructure.
- 10.2 As identified in the DSIS report, Thames Water provide infrastructure over area a much wider than just Dacorum. Their future plans for infrastructure provision are based on growth from the whole region, 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 following a meeting between officers from DBC and Thames Water on 17/01/12. 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 Since the DSIS was written the UK Water and Flood Management Act (2010) has been adopted by the Government. The act deals largely with surface water drainage and makes the County Council the relevant flood authority. Developers will be required to submit sustainable drainage plans alongside planning applications, and these must be approved by the County Council 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 County Council as the flood authority. The act is expected to come into force by Spring 2013.

### **Existing and Committed Infrastructure Provision**

- 10.5 The summaries of information from the East of England Plan, the East of England Capacity Delivery Strategy Study and the Water Cycle Study Scoping Study are still considered valid. With regards to the required

upgrades identified through the Water Cycle Study Scoping Study (para 5.16 in the DSIS Utilities and Physical Infrastructure report) the upgrades to the Waste Water Treatment Works (WWTW) at Berkhamsted and Tring have now taken place. With regards to the conclusions for the other settlements identified at para 5.16 in the DSIS report, Thames Water confirmed that the information remains correct for the level of growth proposed in the Core Strategy.

## **Estimating Future Demand**

- 10.6 It is not considered particularly useful to project the estimated sewage flow rates for the level of development planned through the Core Strategy. This is because of the uncertainty and changes to the planned levels of development in the region over which sewerage infrastructure is provided and planned and the need to factor in this wider context.
- 10.7 Thames Water draw up Asset Management Plans (AMPs) in 5 year cycles. These plans set out future infrastructure provision and the associated funding mechanisms and priorities. The plan is based largely on information provided by local planning authorities and is agreed by OFWAT<sup>24</sup>. Their current business plan (AMP 5: 2010 - 2015) is based on the level of development set out in the regional strategies, which is likely to change at the district level, and to overestimate the actual level of future growth. As such Thames Water have asked Local Planning Authorities to provide updated planned development levels for use in the next plan period (AMP6: 2015 - 2020).
- 10.8 For the sub-region, Thames Water wish to do some more detailed modelling work for the Water Cycle Study group area. The residential development levels and on site assumptions underpinning Core Strategies from each authority will feed into the modelling work, which will cover the period to 2031, i.e. a longer period than the AMP periods that the business plans cover.
- 10.9 DBC will continue to liaise closely with 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.

## **Issues/Future Trends**

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

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<sup>24</sup> OFWAT is the economic regulator of the water and sewerage industry in England and Wales

## **Demand for Sewerage Infrastructure arising from Growth**

10.11 See paragraphs 7.6 – 7.9 above.

### **Resulting Sewerage Infrastructure Requirements**

10.12 Thames Water have confirmed that the infrastructure upgrades required as a result of the development planned in the Core Strategy is as follows:

- Either Maple Lodge or Blackbirds waste water treatment works (WWTW) will require upgrading within the plan period. The decision on which will be made once the modelling work referred to in para 7.8 has been completed. The decision will be set out in AMP7 (2015-2020). This upgrade will serve development in Hemel Hempstead and Kings Langley.
- Berkhamsted's WWTW has recently been upgraded and has sufficient capacity to cope with the levels of new development proposed in the Core Strategy.
- Tring is served by its own WWTW. It is expected that whilst the network capacity (pipes) will need some upgrading, the treatment works itself can accommodate the proposed level of new development.
- Bovingdon is served by the Chesham WWTW. Whilst there have been some recent reliability issues at the Bovingdon pumping station, there are no capacity issues and the levels of new development proposed can be accommodated.
- The capacity of Markyate WWTW will be increased by the planned expansion of the reed bed and the levels of development planned in the village can be accommodated at the local WWTW.

10.13 Overall Thames Water confirmed that whilst the level of development programmed in the Core Strategy will create the need for some infrastructure upgrades, they are happy that such upgrades can be comfortably provided at the appropriate time.

### **Costs and Funding**

10.14 The information in this section of the DSIS report is still considered valid. Although only an estimate, the information in table 5.6 provides a useful indication of the likely scale of the costs involved in providing the improvements/upgrades to sewerage infrastructure. The estimate is based on a proportion of total investment for the whole Thames Water region equal to the proportion of the population of the region attributable to Dacorum. The estimate is broken down by the type of work planned, and

the total costs for new and renovated sewers and new and refurbished WWTWs attributable to Dacorum for the period 2010-2020 is £80.5m.

- 10.15 Thames Water expanded upon the information in paragraph 5.41 regarding a situation where a developer wishes to build a development before Thames Water can fund the required upgrades to the sewerage infrastructure. In this instance, Thames Water are reliant on the planning system to impose a grampian condition to ensure these costs are met by the developer.
- 10.16 Officers from Thames Water confirmed that infrastructure upgrades and improvements are usually funded via revenue from customer bills, and are agreed with OFWAT via the Asset Management Plans (AMPs). Whilst developer contributions are generally not sought towards sewerage infrastructure upgrades, developers may be responsible for ensuring adequate on-site provision.

# Chapter 11: Energy (Electricity and Gas)

## The DSIS Report

- 11.1 The DSIS Utilities and Physical Infrastructure report contains a section on the provision of energy network infrastructure in Dacorum and the likely impact of the two development scenarios assessed. The report provides an overview of the way the electricity and gas networks operate, the operating companies and the extent of the network coverage. The adequacy of the existing and committed infrastructure is then assessed and future demand is estimated for the two growth scenarios. The resultant energy infrastructure requirements are set out with an assessment of costs and funding.
- 11.2 As identified in the DSIS report, energy infrastructure is planned at a much wider area than just Dacorum. The providers' future plans for infrastructure provision are based on growth from whole region over which they plan, which makes it difficult to draw clear conclusions about the impact of the development planned in Dacorum
- 11.3 Much of the information in the DSIS report remains valid, and as such is not repeated in this IDP report. Some of the information in the DSIS report is updated here following meetings between officers from DBC and UK Power Networks (UKPN) on 05/01/12 and between officers from DBC and National Grid on 15/02/12. 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 have been superseded by new information.
- 11.4 Officers at Southern Gas Networks (SGN) were contacted regarding this update to the IDP report, however, it was agreed that the information within the DSIS regarding the SGN network would not change as a result of the updated level of planned development. As noted in the DSIS report, only a small part of SGN's network falls within Dacorum, which is an area just outside Tring. The level of development planned at Tring is very similar to that considered in the DSIS, and the main urban area and local allocation both fall within National Grid's jurisdiction.

## Policy Drivers

- 11.5 Since the DSIS was written UK Power Networks (UKPN) has taken over the operation of the network previously operated by EDF Energy. They provide electricity over the same geographical area as EDF Energy, and Dacorum falls within the Eastern Power Network (EPN).
- 11.6 The rest of the Policy Drivers section from the DSIS report remains correct.

## **Existing and Committed Infrastructure**

- 11.7 The information in the sections ‘Dacorum’s Energy Network’ and ‘Existing Energy Provision via the Network’ within the DSIS report remains correct.
- 11.8 With regards to the information in the ‘Planned Investment’ section there are some minor updates as set out below.
- 11.9 Officers from National Grid have confirmed that local reinforcements to the network are likely to be required to serve new development, but that from a strategic point of view, the impact of the planned development can be absorbed by the gas network. They also confirmed that they are in the process of upgrading the medium pressure system in Berkhamsted to its maximum capacity, however, it is likely to take a number of years to complete.
- 11.10 Details about planned investment in the electricity network were not available, but officers from 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.
- 11.11 The information in the ‘Adequacy of Existing and Committed Infrastructure’ section remains unchanged.

## **Estimating Future Demand**

- 11.12 The information in the section ‘Provision Standards and Assessment of Network Capacity’ is considered to be valid.
- 11.13 The gas and electricity provision standards set out in the DSIS report (Table 3.1) were confirmed by the providers as correct. The information pertaining to these, including the caveats, in the section ‘Provision Standards and Assessment of Network Capacity’ remains valid. The issues identified for predicting future energy usage trends set out in the DSIS report, relating to the Code for Sustainable Homes and Decentralised Energy Generation remain valid and useful.

## **Energy Demand arising from Growth**

- 11.14 This section of the DSIS report relates specifically to the development scenarios assessed, and therefore is no longer considered valid.
- 11.15 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.

11.16 UKPN provided an assessment of the electricity demand arising from the planned development, and an estimate of how this demand would be apportioned between existing substations. They used this information to determine the upgrades that would be required to primary and grid substations accommodate the planned development. Table 11.1 shows the estimated demand and how it will be apportioned. The required upgrades are set out in the next section.

**Table 11.1: Implications of planned growth for the electricity network to 2031**

<b>Substation</b>	<b>Additional load due to residential growth (kVA)<sup>1</sup></b>	<b>Additional load due to Commercial growth (kVA)<sup>1</sup></b>	<b>Total</b>
Hemel North	1,480		1,480
Hemel East	120	3,460	3,580
Warners End	3,510	2,140	5,650
St Pauls	530	2,140	2,670
Frogmore	2,030	2,140	4,170
Industrial	1,480	7,030	8,510
Tring	530		530
Berkhamsted	780		780
Kings Langley	80		80
Caddington	230		230
Lye Green Primary	140		140
Other (general)	200		200
<b>Total</b>	<b>11,110</b>	<b>16,910</b>	<b>28,020</b>

<sup>1</sup>: Kilovolt-amperes

11.17 Similar projections of demand were not available from National Grid. The provision standards set out in the DSIS have been applied to the planned development levels in order to assess the likely additional requirement on the gas network.

**Tables 11.2: Estimated increase in gas flows arising from planned development 2006 – 2031**

<b>Development Type and level planned 2006 - 31</b>	<b>Provision Standard (m<sup>3</sup> per hour)</b>	<b>Additional requirement (m<sup>3</sup> per hour)</b>
Residential, 11,320 dwellings	0.81 per dwelling	9,170
Office, 131,000 sqm	0.001 per sqm	131
Retail, 63,750 sqm	0.01 per sqm	637.5
<b>Total</b>	<b>n/a</b>	<b>9,938.5</b>

## **Resulting Energy Infrastructure Requirements**

11.18 The upgrades to the primary and grid substations required as a result of the additional electricity load on the network associated with table 11.1 are set out below.

11.19 The primary substation upgrades required, and the estimated costs are:

- Hemel East: Installation of 1 x new 33kV circuit from Piccotts End Grid and installation of a new 12/24 transformer. £3.5m
- Warners End: Installation of 2 x new 33kV circuits from Piccotts End Grid, replacement of 2 transformers and replacement of the 11kV switchboard. £4.8m
- Frogmore: Load transfers to Hemel East and Warners End (once reinforced). £383K
- Berkhamsted: Installation of 2 x new 33kV circuits from Lye Green Grid and replacement of 11kV switchboard. £4m

11.20 The grid substation upgrades required, and the estimated costs are:

- Ilmer Grid: Installation of 2 x new 90mVA transformers and replacement of the 33kVA switchboard. £5.6m
- Aylesbury East Grid: Following reinforcement of Ilmer Grid, transfer North Drive Primary and Wendover Primary onto Ilmer.

11.21 In addition to the above, UKPN confirmed that an additional primary substation may be required at Hemel Hempstead as identified in the DSIS report. 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.

11.22 As set out in paragraph 11.9, National Grid confirmed 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.

### **Costs and funding**

11.23 The costs associated with the necessary upgrades to the electricity substations are set out in paragraphs 11.19 - 11.20. Additional costs of electricity infrastructure, as set out in the DSIS report are estimated as follows:

- New primary substation: £2m plus land
- 33kV cabling: £500,000 per km
- 132kV cabling: £2m per km

11.24 Similar information about the cost of providing upgrades to the gas network was not available.

11.25 The rest of the information in this chapter of the DSIS report is still considered to be valid.



## **Chapter 12: Potable Water**

- 12.1 Veolia Water is the main supplier of potable water in Dacorum. When contacted about updating the information in the DSIS report for this IDP, Veolia Water confirmed that the changes to the planned level of development from the scenarios assessed in the DSIS would not alter the information regarding potable water in the DSIS report.
- 12.2 The 'Water' chapter in the DSIS Utilities and Physical Infrastructure Assessment report remains entirely valid.
- 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 but did note that local network reinforcement would be likely to be required.



## Chapter 13: Conclusions

- 13.1. The assessment of infrastructure need provided by this IDP shows that the development planned in the Core Strategy can be supported by the necessary infrastructure. 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'.
- 13.2. 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 and the delivery of the upgrades to the WWTW necessary to support development in the wider sub-region.
- 13.3. The recent changes to the way many providers are funded makes the delivery of necessary infrastructure in the future more difficult. Changes to the way development will contribute to the funding of such infrastructure presents further challenges, but also potential opportunities. The key to meeting such challenges, and to delivering the necessary infrastructure, will be for continued liaison between the borough council and infrastructure providers.
- 13.4. This IDP is seen by the borough council as the first step towards a new approach to infrastructure delivery arising from the CIL regulations. Whilst it updates the previous IDP contained within the DSIS, it represents the first stage of direct liaison between the borough council and providers regarding long-term, strategic infrastructure provision. It is intended to maintain close liaison with providers in the further development of Council's approach to securing and allocating funding towards infrastructure delivery.
- 13.5. The council intends to update the infrastructure requirements set out in the infrastructure delivery schedule (IDS) on an annual basis. It is not considered necessary to update the whole of the IDS every year; the annual update will consider the infrastructure requirements over the subsequent 5 years unless advised otherwise by the providers. The annual update will include monitoring the delivery of infrastructure, and will focus particularly on updating the estimated costs of delivering the infrastructure. Any key changes will be reported through the Council's Annual Monitoring Report (AMR).
- 13.6. This IDP provides a useful assessment of the overall infrastructure required to support the development planned in the Core Strategy. Further work will however be required to assess the infrastructure requirements for individual developments. This work will be progressed alongside the Site Allocations DPD, and will include assessments for each site of the on- and off-site

infrastructure requirements. These, will in turn, inform decisions on the phasing of sites.

- 13.7. The CIL regulations 2010 (and subsequent amendments) placed restrictions on the use of developer contributions paid through Section 106 (S106) and the Community Infrastructure Levy (CIL). S106 contributions towards a single piece or type of infrastructure may be pooled from up to 5 legal agreements, and S106 contributions cannot be sought towards infrastructure intended to be funded via CIL monies. The combined effect of these rules mean that the Council needs a well thought out strategy setting out how it intends to fund different types or pieces of infrastructure.
- 13.8. The Council will develop a strategy with infrastructure providers and other stakeholders to ensure optimal use of the CIL and S106 to capture developer contributions and to deliver infrastructure. In order to develop such a strategy, and for it to be successful, the Council will need to have a good understanding of the likely phasing of development sites, and their infrastructure requirements as well as cumulative infrastructure requirements. The Site Allocations DPD, the Town Centre Masterplan, the East Hemel Hempstead Area Action Plan and any new development briefs will therefore be key to the successful development and implementation of the strategy.

# **APPENDIX A**

## **INFRASTRUCTURE DELIVERY SCHEDULE**



## Notes

When reading the Infrastructure Delivery Schedule it is important to note the following:

- Costs are assumed to be correct at June 2012 unless otherwise stated. Costs, or their base date, may be updated in the annual update to be incorporate in the AMR.
- The transport schemes included in the Infrastructure Delivery Schedule (IDS) are taken from published strategies where there is a degree of certainty about when they will be delivered and how much they will cost. The IDS underestimates the number of schemes planned for areas of the borough other than Hemel Hempstead because transport plans are not yet published; schemes will be included for other parts of the borough when the relevant transport plans are published.
- The term 'developer contributions' covers contributions made via S106 and CIL.

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
<i>Transport infrastructure</i>							
Bus	HHUTP	Improved bus stop locations	Ongoing	Variable	LTP, developer contributions, other improvement initiatives	Relevant funding allocated annually.	HCC
	HHUTP	Review bus timetables, Hemel Hempstead	Ongoing	TBC	LTP Capital, S106, other development and improvement initiatives	Relevant funding allocated annually.	Bus operators
	HHUTP	Review bus stop locations, Hemel Hempstead	Ongoing	TBC	LTP capital, S106, other development and improvement initiatives	No funding secured. Relevant funding allocated annually.	HCC
	LSTF bid	Implementation of Gade Valley bus service: Watford – Hemel Hempstead	2011/12	£194K	LSTF/ S106	£90K secured from S106 in Three Rivers. Dependent on success of LSTF bid for the rest.	Hertfordshire Highways, but the service will be taken by commercial operator in 2015
	LSTF bid	QNP support officers, county wide	2012 onwards	£240K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways

	<b>Source</b>	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
	LSTF bid	QNP smart ticketing, Hemel Hempstead	2012 onwards	£70K	LSTF	Part funding secured in 2011/12. Funding decision for 2012-2015 expected June 2012.	Hertfordshire Highways
	LSTF bid	Maylands bus interchange improvements, Hemel Hempstead	2012/13	£115K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	LSTF bid	Maylands to Station Bus Link – procure operator in order to make the service more regular and secure for the long term. Hemel Hempstead	2012/13	£209K	LSTF + contributions from businesses	Dependent on success of LSTF bid	DBC/ operators
	LSTF bid	QNP household marketing, Hemel Hempstead	2012-15	£149K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	HHUTP LSTF bid	QNP stop specific information, Hemel Hempstead	2013-14	£102K	LSTF	Dependent on success of LSTF bid	HCC/ Bus operators
	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	2014	TBC	Bus operators	?	Bus operators
	HHUTP	Review fare structures/lower fares – work of Intalink – HCC partnership with operators that do ticket offers e.g. PlusBUS and Explorer tickets. Hemel Hempstead	Ongoing	£20K	Operators/ developer contributions	Ongoing revenue funding.	Bus operators
	HHUTP	Improve access into schools for buses, Hemel Hempstead	2014	£25-150K per	LTP, developer	No funding secured.	HCC

	<b>Source</b>	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
				school	contributions/ external funding		
	HHUTP LSTF bid	QNP Bus & Infrastructure Upgrades, county wide	2015	£1.8m	LSTF/ Developer Contributions GAF/	£40K GAF money secured from St Albans. Dependent on success of LSTF bid for the rest.	Hertfordshire Highways
	Hemel Hempstead Town Centre Masterplan	Hemel Hempstead bus station relocation	2015	TBC	Developer Contributions	No funding secured	DBC/HCC
	HHUTP	Bus priority on key routes, Hemel Hempstead	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	Hertfordshire Highways/ operators
	HHUTP	Integrated ticketing between public transport services, Hemel Hempstead	Ongoing	TBC	LTP, developer contributions/ external funding	No funding secured	Bus and train operators
	HHUTP	Increased bus frequencies, Hemel Hempstead	2019	TBC	HCC/ operators/	No funding secured	Bus operators

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
					S106/DfT grants		
	HHUTP	Extension of bus services, e.g. orbital service, Hemel Hempstead	2019	TBC	LTP, developer contributions/ external funding	No funding secured	Bus operators
	HHUTP	Subsidy to bus operators, Hemel Hempstead	2019	TBC	LTP, developer contributions/ external funding	No funding secured	HCC
	HHUTP	Wider concessionary fare scheme, Hemel Hempstead	2019	TBC	LTP, developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Guided busway (e.g. on A414), Hemel Hempstead	2019	£2m per km	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
	HHUTP	New vehicles (e.g. low-floor buses)	2019	£100K per	Operators	?	Bus operators

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
				vehicle			
	HHUTP	CCTV on buses and at station	2019	£500K	Bus operators and London Midland	?	Bus operators
	HHUTP	New bus-only road e.g. linking Hillfield Road and Turners Hill, Hemel Hempstead	2029	£2m per km	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			HCC
	HHUTP	Signage, various locations, Hemel Hempstead.	Ongoing	£500 per sign	LTP, S106, other development and improvement initiatives	No funding secured.	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,	Ongoing	£2-5K (informal)	LTP, developer	Some funding secured. To be	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Hemel Hempstead.		TBC (formal)	contributions/ external funding	delivered through localised initiatives.	
	HHUTP	Cycle lanes/routes (e.g. London/Station Road, Plough roundabout/Leighton Buzzard Road, Fishery Lane)	Ongoing	£1K per 20m + signage	LTP, developer contributions/ external funding	Some funding secured.  Schemes likely to be delivered as part of wider improvement schemes.	HCC
	HHUTP	Canal path seating (station to town centre, Grand Union Canal to Apsley)	Short term	£2K per seat	British Waterways/ developer contributions	?	British Waterways
	HHUTP	Cycle maps	Nearing completion	£5K	LSTF	Dependent on success of LSTF bid	DBC
	LTP3	Kingshill Way Pedestrian Crossing	2015-16	£500K	Developer Contributions/ LTP	No funding secured	Hertfordshire Highways
	LSTF bid	TravelSmart. Hemel Hempstead (18,000 homes)	2012-15	£525K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	Maylands Master Plan LSTF	Maylands Avenue Urban Realm Improvements, Hemel Hempstead	2013	£299K	LSTF/S106	£18K secured through S106. Dependent on success of LSTF bid for the rest.	DBC
	LTP3	Maylands to Town Centre walking and cycling scheme. Hemel	2013	£479K	LSTF/ LTP/ Developer	£248K secured through S106.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Hempstead			Contributions	Dependent on success of LSTF bid for the rest.	
	HHUTP LSTF bid	Nickey Line Access Ramp Improvements. Hemel Hempstead	2013	£62K or £350K	LSTF/ LTP/ developer contributions/ external funding	£20K secured through S106. Dependent on success of LSTF bid for the rest.	HCC
	LSTF bid	Upgrade cycle parking at Hemel Hempstead, Watford and St Albans town centre.	2013/14	£112K (for 3 town centres)	LSTF	Subject to LSTF bid success.	HCC
	HHUTP	Pavement widening (e.g. London/Station Road, Bennetts End Road). Hemel Hempstead	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	2014	£5K per 10m	LTP/ developer contributions/ external funding	No funding secured	HCC
	HHUTP	Junction re-design (e.g. Allandale). Hemel Hempstead	2014	£75-100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Change traffic priorities to favour pedestrians (e.g. Leighton Buzzard	2014	£15-20K per	LTP/ developer	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Road). Hemel Hempstead		signals	contributions/ external funding	Some may be delivered through the Hemel Hempstead town centre Masterplan.	
	HHUTP LTP3	Improve access for pedestrians and cyclists into some areas (e.g. Apsley, Jarman Park). Hemel Hempstead	2014	£50K per scheme	LTP/ developer contributions/ external funding	Part funding secured for Jarman Park crossing from S106 - Tesco extension. No other funding secured.	HCC
	HHUTP	Provide pedestrian and cycling links to employment zones from residential areas. Hemel Hempstead	2014	£15-300K per scheme	LTP/ developer contributions/ external funding	Some schemes are part funded. Delivery expected to be as part of wider improvement schemes.	HCC
	HHUTP	Canal access route/ramp (e.g. London/Station Rd, Fishery Lane). Hemel Hempstead	2014	£20K per 10m	British Waterways	?	British Waterways
	HHUTP	Cycle parking (e.g. at rail station, Maylands, local centres, sports and leisure centres). Hemel Hempstead	2014	£1-2K (one Sheffield stand); £5-10K (for cover)	LTP/ developer contributions/ external funding	Cycle parking improvements underway at stations.  No funding secured for other locations.	HCC/ London Midland
	HHUTP	Shared cycle track (e.g. St Albans Road, Redbourn Road). Hemel	2014	£10K per 10m	LTP/ developer	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Hempstead			contributions/ external funding		
	HHUTP	Pavement/towpath widening (e.g. Queensway, Grand Union Canal). Hemel Hempstead	2014	£2.5-5K per 10m	HCC, British Waterways	?	HCC/British Waterways
	HHUTP	Improve access to schools on foot/cycle (e.g. Longdean School). Hemel Hempstead	2014	£20K per school	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	CCTV at cycle stands (Marlowes). Hemel Hempstead	2014	£25K	LTP/ developer contributions/ external funding	No funding secured. May be delivered as part of a wider improvements scheme	HCC
	HHUTP	Lighting (e.g. Briery Way, Marlowes). Hemel Hempstead	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	2014	£75-100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Improved cycle and pedestrian links between Hemel Hempstead station	2016	£500K	HCC/DBC, LTP/	Part funded: £300K earmarked by DBC	DBC/ Herts Highways

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		and town centre. Hemel Hempstead			developer contributions/ external funding	from GAF funding	
	HHUTP	Lighting (e.g. Plough roundabout, Fishery Lane, Underpass to park, Briery Way, St Albans Hill). Hemel Hempstead	2019	Up to £100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Pelican crossings (e.g. Longfield). Hemel Hempstead	2019	£50-70K (Pelican)	LTP/ developer contributions/ external funding	Some are part funded.  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	Some are part funded.  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	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
						schemes	
	HHUTP	Improve Plough Roundabout to ensure cyclists' safety. Hemel Hempstead	2019	£500K (off-road)	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	No funding secured.	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 town centre). Hemel Hempstead	2021	£50K per 100m	LTP/ developer contributions/ external funding	No funding secured	Sustrans
	Urban Park Project	Durrants Hill Rd footpath improvements. Hemel Hempstead	?	£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

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Rail	Route Plan (Route 18) West Coast Mainline	National Stations Improvement Programme Works at Berkhamsted	2013	Cost not provided	Network Rail	Assume that funding is secure	Network Rail
	HHUTP	Stabilise rail timetabling. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2014	TBC	Train Operating Companies (TOCs)	?	London Midland
	HHUTP	Feasibility study of enhancing the station as a gateway to the town. Hemel Hempstead	2014	£25K	?	No funding secured	DBC
	LTP2	DDA access scheme at Hemel Hempstead station	2016	?	TOCs	No funding secured	HCC/TOCs
	HHUTP	RTPI at stations. Hemel Hempstead	2019	?	TOCs	?	TOCs
	HHUTP	Increased rail frequencies, Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2019	TBC	TOCs	?	London Midland
	HHUTP	CCTV at rail stations. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2019	£250K	TOCs	?	London Midland
	HHUTP	Step-free access to platforms (rail stations). Hemel Hempstead	2019	TBC	DfT	Funding Secured	London Midland
	HHUTP	Increased track capacity on West Coast Mainline. Hemel Hempstead, Berkhamsted, Tring, Kings Langley	2029	TBC	DfT/TOCs	?	Network Rail
	HHUTP	Longer trains. Hemel Hempstead,	2029	TBC	TOCs	?	London

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Berkhamsted, Tring, Kings Langley					Midland
Road	HHUTP	Improve road markings. Hemel Hempstead	Short term	£50K	HCC: Road maintenance budgets	Funding allocated through Herts Asset Management Plan	HCC
	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
	LTP3	Leighton Buzzard Road A4146 Casualty Reduction Proposals. Great Gaddesden	2011-12	?	LTP/ developer contributions/ external funding	?	Hertfordshire Highways
	LTP3	Maylands Avenue/Maxted Road S012 Signal Refurbishment	2011-12	?	LTP/ developer contributions/ external funding	?	Hertfordshire Highways
	Confirmed by Highways Agency officer	M25 widening to D4 J16-23. Sub-regional	2012	£601.8m	PFI	£602m secured	Highways Agency
	GPF bid	Improve junction access from Three Cherry Trees Lane to Spencers Park and master planning work.	2012	£1.5m	GPF then developer	Funding secure subject to final council approval.	HCA

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Hemel Hempstead					
	GPF bid	Wood Lane End Access Road to Maylands Gateway and utilities infrastructure. Hemel Hempstead	2013	£2m	GPF then developer	Dependent on success of further application to LEP for GPF – due October 2012.	HCA
	GPF bid	Maylands Gateway site 2 road widening and utilities infrastructure. Hemel Hempstead	2013	£2m	Developer	Potential for future round of GPF allocation	DBC
	LTP3	Tower Hill/The Street Crossroads Route Casualty Reduction. Chipperfield	2012-13	?	LTP/ developer contributions/ external funding	?	Hertfordshire Highways
	LTP3	Kings Road Route Casualty Reduction Proposals. Berkhamsted	2012-13	?	LTP/ developer contributions/ external funding	?	Hertfordshire Highways
	LTP3	High St/Nr Swingate Lane S032 Signal Refurbishment. Berkhamsted	2012-13	?	LTP revenue	?	Hertfordshire Highways
	LTP3	High St/Nr Chesham Road S025 Signal Refurbishment. Berkhamsted	2012-13	?	?	?	Hertfordshire Highways
	LTP3	London Rd/Durrants Hill/Storey Street Junction Casualty Reduction	2012-13	?	?	?	Hertfordshire Highways
	LTP3	Redbourn Road Crossroads Casualty Reduction Proposals	2012-13	?	?	?	Hertfordshire Highways
	LTP3	Leighton Buzzard Road Casualty Reduction Proposals	2012-13	?	?	?	Hertfordshire Highways

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	LTP3	St. Albans Rd/Bennetts End Rd Roundabout Casualty Reduction Proposals	2012-13	?	?	?	Hertfordshire Highways
	LTP3	Queensway/Nr Adeyfield Rd S235 Signal Refurbishment	2012-13	?	LTP revenue	?	Hertfordshire Highways
	LTP3	Bulbourne Road Casualty Reduction Proposals	2012-13	?	?	?	Hertfordshire Highways
	LTP3	High Street Tring EPIP Point	2012-13	?	?	?	Hertfordshire Highways
	LTP3	Dunstable Road/Folly Bridge S123 Signal Refurbishment	2012-13	?	?	?	Hertfordshire Highways
	HHUTP	Average speed cameras (e.g. Leverstock Green Road, Green Ln, St Albans Rd, Link Rd). Hemel Hempstead	2014	£200K per camera	LTP/ developer contribution s/ external funding	No funding secure	HCC
	HHUTP	Lower speed limits (e.g. Breakspear Way). Hemel Hempstead	2014	£30K per link	LTP/ developer contribution s/ external funding	No funding secure	HCC
	HHUTP	Traffic calming (e.g. Chaulden, Bunkers Lane). Hemel Hempstead	2014	£10K per 10m	LTP/ developer contribution s/ external funding	No funding secure	HCC
	HHUTP	Road safety training. Hemel Hempstead	2014	£30K	LTP capital	?	HCC
	HHUTP	Review of new traffic lights on	2014	£20K	LTP/	No funding secure	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Leighton Buzzard Road. Hemel Hempstead			developer contributions/ external funding		
	Identified by consultants, confirmed by HH	Signalise Kings Road/Kingshill Way/ Durrants Road. Berkhamsted	2016	£500,000	HCC/ developer contributions	No funding 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
	HHUTP	AQMA at J8 of M1 and Plough roundabout. Hemel Hempstead	2019	£80K	?	?	HCC Highways Agency
	HHUTP	Widen roads (e.g. A414 and A4146). Hemel Hempstead	2019	£150K per 100m	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Redesign roads and junctions (e.g.	2019	£250-	LTP/	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Bourne End slip road, Two Waters flyover). Hemel Hempstead		500K	developer contributions/ external funding		
	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	No funding secured.	HCC

	<b>Source</b>	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
					contributions/ external funding		
	HHUTP	HGV park in Maylands. Hemel Hempstead	2019	£200K	LTP/ developer contributions/ external funding	No funding secured.	Maylands Partnership
	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.	2019	£500K	LTP/	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		Adeyfield). Hemel Hempstead		per street	developer contributions/ external funding		
	HHUTP	New traffic signals (e.g. on A414 with Green Lane, with Maylands Ave)	2019	£40K per junction	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Urban Traffic Control/Intelligent Transport Systems. Hemel Hempstead	2019	TBC	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Install one-way system in the Old Town. Hemel Hempstead	2012-13	£1.12m	DBC and HCC	£1m secure from DBC capital.  £120K secure from HCC (via LTP)	HCC, DBC
	HHUTP	Designate "Red Routes" to ban stopping and parking (e.g. Queensway). Hemel Hempstead	2019	£300K	LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Variable message signs. Hemel Hempstead	2019	£2m	LTP/ developer contributions/ external funding	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	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 Eastern 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	Make the Old Town a historic core	2029	TBC	?	?	HCC
	HHUTP	Provide roundabouts (e.g. Shenley Rd/ Redbourn Rd). Hemel Hempstead	2029	£500K each	LTP/ developer contributions/ external funding	No funding secured.	HCC
Smarter	HHUTP	Business and school travel planning	2011	£719K	LSTF/HCC	£221K secure from	Hertfordshire

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
Choices Interventions	LSTF bid	(part of a wider scheme). Borough Wide	onwards			HCC. Remainder dependent on success of LSTF bid.	Highways
	HHUTP LSTF bid	Maylands Area Travel Plan. Hemel Hempstead	2011 onwards	£151K	LSTF	Dependent on success of LSTF bid	DBC
	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
	LSTF bid	Maylands Car Club (car sharing scheme). Hemel Hempstead	2012	£3K All revenue	LSTF	Dependent on success of LSTF bid	DBC
	LTP3	Safer Routes to School, Berkhamsted	2011-12	£25K per school	LTP/ developer contributions/ external funding	?	HCC
	HHUTP	Safer Routes to School, Hemel Hempstead	2014			?	HCC
	HHUTP	Personalised Travel Plans for households in areas with good sustainable transport options. Hemel Hempstead	2014	£15 per person	HCC or DfT capital. LTP/ developer contributions/ external funding	No funding secured.	HCC
	HHUTP	Car clubs. Hemel Hempstead	2014	£250K	LTP/ developer contributions/ external funding	No funding secured.	HCC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	HHUTP	Travel awareness campaigns. Hemel Hempstead	2014	£200K	HCC of DfT capital	No funding secured.	HCC
	HHUTP	Prevent/discourage pupils/parents from driving to school. Hemel Hempstead	2014	£100K	LTP/ developer contributions/ external funding	No funding secured.	HCC
Innovation	LSTF bid HHUTP	Community Transport Scheme. Borough wide	2011/12 (to set up, but ongoing)	£221K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	LSTF bid	Home to school transport: central hub (part of a wider scheme). Borough wide	2011 start, but will be ongoing	£448K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	LSTF bid	Scoots Moped Scheme. Borough wide	2012 onwards	£583K	LSTF	Dependent on success of LSTF bid	Hertfordshire Highways
	HHUTP LSTF bid	Intelligent Transport Systems for cars, buses and at bus stops. Hemel Hempstead	2012-15	£871K	HCC/LSTF	£250K secure from HCC. £100K LSTF funding secure for 2010/11, but future dependent on success of future rounds.	HCC
Community Transport measures	HHUTP	Provide easier access for mobility impaired (e.g. dropped kerbs). Hemel Hempstead	Short term	£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

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
	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	2014	TBC	LTP/ developer contributions/ external funding	No funding secured.	DBC
	HHUTP	Expand Dial-a-Ride. Hemel Hempstead	2014	TBC	LTP/ developer contributions/ external funding	No funding secured.	DBC
	HHUTP	Demand Responsive Transport to serve the hospital. Hemel Hempstead	2014	TBC	LTP/ developer contributions/ external funding	No funding secured.	DBC
Parking	HHUTP Parking Development Manager, DBC	Expand CPZ schemes (e.g. around the two railway stations). Hemel Hempstead	2012-14	£120K per scheme	DBC	Part secured. Funding allocated in phases.	DBC
	HHUTP	Remove Parking around schools. Hemel Hempstead	2012-14	£20K per school	?	?	DBC
	HHUTP	Provide Motorcycle parking (e.g.	2014	£50K	?	?	DBC

	Source	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
		railway stations, Maylands, Marlowes)					
	HHUTP	Provide additional parking for disabled drivers	2014	£50K	?	?	DBC

	Infrastructure Project	Indicative Delivery Date	Estimated Cost	Funding Sources	Funding status	Lead Delivery Agency
<i>Education infrastructure</i>						
Early years education	None identified	N/A	N/A	HCC/ developer contributions/ external funding sources	N/A	HCC
Primary education	Hemel Hempstead North East Primary Planning Area: Re-opening of Barncroft school and expansion of existing school by 1 f.e.	Post 2016	£8.32m	HCC/ developer contributions/ external funding sources	Funding not secure	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 secure	HCC/academy/ free school
	Hemel Hempstead South East Primary Planning Area: one new 2 f.e. school	Post 2016	£7.64m + land	HCC/ developer contributions/ external funding sources	Funding not secure	HCC/academy/ free school
	Hemel Hempstead West and North West Primary Planning Area: one new 2 f.e.	Dependent upon the	£7.64m	Developer	Funding not secure	Developer/HCC/ academy/ free

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
	school as part of LA3	phasing of housing				school
	Hemel Hempstead Town Centre Primary Planning Area: one new 2 f.e. school	2012-14	£7.64m + land	HCC/ developer contributions/ external funding sources	Funding not secure	Developer/HCC/ academy/ free school
	Berkhamsted Primary Planning Area: two new 2 f.e. schools	Dependent upon outcome of current consultation regarding change to 2 tier education	£15.28m	HCC/ developer contributions/ external funding sources	Funding not secure	Developer/HCC/ academy/ free school
Secondary education	Possible expansion of Tring Secondary School and relocation of playing fields	Post 2014	?	HCC/ developer contributions/ external funding sources	Funding not secure	HCC
Further education	Redevelopment of West Herts College Hemel Hempstead campus	2015/16	£18-22m	Uplift in value from redevelopment of site	Funding not secure	West Herts College
	Redevelopment of 6 <sup>th</sup> form facilities, Kings Langley secondary school	Dependent upon timing of external funding	?	External funding source – priority schools programme	Funding secured	HCC
	Additional apprenticeships in the voluntary sector	2012/13 2013/14	£80K (over 2 years)	DBC core funding	Funding not yet secure	DBC

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
<i>Healthcare infrastructure</i>						
	Redevelopment of Hemel Hempstead General Hospital	2014	?	?	?	West Hertfordshire Hospitals NHS Trust/ NHS Hertfordshire
	16-18 mental health beds, Hemel Hempstead	?	?	Herts Valley CCG	Funding not secure	Hertfordshire Partnership NHS Foundation Trust
<i>Open space infrastructure</i>						
Play Space	Play area improvements to existing facilities at: <ul style="list-style-type: none"> <li>- Hyde Lane, Bovington</li> <li>- Lockers Park, Hemel Hempstead</li> <li>- Jocketts, Hemel Hempstead</li> <li>- Warners End Valley, Hemel Hempstead</li> <li>- Coronation Fields, Hemel Hempstead</li> <li>- Miswell Lane, Tring</li> <li>- Gadebridge Skate Park, Hemel Hempstead</li> </ul>	2012-14	£260K +	DBC capital budget and developer contributions.	Funding secured.  £258K from capital budget  £2K from S106	DBC
	Improvements to and relocation of Marlowes play area. Hemel Hempstead.	2012/13	£30K	GAF	Funding secured	DBC
	Improvements to Lagley Meadow play area. Berkhamsted	2012-14	£45,860	Developer Contributions	Funding secured	DBC
	Improvements to the Kings Langley play area. Kings Langley	2012-13	£13,500	Developer Contributions	Funding secured	DBC
	Improvements to Mortimer Hill play area. Tring.	2012-13	£5,000	Grant from Groundworks to	Funding secured.	Tring Play For All

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
				Tring Play For All		
	Improvements to Bunkers Lane play area. Hemel Hempstead.	2012-15	£80K	Developer Contributions	£80K of funding secured through S106.	DBC
	Improvements to George Street play area. Berkhamsted.	Dependent on delivery of development and receipt of S106 money.	?	Developer Contributions	£10.4K of funding secured through S106 subject to expected revision to planning application.	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
	Improvements to Grovehill/Woodhall Farm play area. Hemel Hempstead.	Dependent on delivery of development and receipt of S106 money.	?	Developer Contributions	£24,750 of funding secured through S106.	DBC
	New play area at Cherry Trees Lane. – 1 or 2 Hemel Hempstead.	Alongside Development	n/a	Provision required as part of development		Developers
	Two new play areas at Manor Estate. Hemel Hempstead.					
	New play area at Sappi development. Hemel Hempstead.					
	New play area at Green Lane. Hemel Hempstead.					
	New play area at Land West of Tring (Local Allocation). Tring.					
Natural	Target 3 existing Natural Green Spaces for	Ongoing	?	?	?	DBC

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>	
Green Space and Local Nature Reserves	access and interpretation improvements: Woodhall Wood, High Wood and Howe Grove. Hemel Hempstead.						
	Consider designating Local Nature Reserves at High Wood, Maylands Wood, Widmore Wood and Woodhall Wood. Hemel Hempstead.	Ongoing	?	?	?	DBC	
	Designate Dundale as Local Nature Reserve and continue to support the Friends Group Tring.	2015/16	?	?	?	DBC	
	Ashridge: improved green access – as described in DBGIP. Borough wide	?	£100K - £500K	?	?	?	
Other	Improvements to open space at Two Waters (Urban Park) comprising three projects: Hemel Hempstead.						
	- Heath Park Gardens (environmental improvements and improvements to access) in conjunction with Box Moor Trust	2012/13	£140K for phase 1	DBC/ developer contributions/ British Waterways/ Box Moor Trust/ external funding sources	£140K secured through S106	DBC/ Box Moor Trust/ British Waterways/ Boxmoor and District Angling Society/ Dacorum Heritage Trust/ 1 <sup>st</sup> Apsley Scouts	
	- Boxmoor improvements, which includes upgrades to the canal towpath in conjunction with British Waterways	2012-15	?		Funding not secure		
	- Environmental and accessibility improvements to lakes and green space at Apsley	2012-15	£500K		£300K secured from GAF, external funding options for remainder being explored.		
	Refurbishment of Water Gardens Hemel Hempstead.	2015	£3-5m		Heritage Lottery Fund (HLF)		Funding not secure (stage 1 bid to be

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
					submitted 08/12)	
	Bunkers Park extension (30,000 sqm additional space to be provided) to include provision of additional sports pitches. Hemel Hempstead.	?	£700K + land	DBC/developer contributions	£338K secured through S106 - £87,880 received.	DBC
	Improve access to Tring Park – a planning application is under consideration for a car and coach park to serve Tring Park and Tring museum. Tring.	?	?	Heritage Lottery Fund	£11.7K granted to prepare stage 2 bid	Woodland Trust and Natural History Museum
	Tring Park Enhancements – as described in DBGIP Tring.	?	£100K - £500K	?	?	?
	Aldbury Nowers habitat restoration and enhancement – as described in DBGIP	?	£100K - £500K	?	?	?
	Grand Union Canal enhancement – as described in DBGIP and HSGIP Borough wide	?	£2m +	?	?	?
	River Valleys project – Gade, Bulbourne and Ver – as described in DBGIP and in the HSGIP (as Thames Tributaries, River Valleys and corridors) Borough wide	?	£100K - £500K	?	Funding not secure. Catchment restoration bids to be submitted in November	?
	Rural villages and common links – as described in DBGIP Borough wide	?	Up to £100K	?	?	?
	Urban greening for Hemel Hempstead – as described in DBGIP and in HSGIP (as Urban GI Heritage) Hemel Hempstead.	?	At least £500K	?	?	?
	'Green Hertfordshire' interactive map project	?	£50K -	?	?	?

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
	– as described in DBGIP and the HSGIP Borough wide		£100K			
	Projects to support the policies and actions in the Green Space Strategy	Variable	Variable	Variable	Variable	Variable
<i>Emergency services infrastructure</i>						
Police	29.5 Police staff	2006 - 2031	£237,107	Hertfordshire Constabulary/CIL monies	Funding not yet secure	Hertfordshire Constabulary
	151 sqm of police floorspace		£472,357			
	Reprovision of Hemel Hempstead police station in PSQ	2016	N/A – part of a wider scheme	Uplift in value of existing police station site through redevelopment	Funding not yet secure	DBC/ Hertfordshire Constabulary
<i>Waste infrastructure</i>						
Waste Disposal	Energy from waste facility. New Barnfield, Hatfield – subject to planning permission. County-wide.	2016	£20m	Defra (via PFI), developer contributions and Veolia (operator).	Funding secured. Veolia will pay the construction costs of ≈ £200m. HCC will receive £115.3m of PFI credits towards the payment of 'gate fees'.	Veolia
	Organic Waste Treatment Facility (OWTF) to serve Dacorum, Watford and Three Rivers. Hemel-Watford corridor Borough-wide.	2014-18	?	Likely to be funded initially by the private sector and repaid by way of a 'gate fee'.	Funding not secure	HCC and private sector developer
	Expanded HWRC Hemel Hempstead.	TBC	£2m plus clearance, flattening and land costs	DBC/HCC core budgets/realisation of land value from redevelopment of existing HWRC site.	Funding not secure	HCC

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
Waste Collection	Two additional collection rounds (comprising 4 vehicles and associated staff). Borough-wide.	Dependent on outcome of research undertaken during 2012-13.	1.08m plus running costs	DBC core budget/ developer contributions	Funding not secure	DBC
	Expansion/re-organisation of Cupid Green Depot. Hemel Hempstead.	TBC	TBC	DBC core budget/ developer contributions	Funding not secure	DBC
	Additional vehicles and transfer facilities to accommodate increased recycling rates. Borough-wide	?	?	DBC core budget/ HCC/ developer contributions	Funding not secure	DBC/HCC
<i>Sports facilities infrastructure</i>						
Health and Fitness	56 additional gym workstations at Hemel Hempstead Sports Centre. Hemel Hempstead.	2012	?	Sportspace	Funding secured	Sportspace
	7 additional gym workstations at Berkhamsted Sports Centre. Berkhamsted	2012	?	Sportspace	Funding secured	Sportspace
Sports Centre	Replacement of Tring Sports Centre Tring.	?	£3-5m	Lottery Iconic Facility Funding, DBC, HCC, Tring School, Tring Town Council and Sportspace.	No funding secured.	Sportspace
	Refurbishment/redevelopment of Berkhamsted Sports Centre Berkhamsted.	?	£5m	Lottery Iconic Facility Funding, DBC, HCC, value from redeveloping existing site and Sportspace.	No funding secured.	Sportspace

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<i>Libraries infrastructure</i>						
	Re-provision of Hemel Hempstead town centre library as part of PSQ development. Hemel Hempstead.	2016	TBC	HCC/ developer contributions/ external funding sources	Funding not secure	DBC/HCC
<i>Job brokerage infrastructure</i>						
	Activities supported by ESP Board and Skills Strategy	?	?	DBC/developer contributions/ external funding	£430K secured from DBC core budgets	DBC/ESP Board/ Employers/ Training providers
<i>Cemeteries infrastructure</i>						
	New cemetery site, 30 acres Hemel Hempstead	2016/7	£1.8m plus land	DBC	Funding not secure	DBC
	Reserve land for extension to cemetery Tring	2040	N/A	Landowner to reserve land	N/A	DBC/Landowner
<i>Health and community services infrastructure</i>						
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
	330 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	Additional care to provide residential and nursing care	Up to 2030	At current rate	HCC	Funding to be confirmed as	HCC/ Healthcare providers

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
with physical disabilities					demography develops	
<i>Sewerage and waste water infrastructure</i>						
	Upgrades to Blackbirds or Maple Lodge WWTW. To serve development at Hemel Hempstead and Kings Langley	2015-2020	£17m <sup>25</sup>	Thames Water revenue from customer bills	Funding for works to 2015 secure. Funding not secure beyond 2015 – to be confirmed through subsequent AMPs and approved by OFWAT.	Thames Water
	Improvements to capacity of sewerage network serving Tring.	To support new development	£47.6m <sup>26</sup>			
	Improvements to Bovingdon pumping station.	Ongoing				
	Increase capacity of Markyate WWTW via expansion of reed beds.	?				
	Localised improvements/upgrades to sewerage infrastructure and network.	To support new development				
	Borough wide					
<i>Electricity infrastructure</i>						
	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.	2012	£3.5m	UKPN and developers	?	UKPN

<sup>25</sup> Source: Table 5.6 in DSIS: Utilities and Physical Infrastructure Assessment. Based on the estimated cost of new and refurbished WWTWs during period 2015-20 attributable to Dacorum.

<sup>26</sup> Source: Table 5.6 in DSIS: Utilities and Physical Infrastructure Assessment. Based on the estimated cost of new and renovated sewers and new and refurbished pumping stations during period 2010-20 attributable to Dacorum.

	<b>Infrastructure Project</b>	<b>Indicative Delivery Date</b>	<b>Estimated Cost</b>	<b>Funding Sources</b>	<b>Funding status</b>	<b>Lead Delivery Agency</b>
	Upgrades to Warners End primary substation: Installation of 2 x new 33kV circuits from Piccotts End Grid, replacement of 2 transformers and replacement of the 11kV switchboard. Hemel Hempstead.	2020	£4.8m	UKPN and developers	?	UKPN
	Alterations to Frogmore primary substation: Load transfers to Hemel East and Warners End (once reinforced). Hemel Hempstead.	Following necessary reinforcements	£338K	UKPN and developers	?	UKPN
	Upgrades to Berkhamsted primary substation: Installation of 2 x new 33kV circuits from Lye Green Grid and replacement of 11kV switchboard. Berkhamsted	?	£4m	UKPN and developers	?	UKPN
	Upgrades to Ilmer Grid substation: Installation of 2 x new 90mVA transformers and replacement of the 33kVA switchboard. Borough wide	?	£5.6m	UKPN and developers	?	UKPN
<i>Gas infrastructure</i>						
	Local network reinforcement	As necessary to support development	n/a	National Grid/ Southern Gas Network	?	National Grid/ Southern Gas Network
<i>Potable water infrastructure</i>						
	Local network reinforcement	As necessary to support development	n/a	Veolia Water/ Thames Water	?	Veolia Water/ Thames Water