

North Herts District Council

Infrastructure Delivery Plan to support the
North Hertfordshire Local Plan 2011 -
2031

September 2016 (Updated January
2018)

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Planning, Infrastructure Definition and Delivery & Project Management

Explanation on the January 2018 IDP Update

This document was originally prepared in September 2016. In the 16 months since publication a number of things have changed, and in the summer of 2017, in the lead up to the Local Plan examination, the decision was made to undertake a partial refresh to enable a number of new points of evidence to be considered, in particular:

- The reduction in housing growth figures (as they now appear in the submission version of the Local Plan and the subject of examination) compared to those assessed in the original IDP (which are some 4.4% higher)
- New evidence (including the October 2017 Transport Strategy and the 2016 Open Space Review and Standards)
- New funding opportunities that have emerged since 2016 (including announcements in the 2017 Spring and Autumn budgets)
- A clearer assessment of how the infrastructure that is required could be funded
- Specific evidence (including viability work) on the infrastructure needs associated with the 6 largest strategic sites
- Other minor textual changes to provide a clearer explanation or correct factual errors

Text boxes at the start of each chapter provide a summary of the changes within that chapter

The Update does not alter the conclusions of the original document, but provides further evidence to support those conclusions

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Foreword

This Infrastructure Delivery Plan (IDP) as a document seeks to identify all relevant infrastructure needs that are anticipated over the whole plan period from this point starting forward and which can clearly be related to growth, so that there is clear evidence that such need is both known and actively being planned for.

The content of this IDP is based on the potential implications of infrastructure need arising from meeting the district's growth needs to 2031 together with any relevant development taking place in adjoining districts that might have significant infrastructure implications for North Hertfordshire. This report has been prepared on the basis that the development of circa 14,400 new dwellings is achieved over the plan period¹. The infrastructure needs set out in chapters 5 to 12 and the projects set out in the Infrastructure Delivery Schedule in Appendix 1 are based on this figure.

Identifying infrastructure need over a period of 15 years can be complex. Few infrastructure providers are actively planning over so lengthy a timeframe and for that reason alone, the identification of needs in the later years of the plan period include a degree of conjecture.

The precise nature of what is needed in a range of services – is likely to be in a constant state of flux. This is influenced by a range of factors such as changes in demographics and movements into and out of local communities, the power and influence of new technology and new arrangements for planning and delivering structure notwithstanding community's expectations of what they need to be provided with – is also constantly shifting.

To the mix must be added the historic infrastructure that has been identified but never provided – otherwise known as the infrastructure deficit. IDPs are rightly focused on what infrastructure is needed to make the emerging plan work and cannot expect to right past wrongs in terms of historic failures to provide what has been judged as necessary. However, the impact of already congested roads, underinvestment in health facilities and oversubscribed schools, for instance, cannot and must not be ignored.

This IDP aims to achieve a presentation of a balanced, well considered view of future needs related to Plan activities and how they can be carefully planned, adequately funded and delivered in a timely fashion. The additional benefit arising out of such a document is that it allows all those with an interest in infrastructure provision to take stock and plan successful strategies to ensure that these needs become a reality.

¹ The emerging strategy tested through this IDP was defined in advance of final decisions being taken on the sites and targets included in the draft Local Plan.

1. Introduction

- 1.1 The National Planning Policy Framework states that the planning system should “pro-actively drive and support sustainable economic development to deliver homes, business and industrial units, infrastructure and thriving local places that the country needs.”
- 1.2 Over the plan period from 2011 - 2031 North Herts district is, and will continue to be, the focus of substantial housing and employment growth, which will result in increased pressure on local infrastructure, services and facilities. Given this, it is crucial that new infrastructure is provided to support the delivery of new homes and jobs, and create sustainable and inclusive communities.

Purpose of the IDP

- 1.3 The purpose of any IDP is to identify the infrastructure requirements arising out of an authority's Local Plan over the entire plan period, considering also the cost, timing, potential funding mechanisms and responsibilities for delivery. Those requirements will tend to be focused on the needs associated with housing growth, but also need to take into account the implications of other site allocations (particularly employment site requirements) and other local plan policies.
- 1.4 Infrastructure planning is a key part of the local plan in helping to demonstrate how its policies and site allocations can be delivered. Whilst it will not be necessary to provide a complete answer to all questions relating to this issue, it does allow the key challenges to be defined and the opportunities to be considered.
- 1.5 This process of defining infrastructure needs involves the local planning authority working closely with infrastructure providers to determine requirements over time. Such engagement is an important process as it will:
- enable infrastructure providers to give proper consideration on the scale, nature and location of growth, information which they can then factor into other elements of their service planning work;
 - encourage such providers to think beyond the relatively short term and also less parochially and more holistically (to see their infrastructure planning work in a wider context);
 - alert them as to the available public funding opportunities (such as section 106 and the Community Infrastructure Levy (CIL)) and the opportunities that will exist to secure access to it.
- 1.6 The Infrastructure Delivery Plan (IDP) seeks to establish what additional infrastructure is required to support growth within the district from March 2016 to 2031. *[As noted elsewhere in the document, the IDP is concerned with infrastructure needs going forward, not historic need associated with growth that has already taken place, so whilst the Local Plan covers the period 2011- 2031, a base date of March*

31st 2016 has been selected; this document examines infrastructure need arising from development from that date until the end of the plan period – 2031]

1.7 The IDP aims to:

- Review existing infrastructure provision in the district and identify gaps in provision;
- Set out what infrastructure is required to support growth, where the infrastructure is needed and when it should be delivered;
- Detail the costs associated with the provision of infrastructure items in the district, identify potential funding sources, and highlight gaps in funding, where known;
- Identify mechanisms for delivering infrastructure and outline the key stakeholders involved in the delivery process.

1.8 A schedule of infrastructure projects required to support the delivery of the Council's Local Plan can be found in Appendix 1.

What the IDP represents

1.9 It is important to set out precisely what an IDP represents.

1.10 The IDP is **part of the evidence base to support** the emerging Local Plan and therefore is required to be compatible with it. Its purpose is to identify the infrastructure requirements arising out of that plan over the entire plan period, considering as it does so the cost, timing, potential funding mechanisms and responsibilities for delivery.

1.11 The **IDP is not a policy document**, but instead responds to plan policies. Judgements about whether the policies and strategies that give rise to the infrastructure identified in the IDP are the appropriate ones are matters for the local plan; the IDP simply tracks any policy changes through subsequent iterations. The IDP should therefore be judged on whether the infrastructure that responds to local plan policies has been appropriately and accurately identified.

1.12 Finally, and critically, the IDP is **concerned with the infrastructure needs arising from growth** as set out in the Local Plan, and not about addressing any perceived deficiencies and/or underinvestment in the infrastructure currently provided. Furthermore, the infrastructure needs set out in the IDP are focused on those needs arising as a result of growth within the plan period that has yet to take place, and the IDP discounts completions that have already taken place within the plan period on the basis that any infrastructure needs arising from such development should already have been provided for. The selection of a base date of 31st March 2016 reflects this.

1.13 Any perceived underinvestment in infrastructure is clearly a concern, and the district council would expect this to be addressed by infrastructure funders and/or providers. It is however considered unreasonable for future growth to take responsibility for remedying any past failures to adequately provide for, for instance, any current shortage of school places or hospital beds; these are responsibilities that must rest

with those who plan for such services. Whilst the provision of infrastructure needs to be considered in the round, the IDP only addresses that element of need directly associated with growth.

- 1.14** Transportation infrastructure is, however, excepted from the past provision deficit approach. Most other infrastructure need is met through a series of geographically based decisions – meeting the growth needs arising from school places for example is responded to through a number of separate decisions to expand schools (or provide new schools) in appropriate locations to meet overall demand.
- 1.15** With transportation infrastructure – and specifically, highways - it is impossible to view such infrastructure other than as being part of an interconnected network, in which decisions to locate growth in one location has significant wider repercussions. A single child requires a sole school place and an individual patient just one hospital bed, whereas a single journey across the district's highway network will involve numerous interactions with other parts of the network. If some parts of the network are already suffering from congestion, then it becomes very difficult to consider the highway infrastructure impacts of growth in one part of the district in isolation.
- 1.16** For this reason, the IDP looks in transportation infrastructure holistically – not just examining the immediate consequences of growth but the wider picture of congestion in the network, although as noted elsewhere in this IDP, it does not necessarily imply that all identified highway infrastructure needs should be met without question.

What is infrastructure?

- 1.17** In order for communities to be successful, it is vital that they are well served by a range of infrastructure that is appropriate to people's needs, affordable and accessible.
- 1.18** Infrastructure can generally be grouped into three main areas:
- **Physical Infrastructure such as:** transport infrastructure (roads, public transport, pedestrian and cycle routes, public rights of way and bridleways), cemeteries, communications, district heating systems, gas and electricity infrastructure, water provision and treatment, sewerage works and waste collection, recycling and disposal
 - **Social Infrastructure such as:** primary and secondary schools, nurseries, further education, primary and secondary healthcare, public emergency services, libraries, sports and recreation facilities, community facilities, cultural services and places of worship
 - **Green Infrastructure such as:** open space, allotments, parks and gardens, formal and informal green space, green corridors, river corridors, waterways, greenways, urban open land, Sites of Special Scientific Interest, conservation areas, and sports pitches
- 1.19** Different types of infrastructure are required to support different scales of development within an area:

- On a smaller scale, **on site** infrastructure (including roads and walk/cycleways, gas pipes and electricity cabling, water supply and waste water disposal pipes etc) is necessary to enable the delivery of a specific development;
- At a **neighbourhood** level, infrastructure is required to mitigate the impact of the development and support the day to day needs of the new population, for example community facilities, GP surgeries, schools, places of worship and sports facilities; and
- At a more **strategic** level, larger pieces of infrastructure (including new waste disposal facilities, sewerage treatment works, cemeteries, cultural facilities such as museums and galleries, hospitals, electricity sub-stations, and improvements to the strategic highways network etc) are needed to support population and economic growth across the district and the wider area.

IDP geographies

- 1.20** Chapter 4 seeks to establish the basis for assessing infrastructure needs arising out of growth. Essentially it does so by assigning all future growth to both locations and typologies (whether urban capacity, major greenfield development or growth in villages). Windfall development (which by its nature is essentially footloose) is also assigned to a specific location for this purpose as it also needs to be assessed.
- 1.21** The reason for doing this is twofold. Firstly, the effect of new development may be experienced in different ways in different locations (because for instance one settlement may have higher existing levels of highway congestion, or have greater GP capacity than another) and therefore whilst it is important to consider overall need, it is equally important to consider the impact locally. Secondly, depending on the scale of development and its location this might influence not only the type of provision but also its funding. A major greenfield extension is highly likely to result in the provision of one or more on site primary schools funded through planning obligations, whereas a small urban site might make a contribution to a primary school located off site from the site through s106 or Community Infrastructure Levy (CIL)².
- 1.22** This assessment geography does not often correspond with the assessments of infrastructure needs undertaken by service providers, which are many and varied. Schools are planned on the basis of education planning areas – there are 22 across the county for secondary age planning for instance, and they do not conform to local authority boundaries; GP provision is assessed through examination of the current operational circumstances of individual surgeries; and water and sewerage is planned on the basis of modelling river catchment and capacity within individual sewerage treatment works. Transport is typically considered in relation to transport corridors which may run through a number of districts

² The Council has yet to take a formal decision regarding the introduction (or otherwise) of CIL in the District. References to CIL and Section 106 and s106) in this report should be considered interchangeable as appropriate.

- 1.23** There is therefore no common geography in relation to infrastructure planning, and in the light of this it is considered most appropriate to select a methodology which responds best to an overall assessment of needs for a variety of infrastructure types, which is the one that has been adopted.

Status of the IDP

- 1.24** This document has been prepared for North Herts District Council and is intended to support the delivery of the Council's emerging Local Plan. The IDP is not a policy document, it does however constitute a key piece of the council's evidence base, and will also form the basis for any future development of a CIL charging schedule if taken forward.
- 1.25** The IDP will also assist in facilitating further dialogue with both service providers and developers, and in seeking to influence public, private and agency funding and priorities, to ensure that new development is supported by the right infrastructure. To this end, the IDP is a live document, and will require updating periodically to take account of further updates to the plans and programmes on which it is based.

2. Profile of North Hertfordshire

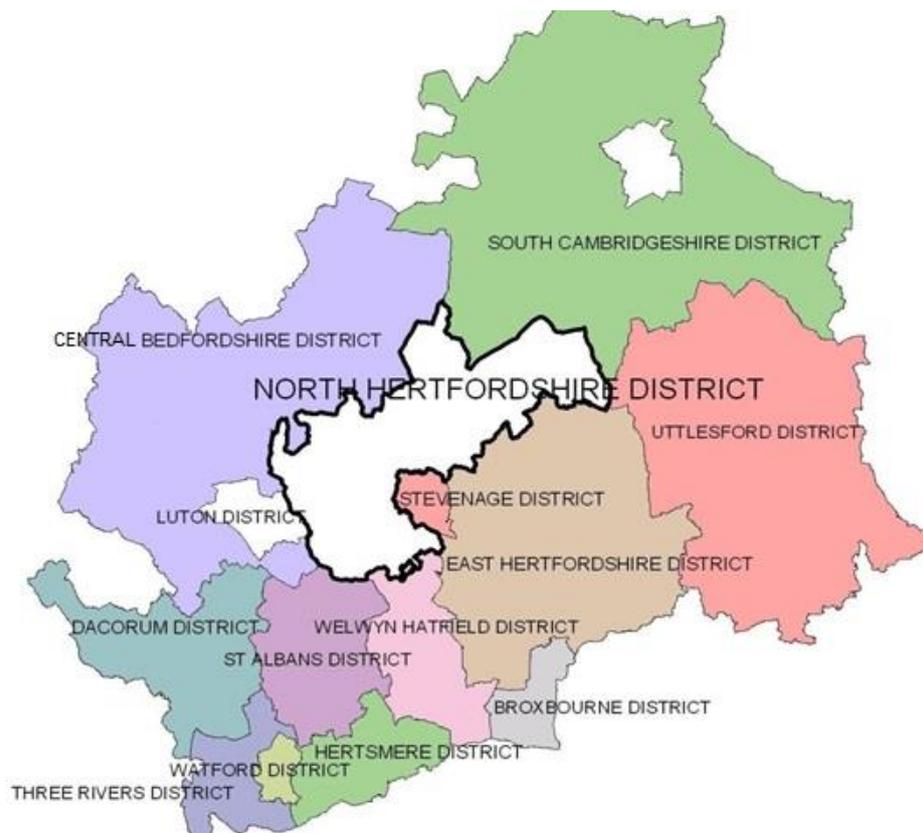


Figure 1: Map of the district and its neighbours

Physical Profile

- 2.1** North Hertfordshire is predominantly rural, incorporating 375km² of attractive undulating countryside following the chalk escarpment of the Chiltern Hills and the East Anglian Heights. The district has four main settlements: the historic market towns of Hitchin, Baldock and Royston and the world's first Garden City, Letchworth. The district has 36 civil parishes and two unparished areas (Hitchin and Baldock). The newest parish, the Great Ashby Community Council, has recently been formed to represent this community, which was previously part of Graveley Parish. A large proportion of the rural area of the district is covered by green belt, the remainder is classified as rural area beyond the green belt.
- 2.2** The district is less than 40 miles from central London and has good transport links served by a fast rail network to the north to Cambridge and to the south to London and intermediate stations including Welwyn Garden City and Stevenage – the latter providing access to intercity services on the East Coast Main Line. The A1(M) and A10 run north-south through the district while the A505 provides for east west links, although generally north/south corridors and radial routes are much better defined and serviced than those routes running east-west. There is easy access to the A1(M) and the airports of Luton and Stansted. The M1 motorway also passes close to the district's western edge.

Demographic profile

- 2.3** The following information presents a brief summary of the demographic profile of North Herts, based on data taken from nationally recognised sources such as the Office for National Statistics, NOMIS, Sport England and Experian.

Population and distribution

- 2.4** The total population, from the 2013 Mid-Year Estimates, in North Hertfordshire was 129,318 (males = 63,530 and females = 65,788).
- 2.5** The most densely populated areas include Letchworth, Baldock, Hitchin and Royston. The district age profile differs from the East of England profile as there is a lower proportion of 15-29 year olds (North Hertfordshire 15.9%, East of England 18%). There are, however, more in the age groups from 30-54 (North Hertfordshire = 36.5%, East = 33.9%).

Ethnicity

- 2.6** 89.5% of the population classify their ethnicity as white; this is higher than the England rate (85.4%). 5.4% of the population classify their ethnicity as Asian, compared to a national average of 7.8%. 2.0% of the population classify their ethnicity as Black, compared to a national average of 3.48%.

Economic Activity and Inactivity

- 2.7** 8 in 10 (81.9%) of North Hertfordshire's 16-64 year olds are economically active (in or seeking employment – March 2014) compared to a national figure of 77.4%. The unemployment rate (Source ONS) in North Hertfordshire is 5.5%; this is below the East of England figure (5.8%) and below the national rate (7.2%). Approximately 1 in 5 (18.1%) of NHDC's 16-64 year olds are economically inactive, with around 1 in 3 students.

Income and benefits dependency

- 2.8** The median figure for full-time earnings (2013) in North Hertfordshire is £33,415; the comparative rate for the East of England is £28,220 (-15.6%) and for Great Britain is £26,941 (-19.3%).
- 2.9** In August 2014 there were 1,158 people in North Hertfordshire claiming Job Seekers Allowance (JSA); this represents a decrease of 3% compared to August 2006 (1,194). However, people claiming JSA only represent 20.3% of benefits claimants in North Hertfordshire; included amongst the remainder are those claiming ESA and incapacity benefits (41.6%) and carers (11.5%).

Deprivation

- 2.10** None of NHDC's population lives in areas within the bottom 10% of Super Output Areas (SOA) nationally, i.e. in the most deprived parts of the country. Furthermore,

only 3.8% are in the next two cohorts; this compares to a national average of 29.8% in the 'lowest' three bands.

- 2.11** 15.7% of the population do not have access to a car. This is much lower than the national figure (24.9%) and slightly lower than regionally (17.7%).

Health

- 2.12** Life expectancy in North Hertfordshire is similar to the national figure; the male rate is currently 79.9 compared to 79.2 for England, and the female equivalent is 82.8 compared to 83.0 nationally.

- 2.13** Adult and child obesity rates in North Hertfordshire are below the national and regional averages, 19.1% against 23.0% nationally for adults and 15.5% against 18.9% nationally for children; however, these figures still present a key challenge for the district.

3. Context and approach

Background

3.1 The context to the IDP and the methodology adopted is as follows:

National Policy Framework - Infrastructure Planning

3.2 The NPPF states that the government expects the planning system to deliver, amongst other things, the infrastructure that the country needs, and that crucially, local authorities should plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies set out in the NPPF.

3.3 In planning for infrastructure the NPPF requires local planning authorities to work with other authorities and providers to:

- Assess the quality and capacity of transport, water, energy, telecommunications, utilities, health and social care, waste and flood defence infrastructure and its ability to meet forecast demands; and
- Take account of the need for nationally significant infrastructure within their areas (NPPF, para 162).

3.4 Furthermore, when setting strategic priorities for an area, paragraph 156 of the NPPF makes it clear that local plans should include strategic policies to deliver:

- Infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management and the provision of minerals and energy (inc heat); in addition to
- Health, security, community and cultural infrastructure and other local facilities.

3.5 With regards to the delivery of specific infrastructure items, the NPPF states that local planning authorities should:

- Set out a strategic approach to planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure (NPPF, paragraph 114);
- Plan positively for the provision and use of shared space, community facilities and other local services to enhance the sustainability of communities and residential environments (NPPF, paragraph 70);
- Take a proactive, positive and collaborative approach to meeting the requirement for school place provision within the area. Here great weight

should be given to the need to create, expand or alter schools (NPPF, paragraph 72);

- Carry out assessments to determine the need for new and/or improved open space and sport and recreation facilities, which should be used to determine what facilities are provided in the district (NPPF, paragraph 73);
- Support the provision of high quality communications infrastructure including high speed broadband (NPPF, paragraph 42).

Viability

- 3.6** The NPPF provides in-depth guidance on viability and requires that local planning authorities have regard to the impact of the *cumulative effect* of all their planning requirements on viability so that the implementation of the plan is not threatened. Furthermore, paragraph 173 states that “the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened.” In addition to this, the NPPF is clear that after taking account of policy requirements, land values should be sufficient to “*provide competitive returns to a willing landowner and willing developer to enable the development to be deliverable*”.
- 3.7** With regards to CIL, the NPPF is clear that its purpose is to *support* and *incentivise* development in an area and advocates that local authorities should prepare and test their CIL Charging Schedules alongside the Local Plan.
- 3.8** The National Planning Practice Guidance (NPPG) re-iterates the guidance in the NPPF on viability and whilst it does not advocate an approach for assessing viability, it does list the underlying principles for understanding viability in planning as being:
- Evidenced based judgment;
 - Collaboration; and
 - A consistent approach
- 3.9** The NPPG states that these principles will also be relevant for CIL.

Viability

The Local Plan Viability Assessment

- 3.10** The district council has commissioned a Local Plan viability assessment from Dixon Searle Partnership. This work is updating previous assessments due to changes in development costs, revenue assumptions and national policy changes that have taken place since the last review in 2012. The July 2016 draft of this document was available for the purposes of considering the emerging conclusions in respect of the IDP.
- 3.11** The emerging conclusions from this work are pertinent to the IDP since the report

looks at the deliverability of affordable housing in tandem with the likely demands placed of new development to fund the necessary infrastructure arising from such development. Though it does not seek to provide definitive evidence, the report concludes that it should be possible to deliver both the infrastructure that will be required and also the provision of significant levels of affordable housing. However, the study notes that negotiation against any affordable housing targets which are set may be required.

The 2016 countywide Viability Study

- 3.12** In April 2016 the County Council and a number of district councils commissioned Chris Marsh Associates to challenge the general practices currently adopted by the development industry in negotiating on s106 agreements and challenging proposed CIL rates. The perception some local authorities have is that in general terms the housing market in Hertfordshire is usually strong, with levels of demand for new housing being driven by both natural population increase and change in the county, together with in migration from London.
- 3.13** However, despite the overall health of the local development economy, levels of contribution towards new infrastructure through Section 106 Agreements and Community Infrastructure Levies are often disappointing. Even with strong market demand, green field sites in the county are claimed not to be viable if they are required to meet the infrastructure contributions asked of them.
- 3.14** This Study seeks to identify what is causing this viability challenge to the funding of infrastructure in the county, particularly in circumstances usually considered to be ideal (large scale green field/green belt releases/strong market conditions) and what the local planning authorities can do to ensure a better outcome for infrastructure funding. Its outcome is due during 2018 and may prove influential in future infrastructure planning.

The Community Infrastructure Levy

- 3.15** The statutory basis for charging CIL was introduced by the Planning Act 2008. Following this, the Community Infrastructure Levy Regulations 2010 came into force on 6 April 2010, allowing CIL to be charged for the first time.
- 3.16** Since then, the CIL Regulations 2010 have been amended four times: first by the CIL (Amendment) Regulations 2011, second by the CIL (Amendment) Regulations 2012 and then more recently by the CIL (Amendment) Regulations 2013, February 2014 and March 2015.
- 3.17** Further to this, the Government also issued new statutory guidance on CIL (April 2013) which Charging Authorities must take into account. This replaces previous guidance and should be complied with in terms of the setting and operation of the Community Infrastructure Levy.

- 3.18** CIL was introduced to allow local authorities to raise funds from developers undertaking new building projects in their area, the purpose of which is to provide infrastructure to support the development of a place, rather than to make individual planning applications acceptable in planning terms. As a result, planning obligations may still be required to address some site specific impacts of development, without which planning permission would not be granted.
- 3.19** However, in order to ensure that planning obligations and CIL can work in a complementary way, the government has also introduced new statutory restrictions upon the use of planning obligations to clarify their purpose and to ensure that the two mechanisms can work effectively together.
- 3.20** To secure this CIL Regulations 2010 change the use of planning obligations by:
- Placing into law the policy tests on the use of planning obligations set out in Circular 05/2005;
 - Ensuring the local use of CIL and planning obligations does not overlap; and
 - Limiting pooled contributions from planning obligations towards infrastructure which may be funded by CIL
- 3.21** In November 2015 the government established a review panel to consider the potential for further changes to the CIL regime. The panel proposed the introduction of a compulsory Local Infrastructure Tariff, but the recommendations appear to have been rejected for the time being by the government who in late 2017 proposed some modifications to the CIL regulations to remove some of the pooling restrictions around s106 contributions on larger development sites amongst other measures.
- 3.22** The district council is yet to make a decision about introducing a CIL as it awaited the potential reform of CIL and information about future pooling arrangements. If the proposed changes are confirmed by the government, the authority will now move ahead with a decision on whether or not to pursue its introduction.

Hertfordshire Planning Framework

- 3.23** The Hertfordshire planning framework is of great significance to the IDP given the two tier nature of local government in the county (with the County Council's responsibility for identifying and overseeing infrastructure investment for a variety of services including transport and education). Important factors are also the collaborative working on infrastructure need that continues to take place, the presence of large towns such as Stevenage and Luton immediately beyond the district boundary (which will have their own infrastructure needs which will interact with those of the district) and the recently emerging role of the Hertfordshire LEP.

The Hertfordshire Local Enterprise Partnership (Herts LEP)

- 3.24** Herts LEP, established in 2010, is one of 39 LEPs across the country tasked by the Government to drive forward sustainable private sector growth and job creation.

3.25 The LEP's role is to bring together local businesses, education providers, voluntary organisations and social enterprises as well as the public sector to tackle key barriers to growth. Whilst the LEP is not involved in direct delivery its purpose is to be a:

- **Strategic leader:** to develop a long-term vision for Hertfordshire's economy
- **Co-ordinator:** to create the relationships and networks that are needed for partnership working to flourish
- **Investor:** the LEP has a proven track record in securing significant investment for the county
- **Advocate:** the LEP acts as a strong voice on behalf of businesses and communities in Hertfordshire within Government to continue to make the case for further investment

Herts LEP Strategic Economic Plan (SEP)

3.26 In October 2013 the LEP published its growth plan for the county - the SEP - entitled 'Perfectly Placed for Business A Strategy for Smart Economic Growth in Hertfordshire, 2013 - 2030'.

3.27 This strategy sets out the LEPs vision, that by 2030, Hertfordshire will be the leading economy at the heart of the UKs Golden Triangle, which encompasses Cambridge, Oxford and London.

3.28 To deliver the vision, the LEP has identified a number of priority areas, which represent major opportunities for Hertfordshire. These include:

- Maintaining Hertfordshire's global excellence in science and technology
- Harnessing Hertfordshire's relationship with London (and elsewhere)
- and Re-invigorating Hertfordshire's places for the 21st Century

3.29 The aim of the strategy is to promote growth in the county and ensure that Hertfordshire is perfectly placed for business. However, in order to achieve this, the strategy recognises that the necessary infrastructure will have to be delivered in Hertfordshire to support this level of growth.

LEP funding sources

3.30 The LEP secures funding for economic growth, skills and enterprise the government's Growth Deal, with funds secured through a competitive process. The period of funding runs from 2015/16 to 2020/21. To date the LEP has secured a £221.5m Growth Deal funding for Hertfordshire and has recently (July 2016) submitted a further bid for £87.5m for additional projects from 2017/18.

3.31 In addition to Growth Deal and EU funding, the LEP has also been allocated £16.2m Growing Places Fund, a revolving loan scheme to unlock developments and enable the delivery of new jobs, commercial space and homes.

LEP spatial priorities

- 3.32** Within the LEP's economic strategy it has identified a priority to target investment in three Growth Areas defined by major radial corridors as follows:
- **M1/M25** – including Hemel Hempstead, Watford and St Albans
 - **A1(M)** – including Stevenage, Welwyn Garden City, Hatfield and Letchworth Garden City
 - **A10/M11** – including Bishop's Stortford, Hertford and Broxbourne
- 3.33** Of these corridors the A1(M) corridor is of high relevance to North Herts, whilst the A10/M11 corridor also has some relevance to the district as a section of the A10 passes north/south through its eastern part, As noted later in the transport chapter (Chapter 5) Growth Area Forums established by the LEP and involving key stakeholders and the wider business community are driving the investment agenda by identifying priorities including strategic development sites and gaps in infrastructure provision. The intention is for this to be championed by the LEP to unlock private sector investment and job creation.
- 3.34** Chapter 5 details the funding that has been secured through the Growth Deal in terms of investment packages for both corridors, which are expected to continue to have significance for future investment decisions in relation to the Growth Deal (which is expected to be refreshed in due course for projects from 2020/21 onwards).

The LEP EU Investment Strategy

- 3.35** The Government has allocated LEPs a 'notional' allocation from the European Structural and Investment Fund programmes for the period 2014 to 2020. As part of this the Hertfordshire LEP received an allocation from the European Regional Development Fund (ERDF) and European Social Fund (ESF) of €69.5m. This is roughly £60m at the current exchange rate.
- 3.36** Hertfordshire LEP has produced an Investment Strategy setting out what its priorities are for spending this money, estimated funding allocations to projects and what governance structure it intends to put in place to oversee expenditure.
- 3.37** Following the majority view expressed by the UK electorate in June 2016 in favour of leaving the European Union and the anticipated invoking of Article 50 of the Lisbon Treaty to commence the process of withdrawal it is anticipated that such funds will cease to be available in due course and it is currently uncertain whether equivalent funding directly from UK government will be put in place.

The Greater Cambridge/Greater Peterborough LEP

- 3.38** North Herts also falls within the jurisdiction of the Greater Cambridge/Greater Peterborough LEP, which has similar aims and objectives to those of Hertfordshire

LEP. The two LEPs are looking to collaborate where appropriate and both are known to be interested in the potential improvements to the A10 including its potential dualling from south of Buntingford to Foxton.

Hertfordshire Infrastructure and Investment Strategy

- 3.39** To inform the infrastructure planning process in Hertfordshire, North Herts District Council, along with the ten other Hertfordshire authorities, commissioned the 'Hertfordshire Infrastructure & Investment Strategy (HIIS)' in October 2009. The study took a comprehensive look at both the "infrastructure deficit" (infrastructure needed currently but not yet provided) and future infrastructure need in the county through to 2031, and successfully engaged a range of infrastructure providers in the process of determining these needs.
- 3.40** The study concentrated on the growth areas and key centres for development change (KCDCs) as set out in the former East of England Plan. It found that most of the infrastructure required to support growth in the district could be classified as strategic in nature as opposed to local infrastructure.
- 3.41** Furthermore, the HIIS concluded that the county required a minimum investment of £2.4bn to deal with the historic infrastructure deficit and a further £2.66bn to cover future needs, and that conventional sources of financial support would only go a limited way towards funding these needs. Anticipating the introduction of CIL, HIIS calculated that an average £23,000 would need to be charged for each new dwelling constructed in Hertfordshire to bridge the shortfall.
- 3.42** Elements of the HIIS were subsequently updated and a revised report was published in January 2013. In addition to this, a Strategic Infrastructure Delivery Plan has also been produced for Hertfordshire, which identifies projects of a strategic and cross cutting nature.

Hertfordshire Local Nature Partnership's Strategy

- 3.43** The purpose of the Hertfordshire Local Nature Partnership (LNP) is to ensure the county's natural environment is fully considered and valued in local decision making and that it delivers benefits for wildlife, people, landscapes and the local economy. To this end the LNP has prepared a strategy covering the period from 2013 to 2016, which identifies the following priorities for Hertfordshire:
- Healthy and resilient ecological networks
 - Delivering health and wellbeing through the natural environment
 - Sustainable economic growth through the natural environment; and Water for people and wildlife

- 3.44** Underpinning the strategy however is the need to both deliver new green infrastructure and protect/ enhance existing to support growth in Hertfordshire and local authorities will need to work both together and with the LNP to achieve this.

Hertfordshire Waste Development Framework

- 3.45** In November 2012 Hertfordshire County Council adopted its Waste Core Strategy and Development Management Policies Development Plan Document (DPD), which covers the period from 2011 to 2026.
- 3.46** The Waste Core Strategy and Development Management Policies DPD sets out the spatial vision and strategic objectives for waste planning in Hertfordshire up to 2026, providing the basis for a longer term spatial strategy that complements the county council's Joint Municipal Waste Strategy to 2026. This document also contains the policies needed to implement these objectives, along with detailed generic development management policies that will be used to make decisions on waste planning applications.
- 3.47** This document is supported by the Waste Site Allocations (WSA) DPD which was adopted in 2014 and identifies sites for waste management facilities across the county. In addition to the Waste Local Plan, the County Council has produced Supplementary Planning Document for the Employment Land Areas of Search. The document provides more detail on the areas identified in the Site Allocations document and should be used by applicants wishing to develop waste management facilities on them.
- 3.48** When planning for new growth in North Herts it will be necessary to have regard to this document when considering the implications of new development on waste disposal.

Hertfordshire County Council Local Transport Plan

- 3.49** Hertfordshire County Council published its new Local Transport Plan (LTP3) in April 2011. LTP3 sets out the transport strategy for Hertfordshire (over the period from 2011 to 2031), the goals and challenges to be met, and outlines a programme of transport schemes and initiatives (interventions). The various interventions are planned to be delivered over the short, medium and longer term, but given present uncertainties over funding, their timing cannot be assured. Targets have also been set so that progress towards meeting the strategy objectives can be measured.
- 3.50** The Plan covers all modes of transport - including walking, cycling, public transport, car based travel and freight - and takes account of the effect of transport on wider aspects including the economy, environment, climate change and social inclusion.
- 3.51** This strategy concerns the implementation of a number of transport infrastructure

projects that will affect the delivery of growth in the district, and it will therefore be necessary to both have regard to this strategy and work with the Highway Authority when taking forward the plans set out in the council's Local Plan. Work on the next iteration of the strategy – the 2050 Transport Vision – is well under way and is expected to be finalized by the end of 2016; it is also heavily featured in this document. The County Council is now moving ahead with the finalization of LTP4.

- 3.52** The government has announced an aspiration to deliver 1 million new in the Oxford – Milton Keynes – Cambridge Corridor by 2050, supported by new settlements and development corporations. A housing deal has been agreed with Oxfordshire for 100,000 homes by 2031, and delivery commitments are being sought for the central and eastern sections of the corridor during 2018.
- 3.53** Significant transportation infrastructure investment is anticipated, with the western section of E-W rail link being completed by 2024, and the central section (Bedford – Cambridge) mid 2020s. Funding for key elements of the Expressway between Cambridge and Oxford is being included in the second Roads Investment Strategy (2020 -2025) to accelerate work on the 'missing links' elements of this road so that it is ready to open by 2030. The government is commissioning England's Economic Heartland to analyse how communities not on the route of the 'missing link' will be able to benefit from it.

Methodology

- 3.54** Limited central government guidance is available relating to infrastructure delivery plans. The Planning Advisory Service (PAS) has produced a steps guide to infrastructure planning and the Planning Officers Society (POS) have published guidance on the Community Infrastructure Levy. This guidance has guided the development of this IDP.
- 3.55** All relevant infrastructure providers have been approached for information on infrastructure provision relevant to the services they provide or oversee. Background information has been provided to them on the Growth Strategy (Chapter 4) including the phasing and location of growth and as schedule of individual sites. Providers were asked a range of questions including:
- Legislative and policy context to provision
 - Current plans and strategies
 - Current and future investment plans
 - Funding and delivery issues
 - Feedback on the proposed local plan growth strategy on infrastructure provision, including the impact of individual sites, overall locations and phasing

Limitations of the scope of this IDP

- 3.56** It is acknowledged that there are gaps in the evidence gathered, at the time of writing this report not all information has been made available by infrastructure providers.

Many are only able to plan ahead in up to 5 year cycles, or react to individual development sites during the planning application or development stage. It has therefore been difficult and a relatively new concept for such providers to take a more strategic approach to planning their services to 2031. Many services would benefit with the exploration of long term infrastructure provision, such as the Hertfordshire Water project which is seeking to address water and sewerage needs well beyond typical plan periods but few are likely to follow this approach.

- 3.57** For many providers it is difficult to predict what may happen in 20 years time due to unpredictable circumstances. National policy changes, particularly in relation to funding and reorganisation of many services has added to the uncertainty of providing infrastructure. In addition, many projects are reliant on the location, layout, phasing and details of particular schemes.
- 3.58** Education planning for example is very dependent on volatile population projections influenced by the type of dwellings provided, birth rates for a particular area and the amount of affordable housing. This is not always known in the early phases of planning and once more detail is known some of the requirements may change. For these reasons, the IDP cannot be set in stone and will need to be kept under review.
- 3.59** These issues are considered in more detail in the Funding of Infrastructure Chapter (Chapter 13).

4. The Local Plan Growth Strategy

Housing Growth

- 4.1 The following figures have been assumed for the purposes of assessing infrastructure needs in the IDP over the period 2011 - 2031.

Dwelling numbers assessed in the 2016 IDP

- 4.2 An explanation is needed on the growth figures which were assessed for infrastructure needs in the 2016 IDP, and how they compare to the submitted Local Plan. The starting point of the 2016 IDP was the then Objectively Assessed Need (OAN) figure for North Herts for the plan period 2011 - 2031 which stood at 14,400 dwellings. Again, at the time, the actual Local Plan housing target was higher than the OAN figure at 16,550 dwellings, comprising 14,600 dwellings to meet North Herts District's needs, and a further 1,950 dwellings to meet Luton's needs in North Hertfordshire.
- 4.3 The IDP did not however assess the infrastructure needs of the entire 16,550 dwelling figure identified above, but only that part of the Local Plan housing growth target that has yet to be delivered, so for the purposes of the 2016 IDP, all development consented or constructed before 31st March 2016 (the 'cut off date') was discounted.³ This meant that the 2016 IDP is focused on the infrastructure needs of the remaining 14,442 new dwellings expected to be delivered over the remainder of the plan period.
- 4.4 The 2016 IDP figure of 14,442 dwellings remains the quantum of development that is assessed for its infrastructure needs within this document. The 2018 update considers the changes in quantum but does not seek to undertake a comprehensive reassessment of infrastructure needs based on the revised figures, although it does provide a commentary on the implications.

The new growth figures

- 4.5 Subsequent to the infrastructure assessment undertaken for 2016 IDP, OAN figures have been reduced from 14,400 dwellings to 13,800 dwellings. As noted in Table 4.4 below, these reductions have been achieved by excluding certain sites from the overall growth strategy, and changing the capacity of others. At the same time, the 'cut off date' (before which completed/consented dwellings are discounted for infrastructure planning purposes) has been advanced from 31st March 2016 to 31st March 2017, excluding further dwellings from the overall Local Plan growth period 2011 – 31 for infrastructure planning purposes.
- 4.6 The sum total of these changes is that the 2016 IDP assessed infrastructure need for a total of 14,422 dwellings; if that work was undertaken today with the revised OAN/Local Plan figures and an additional year of completions/consents from the

³ On the basis that the infrastructure needs of consented/constructed development would have been accounted for in the granting of planning consent, and that in any event, such development could not contribute in any way to the delivery of any additional and future infrastructure need

overall growth figure over the entire plan period, the IDP would be assessing the infrastructure needs for 13,803 dwellings, a 4.4% reduction. These figures may be the subject of further revision through the examination process.

- 4.7 To illustrate this further a breakdown of the 2016 IDP calculations and a comparison with the submitted Local Plan figures (as shown in the grey column) and broken down into housing typology is as shown below:

Development characteristic	Submission Plan Figures	IDP Figures Tested
Dwellings completed/consented (up until date in brackets)	3258 (31/03/17)	3035 (31/03/16)
Windfalls and unidentified broad locations - shown in table 4.2 but then added to totals of the 4 major settlements for the purposes of infrastructure planning in Table 4.3	1540	1650
Urban capacity sites in the district's 4 major settlements (Baldock, Hitchin, Letchworth, and Royston) (this figure added to the windfalls/broad locations identified above in Table 4.3)	778	864
Greenfield extensions to the 4 district's 4 major settlements and east of Luton and at Stevenage (See Table 4.4)	9523	9763
Village allocations (see Table 4.5)	1962	2145
Total	17,061	17,457
Of which numbers to be planned for in terms of meeting their infrastructure needs (overall total minus completions and permissions to 31.03.16)	13,803	14,422

Table 4.1: Overall local plan housing targets categorised for the purposes of the IDP

Completions/consents

- 4.8 Since the start of the plan period in 2011 to 31 March 2016, 3035 dwellings have been completed or committed for development. The 2016 IDP used the base date of 31st March 2016 as the cut-off point for the purposes of future infrastructure planning for development within the Plan period.
- 4.9 The IDP assumed that once a development has permission or has been built, infrastructure providers could reasonably have been expected to have factored in the infrastructure requirements from such development in their service plans, and in any negotiations with developers to secure financial contributions to the cost of such infrastructure (including those where negotiations are ongoing). The consented but not yet built schemes includes a number of significant sites, including proposed allocation RY2 for 330 dwellings north of Newmarket Road Royston.
- 4.10 In the event that infrastructure providers have not factored in the infrastructure requirements from both consented/not built and built schemes, then the infrastructure needs arising from these schemes will need to be added to the infrastructure deficit for both this and other districts in Hertfordshire identified in the 2009 HHS study as summarised in Chapter 3.
- 4.11 Infrastructure providers will be urged to ensure provision is made to address deficits as well as plan for new growth. There is some evidence that service providers are taking a more holistic approach to the planning and delivery of new infrastructure,

particularly in the health and education sectors. New and ongoing funding programmes are identified in Chapter 13 (Infrastructure Funding and Delivery). These measures, together with the use of borrowing to invest in new and infrastructure and CIL – if introduced - would give the District Council a measure of control over directing funding towards any notable omissions in infrastructure provision.

- 4.12** As can be noted in Table 4.1, it is now possible to roll forward the cut-off date for infrastructure planning from 31st March 2016 until 31st March 2017, during which period a further 323 dwellings have either been consented/constructed or consented/not yet constructed. Given the forgoing view that there is no longer the need to plan for the infrastructure for these 323 dwellings, the fact that they are assessed in the 2016 means a slight overcalculation of infrastructure need, particularly for education and health provision. However, this represents a mere 2% overcalculation of need, and its impact is judged to be *de minimis*.

Urban Capacity Sites in the major settlements of Baldock, Hitchin, Letchworth, and Royston plus windfalls and broad locations

- 4.13** For the purposes of infrastructure planning a distinction is drawn between urban capacity sites (defined as those located within the main fabric of a major settlement) and major greenfield extensions, The following sections provide a clear distinction between the two.
- 4.14** There are three reasons for separating the types of sites:
- for the most part, urban capacity sites tend to be smaller than planned greenfield developments beyond settlement boundaries and therefore the infrastructure impact tends to be cumulative rather than individual. For example, a new primary school within an existing town may become necessary because of the collective impact of a large number of small housing developments
 - larger greenfield sites have the capacity to incorporate a range of land uses as part of an overall masterplan, so that infrastructure needs such as schools, health centres and structural greenspace can be planned into that development, rather than located offsite as is the case typically with smaller development sites
 - the changing funding regime means that developer contributions towards meeting the infrastructure needs of large greenfield sites may be secured in a different manner to those contributions towards the infrastructure needs of urban capacity sites; experience from elsewhere suggests that the former will most probably continue to be secured through s106 agreements with the developers of those sites, whereas the latter will be through the allocation of CIL funds (if CIL is introduced) secured through collective contributions made by developers⁴. The November 2017 announcement that the government intends to remove s106 pooling restrictions where significant development is planned on several large strategic sites is very helpful in this regard.

⁴ Notwithstanding this many sites in urban areas are likely to be exempted from contributions due to the prior approvals regime

Windfall sites and broad locations

- 4.15** An allowance for windfalls and unidentified sites needs to be made in infrastructure planning. Some form of assignment of this growth to an appropriate location is desirable in order to consider the additional impact that such development is likely to have on overall infrastructure needs.
- 4.16** In the absence of other criteria for identifying the location for such growth the IDP assigns the windfalls allowance of 1100 dwellings and broad locations allowance of 500 dwellings to the 4 major settlements, proportionate to their current size. To the Letchworth total the provision of an additional 50 dwellings in unspecified town centre locations is also added in accordance with the emerging Local Plan. Phasing and distribution as shown in Table 4.2:

Settlement	Total Windfall and Broad Location Allowance (dwellings)	Phasing (Years)		
		To 2021	2022 - 26	2027 - 31
Baldock	165	25	43	97
Hitchin	593	89	155	349
Letchworth	645	97	167	381
Royston	247	37	65	145
Total	1650	248	430	973

Table 4.2: Windfalls and specified broad locations plan allocations assignments for individual settlements

- 4.17** The figures in Table 4.2 are then added to the urban capacity sites identified in Table 4.3 below. Whilst it is acknowledged that windfalls by their very nature 'footloose' and can be located anywhere (e.g. villages, unspecified broad locations) the IDP has to locate them somewhere appropriate for testing purposes and from that perspective the existing settlements represent the most appropriate locations.
- 4.18** It is acknowledged that the phasing shown in Table 4.2 is very back loaded to the Local Plan's latter years. Generally speaking, the known sites are more likely to come forward in the Plan's early years, with the 'unknown' (as yet unidentified) sites being brought forward later, although it should be noted that the trajectory of development generally ramps up in successive 5 year tranches.

Urban Capacity sites in the district's 4 major settlements

- 4.19** Table 4.3 summarises the urban capacity target figures for the district's 4 largest settlements, together with anticipated phasing of such development. As noted above it includes an assignment for windfalls and broad locations.

Settlement	Total	Phasing		
		To 2021	2022 - 26	2027 - 31
Baldock	301	99	108	94
Hitchin	685	86	200	399
Letchworth	1151	308	394	449
Royston	377	46	122	209
Total	2514	539	824	1151

Table 4.3: Urban capacity sites in the district's 4 major settlements

Major greenfield extensions to the district's major settlements and adjoining Stevenage/Luton

- 4.20** Major development expected take place in greenfield extensions beyond existing major settlement boundaries and at Stevenage and Luton is set out with phasing detailed in Table 4.4 below.

Submission LP Ref	Location	Submission LP Total	IDP Testing Total	IDP Testing Phasing		
				To 2021	2022 - 26	2027 - 31
BA1	Baldock (Blackhorse Farm)	2500	2500	100	1150	1250
BA2, BA3, BA4	Baldock (sites at Clothall Common and Farm)	495	495	300	195	0
HT1	Hitchin (Highover Farm)	700	700	150	500	50
HT3, HT5, HT6	Hitchin (Grays Lane/Lucas Lane Area)	115	115	39	76	0
HT2	Hitchin (Land N of Pound Farm)	84	84	0	34	50
Removed	Hitchin Priory Field	0	300	0	60	240
LG1	Letchworth (Letchworth North)	900	900	0	400	500
LG3	Letchworth (Land East of Kristiansand Way)	120	120	120	0	0
EL1	Luton (Luton North West)	1050	1050	50	500	500
EL2	Luton (Luton East)	350	350	30	150	170
EL3	Luton (Luton North East)	700	700	60	300	340
RY1	Royston West (Land W Ivy Farm)	279	279	130	149	0
RY4	Royston (North of Lindsay Close)	100	40	0	40	0
RY10	Royston (Land S of Newmarket Road)	300	300	0	180	120
GA1	Stevenage (Roundwood)	330	330	230	100	0
GA2	Stevenage (Mendip Way Great Ashby)	600	600	50	500	50
NS1	Stevenage (North)	900	900	0	275	625
Total		9523	9763	1259	4609	3895

Table 4.4: Major greenfield extensions to the district's major settlements and adjoining Luton & Stevenage

- 4.21** It should be noted that for infrastructure planning purposes several greenfield sites that have consent for development are not included in this list but are in the completions/consent total; additionally some small greenfield sites extending the settlement boundary and several sites within the settlement boundary which are actually greenfield in nature are not considered here but are included within the urban capacity column for the reason that they are likely to be treated differently in infrastructure planning terms, as set out in 4.11 above.
- 4.22** The list does however include several small sites where infrastructure need can be considered cumulatively with other nearby or larger greenfield sites.
- 4.23** Two final points relate to Table 4.4. The first is to note that, in line with other tables demonstrating housing numbers in this chapter, there are reductions in overall housing numbers between the 2016 IDP and the submitted plan (dark grey column in Table 4.4). However, these changes are relatively small scale, with one site in Hitchin

deleted and another in Royston where numbers increase (light grey rows). The overall reduction is 2.5%, again in effect *de minimis*.

- 4.24** A second point relates to the three sites east of Luton (EL1, EL2 and EL3) and the three adjoining Stevenage GA1, GA2 and GA3. The infrastructure needs of these groups cannot be viewed in isolation but have to be considered in the round with new development in Luton and Stevenage respectively, and this is something that the IDP will return to.

Development within villages

- 4.25** The anticipated development in the district's villages (net of permissions and completions) is as set out in Table 4.5, together with phasing.

Village settlement	Submission LP Total Dwellings (No sites)	IDP Tested Total Dwellings (No. sites)	Phasing		
			To 2021	2022 - 26	2027 - 31
Ashwell	33 (1)	33 (1)	33	0	0
Barkway	172 (3)	173 (3)	33	0	140
Codicote	315 (4)	315 (4)	90	98	127
Graveley	8 (1)	8 (1)	0	8	0
Ickleford	301 (4)	331 (5)	120	162	49
Kimpton	13 (1)	13(1)	13	0	0
Kings Walden	16 (1)	36(2)	0	36	0
Knebworth	668 (4)	638(4)	50	344	244
Pirton	0	58(1) ⁵	58	0	0
Preston	21 (1)	21(1)	0	21	0
Reed	34 (2)	22 (1)	0	22	0
St Ippolyts	59 (3)	52(2)	32	20	0
St Paul's Walden	41 (1)	81(2)	81	0	0
Therfield	12 (1)	24(2)	24	0	0
Weston	40 (1)	40(1)	40	0	0
Wymondley	300 (1)	300(1)	100	200	0
Totals	2033 (30)	2145 (32)	674	911	560

Table 4.5: Village allocations (all of which are currently unconsented) Changes between 2016 IDP and submission numbers shown in light grey rows

- 4.26** In terms of the differences between the 2016 IDP and the Local Plan submission, these at first sight look significant, with changes in either overall numbers and/or numbers sites in 50% of the villages identified in Table 4.5 – 8 out of 16. However, the overall reduction is just over 5% and most of the major expansions in villages - over 100 dwelling – remain the same or broadly similar.

Overall phasing

- 4.27** Taking the figures set out in the preceding tables into account the overall phasing within the plan is as shown in Table 4.6 below:

⁵ Site removed as now granted permission

Category	Total	Phasing ⁶		
		To 2021	2022 - 26	2027 - 31
Urban Capacity Sites incl. windfalls/broad locations	2514	539	824	1151
Greenfield extensions	9763	1259	4609	3895
Village Locations	2145	674	911	618
Total	14422	2472	6344	5606

Table 4.6: Local Plan growth target phasing

Relevant development in adjoining districts

- 4.28** The IDP should take account of any development in adjoining districts which has implications for the provision of infrastructure within the district. This might either be smaller scale development located immediately adjoining or close to the district boundary or it might be larger scale development which can be considered to have an effect over a wider area than the development itself - the most obvious of these being the impact of traffic flows on adjoining roads.
- 4.29** The extent to which the impact of schemes outside the district can be taken into account is largely dependent on knowledge of those developments - North Herts has no direct control over development coming forward beyond its boundaries and the timescale for the identification of that development may not allow it to be factored in to this IDP since individual Local Plans are brought forward on entirely independent cycles.
- 4.30** Equally however the infrastructure requirements of development proposed within North Herts either adjacent to or in close proximity of boundaries with other districts (specifically north and north east of Stevenage and east of Luton) should be factored into the IDPs being prepared by those other districts. North Herts District Council will be striving to ensure that this is indeed the case.
- 4.31** **The two tables below** set out the significance of these interrelationships is set out below:

Cent Beds	East Herts	Luton	St Albans	South Cambs	Stev'ge	Uttl'ford	WelHat
X	X	XX	-	X	XX	-	X

Table 4.7: Impact of growth strategy of North Herts on adjoining districts

Key: XX - Very significant; X – Of some significance; - Not considered significant

Cent Beds	East Herts	Luton	St Albans	South Cambs	Stev'ge	Uttl'ford	WelHat
?	X	XX	-	?	XX	-?	X

Table 4.8 Impact of growth strategy of adjoining districts on North Herts

Key: XX - Very significant; X – Probably of some significance; - Probably not significant; ? Uncertain (awaits publication of Local Plan)

⁶ The trajectory in this and other tables retains the same trajectory as that for testing through the September 2016 IDP. Aside from changes in trajectory in the trajectory in the submission Local Plan (needed in any event to respond to reduced dwelling numbers/removed sites) Examination documents have pushed back several sites to cover delays in progress towards adoption. The overall effect on infrastructure delivery will be to push back its need for a few sites, but overall the impact on quantum and delivery timescale is not significant

4.32 To consider Table 4.8 further, the emerging evidence from the local plan progress of adjoining authorities was taken into account in the preparation of this IDP (**although note the subsequent changes in the 2018 update table 4.10**).

Authority	Local Plan status	Commentary
Central Bedfordshire Council	The is currently consulting on its Regulation 19 Local Plan	Plan proposes the delivery of up to 20,000 new homes. Of significance in relation to North Herts are proposals for 4,000 new homes North of Luton (plus 20ha of employment space) 2,000 new homes at Arlesley and employment development at RAF Henlow.
East Herts Council	The draft plan is likely to be published for consultation later this year	The authority is known to be examining the potential for development east of Stevenage.
Luton BC	Emerging Local Plan seeks to make provision for a net 6,700 new dwellings within the borough leaving a 11,100 dwelling shortfall to be sought outside borough boundaries. There are also major employment policies for London Luton Airport and several associated business/technology parks	The local plan was submitted in April 2016 and an examination will take place later this year. The authority has passed its Duty to Cooperate
St Albans City and District	None anticipated - Strategic Local Plan identifies 4 locations for significant growth, none of which are close to North Herts	SLP published January 2016, and submitted in August 2016. Detailed local plan to follow with site allocations
South Cambridgeshire District Council	The district council submitted modifications in March 2016 to a local plan submitted in 2014	The local plan growth strategy directs development to Cambridge, its immediate environs and to other locations north/west of the district, and therefore has minimal impact
Stevenage BC	Two major proposals immediately adjacent to the boundary with North Herts - Stevenage West (1350 homes) and North of Stevenage (800 homes); whilst close by is a proposal for development in Stevenage Town Centre (2000 homes)	The Stevenage Borough Local Plan publication version, issued in draft in January 2016 and submitted in July, identifies all three locations but does not provide any detail of phasing other than that Stevenage West will be delivered early in the plan period
Uttlesford District Council	The local authority held an Issues and Options consultation at the end of 2015	North Herts shares a very small boundary with Uttlesford and it is not anticipated that there will be any major proposals in the emerging Local Plan growth strategy which will have an impact on this district
Authority	Local Plan status	Commentary
Welwyn Hatfield Borough Council	The emerging local plan is expected to bring forward 220 dwellings at Welwyn by 2022, and 154 at Woolmer Green, 54 of which are expected to be delivered by 2020 and 150 between 2023 – 27.	The Local Plan is intended for publication in early autumn

Table 4.9: Development in adjoining districts relevant to the IDP

4.33 Table 4.10 below provides a January 2018 update on the emerging Local Plans/Growth Strategies of the adjoining districts:

<p>January 2018 IDP update – adjoining districts</p> <p><u>Central Bedfordshire</u>: Consultation on Reg 18 Local Plan draft took place in the summer of 2017, based on a range of between 20-30,000 new additional homes and 24 – 30,000 new jobs to be delivered between 2015 – 2035. Options include around 4,000 homes and 20ha of employment land north of Luton, as well as around 2,000 homes west of Luton and 2,000 homes/3ha of employment land east of Arlesey, which will have some impact on North Herts if pursued. The submission version of the Local Plan is expected in January 2018</p> <p><u>East Herts Council</u>: Following submission in March 2017 (main impact on North Herts is the proposals for 600 homes east of Stevenage, which will have a moderate impact) hearing sessions on the plan (which provides for a minimum of 16,390 new homes over the period 2011 – 2031) are ongoing.</p> <p><u>Luton BC</u>: Following examination the Luton Local Plan 2011 – 31 was adopted in November 2017 along the lines covered in Table 4.9</p> <p><u>St Albans</u>: Following the issues raised by the appointed Inspectors in relation to the Duty to Co-operate St Albans City and District is one of 15 authorities written to by the Communities Secretary in respect of a potential intervention in its Strategic Local Plan.</p> <p><u>Stevenage BC</u>: Following submission in July 2016 (impact on North Herts as detailed in Table 4.9) Local Plan hearings took place in early 2017. The Inspector’s report was received in October but at the time of writing is subject to a holding direction by the Communities Secretary⁷</p> <p><u>South Cambridgeshire DC</u>: The Local Plan examination (which is being undertaken jointly with the Cambridge Local Plan) closed in July 2017 with the Inspectors advising recently that following the anticipated consultations on Main Modifications considered necessary to ensure that the plans can be found to be sound and adopted, they anticipate that the plans can be adopted in 2018. The impact on North Herts remains as stated in Table 4.9</p> <p><u>Uttlesford DC</u>: Consultation on Reg 18 Local Plan Took Place in Summer 2017, with the plan seeking 14,000 new dwellings by 2031. No significant direct impact on the district but a proposed Garden Community at North Uttlesford (North of Great Chesterford) will have some impact on the A505 (particularly east of Royston) which will need to be taken into account in any future transportation proposals for this road</p> <p><u>Welwyn Hatfield BC</u>: Following submission in May 2017 (impact on North Herts as detailed in Table 4.9) hearing sessions commenced in September and are currently ongoing</p>
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Table 4.10: January 2018 update of progress/implications local plans for authorities adjoining North Herts

Employment Growth

4.33 The impact in terms of infrastructure need associated with economic growth in the district is considered in aspects of this IDP (e.g. transport modelling). The Local Plan is seeking to plan for the future provision of employment space beyond that identified in the East of England Forecasting Model (for around 5,000 jobs instead of EEFM's 3,600 jobs) as in part it seeks to cater for unmet needs from Stevenage.

⁷ The Stevenage Local Plan is predicated on a significant modal shift away from the car and this strategy will need to be integrated for that for North Herts, particularly for those sites within North Herts on the edge of the town

4.34 The main employment land provision is expected to be met as follows:

- Baldock (20.4ha)
- West of Royston (10.9ha)
- Letchworth Garden City Power Station (1.5ha)

4.35 The phasing new employment development is difficult to predict, being related to future economic cycles and investment decisions of businesses based on a variety of factors which will be undisclosed for competition reasons. In the absence of any other compelling alternative scenarios this IDP assumes that the employment space/jobs will be delivered pro rata over the plan period:

Employment Location	Area ha (No. jobs)	Phasing ha (jobs)		
		To 2021	2022 - 26	2027 - 31
Baldock	20.4 (3200)	6.8 (1067)	6.8 (1067)	6.8 (1067)
West of Royston	10.9 (1750)	3.6 (583)	3.6(583)	3.6 (583)
Letchworth GC Power Station	1.5 (240)	0.5 (80)	0.5 (80)	0.5 (80)
Total	32.8 (c5000)	10.9 (1730)	10.9 (1730)	10.9 (1730)

Table 4.11: Quantum and phasing of employment land to 2031 (additional land/jobs)

The remainder of the paragraph is an update on the September 2016 IDP

Infrastructure needs for the district's strategic housing sites

4.36 This chapter concludes with a summary of the infrastructure needs associated with the 6 strategic housing sites of over 500 dwellings which are as follows:

Submission LP Ref	Location	Submission LP Total	IDP Testing Total	IDP Testing Phasing		
				To 2021	2022 - 26	2027 - 31
BA1	Baldock (Blackhorse Farm)	2500	2500	100	1150	1250
HT1	Hitchin (Highover Farm)	700	700	150	500	50
LG1	Letchworth (Letchworth North)	900	900	0	400	500
EL1/EL2/EL3 ⁸	Luton (Luton North West, East and North East)	2100	2100	140	950	1010
GA2	Stevenage (Mendip Way Great Ashby)	600	600	50	500	50
NS1	Stevenage (North)	900	900	0	275	625
Total		7700	7700	440	3775	3485

Table 4.12: The district's 6 strategic greenfield sites of over 500 dwellings:

4.38 The key infrastructure requirements associated with these developments are set out below. This also includes a brief commentary on viability based on the Local Plan Viability Assessment Update completed by Dixon Searle Partnership (2016)⁹. To test the potential viability of sites of a strategic scale and characteristics, appraisals were carried out on development scenarios ranging in size from between an indicative 500 and 2,800 dwellings; representative of potential development of sites across the District.

⁸ Note that the three Luton sites (EL1/EL2/EL3) are treated as a single site for infrastructure testing purposes

⁹ Dixon Searle Partnership: Local Plan Viability Assessment Update (2016)

Location:	Site BA1 Baldock (Blackhorse Farm)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 5 forms of entry (fe) • Secondary School provision: 5fe • Primary health provision: Provision for 3.0 GPs • Early Years provision: Equivalent of 1 Children's Centre • Social Infrastructure including Community and Leisure provision • A new road connecting the A507 London Road to the Baldock by-pass • Sustainable transport investment • Green Infrastructure contributions 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	19.1
	Secondary provision	15.3
	Early Years provision	0.48
	Primary Health provision	1.55
	Social Infrastructure provision	7.17
	Transport infrastructure	4.12
	Green Infrastructure	0.72
	Total	48.44
s106 contribution required per unit	£19, 376	
Viability considerations	The base results for the 2,800 unit North of Baldock scenario in the viability study generate a surplus for s106 contributions in the range of £21,000 to £36,000 per unit	

Table 4.13: Infrastructure requirements/viability considerations relating to site BA1 Baldock

Location:	HT1 Hitchin (Highover Farm)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 1.4fe • Secondary School provision: 1.4fe • Primary health provision: Provision for 0.84 GPs • Early Years provision: Equivalent of 0.28 Children's Centre • Social Infrastructure - Community provision • Transportation including sustainable transport investment • Green Infrastructure contributions 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	5.35
	Secondary provision	4.3
	Early Years provision	0.06
	Primary Health provision	0.44
	Social Infrastructure provision	0.42
	Transport infrastructure	3.20
	Green Infrastructure	0.19
	Total	13.96
HT1 Hitchin (Highover Farm) (Continued)		
s106 contribution required per unit	£19,943	
Viability considerations	The viability study does not directly appraise a 700 unit scheme on Hitchin. However, taking the appraisal of the North of Letchworth scheme as a comparator, this generates residual s106 amounts of between £21,000 and £35,000 per unit depending on the value level tested. The viability study notes that value levels in Hitchin are generally anticipated to be slightly higher in Hitchin than Letchworth	

Table 4.14: Infrastructure requirements/viability considerations relating to site HT1 Hitchin

Location:	Site LG1 Letchworth (Letchworth North)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 1.8fe • Secondary School provision: 1.8fe • Primary health provision: Provision for 1.1 GPs • Early Years provision: Equivalent of 0.36 Children's Centre • Social infrastructure – Community provision • Transportation including sustainable transport investment • Green Infrastructure contributions 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	6.88
	Secondary provision	5.52
	Early Years provision	0.17
	Primary Health provision	0.59
	Community provision	0.6
	Transport infrastructure	1.49
	Green Infrastructure	0.21
	Total	15.46
s106 contribution required per unit	£17, 177	
Viability considerations	The North of Letchworth scenarios in the viability study produce residual s106 amounts of between £21,000 to £35,000 per unit depending on value level tested	

Table 4.15: Infrastructure requirements/viability considerations relating to site LG1 Letchworth

Location:	Sites EL1/EL2/EL3 Luton (Luton North West, East and North East)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 4.2fe • Secondary School provision: 4.2fe • Primary health provision: Provision for 2.52 GPs • Early Years provision: Equivalent of 0.88 Children's Centre • Social Infrastructure - Community provision • Transportation including sustainable transport investment • A new Police Base 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	16.04
	Secondary provision	12.88
	Early Years provision	0.42
	Primary Health provision	1.3
	Social Infrastructure provision	1.0
	Transport infrastructure	1.0
	New Police Base	1.5
	Total	34.14
s106 contribution required per unit	£16, 257	
Viability considerations	With 40% affordable housing applied, the residual s106 is between £19,000 and £5,500 per unit depending on the value sensitivity test. With reduced affordable housing contributions, the s106 residual would be significantly higher at the lowest development value point tested (£27,000 per unit)	

Table 4.16: Infrastructure requirements/viability considerations relating to sites EL1, EL2 and EL3

Location:	Site GA2 Stevenage (Mendip Way Great Ashby)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 1.2fe • Secondary School provision: 1.2fe • Primary health provision: Provision for 0.72 GPs • Early Years provision: Equivalent of 0.24 Children's Centre • Social Infrastructure - Community provision • Transportation including sustainable transport investment 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	4.58
	Secondary provision	3.68
	Early Years provision	0.12
	Primary Health provision	0.37
	Community provision	0.4
	Transport infrastructure	0.2
	Total	9.35
s106 contribution required per unit	£15,583	
Viability considerations	The viability study does not directly appraise a 600 unit scheme north of Stevenage. However, taking the appraisal of the 900 home scheme as a comparator, this generates residual s106 amounts of between £8,000 and £22,000 per unit at 40% affordable housing depending on the value level assumed. With reduced affordable housing contributions, the residual would be significantly higher even at the lowest development value point tested (£29,000 per unit).	

Table 4.17: Infrastructure requirements/viability considerations relating to site GA2 Stevenage

Location:	Site NS1 Stevenage (Stevenage North)	
Principal infrastructure requirements	<ul style="list-style-type: none"> • Primary school provision: 1.8fe • Secondary School provision: 1.8fe • Primary health provision: Provision for 1.08 GPs • Early Years provision: Equivalent of 1 Children's Centre • Social Infrastructure - Community provision • Transportation including sustainable transport investment • Green Infrastructure contributions 	
Indicative cost of infrastructure requirements	Provision	£ (m)
	Primary School provision	6.88
	Secondary provision	5.52
	Early Years provision	0.48
	Primary Health provision	0.59
	Social Infrastructure provision	0.6
	Transport infrastructure	0.2
	Total	14.27
s106 contribution required per unit	£15, 855	
Viability considerations	The viability study generates residual s106 amounts of between £8,000 and £22,000 per unit at 40% affordable housing depending on the value level assumed. With reduced affordable housing contributions, the residual would be significantly higher even at the lowest development value point tested (£29,000 per unit).	

Table 4.17: Infrastructure requirements/viability considerations relating to site NS1 Stevenage

Summary of growth related infrastructure costs on the North Herts Strategic Housing sites of over 500 dwellings:

4.39 In summary these are as follows:

- Total dwellings: **7,700**
- Total anticipated infrastructure costs: **£138.85m**
- Overall average per dwelling infrastructure cost: **£18,032**

4.40 There are four important considerations in respect of these calculations that should be noted:

- this work constitutes a desktop exercise involving the calculation of need, associated costs and development viability. It is not intended to be a substitute for the detailed negotiations that will take place around obligations between the district council and the developers, and the precise sums negotiated by parties to the eventual s106 agreement may ultimately be quite different to those shown in the forgoing tables, for a variety of reasons
- the tables do not include normal on-site infrastructure such as internal roads/footways, open spaces and play areas, landscaping and any other particular requirements of the development masterplan (such as for instance on site ecological mitigation and protecting the setting of onsite ancient monuments). These are costs associated with the establishment of a suitably high quality of development, not the infrastructure such development generates and therefore not considered in this IDP
- there are as can be seen clear variations in the per dwelling contribution that has been identified to meet the infrastructure costs associated with these sites. For the most part, these are a reflection of the differencing transportation infrastructure needs that arise, which are dependent on the location of the site in relation to adjoining settlements, which give rise to higher mitigation works for some locations than others¹⁰
- the viability study concludes that strategic sites could support a reasonable level of affordable housing alongside other s106 requirements. The range of results indicates that the Council is planning development that is very likely to be viable, albeit (and as is always necessarily the case) with the achievable planning obligations packages needing detailed resolution in due course¹¹ (paragraph 3.4.5).

¹⁰ It should be noted that in this section an attempt has been made to reassign transportation infrastructure costs in accordance with the initial work on this undertaken in the 2017 Transport Strategy, which maintained the growth related headline transportation infrastructure cost shown in the 2016 IDP but considered how it could be reassigned to the changing transportation priorities the Strategy identifies. This assessment does not entirely match up with the assignment of costs undertaken in Chapter 13, although not to the extent that it devalues the conclusions of either assessments

¹¹ See Dixon Searle Partnership Local Plan Viability Assessment Update (2016) paragraph 3.4.5

5. Transport

January 2018 Update

An update to the transport element of the IDP is provided at the end of this Chapter from paragraph 5.136 onwards. It reflects specifically:

Progress on the Local Transport Strategy (LTP4) which contains a number of significant updates on the countywide transportation strategy and how it relates to North Herts

The publication, in October 2017 of the North Herts Transport Strategy, prepared by Markides Associates. Amongst other important conclusions it proposes a revamp of transportation priorities away from highway schemes towards more passenger transport related investment and behavioural changes which might support a corresponding modal shift. Indications as to how this might be achieved are summarised, but further work will be needed to bring specific proposals forward, and these will be identified in future iterations of the IDP

For the purposes of the infrastructure Delivery Schedule a potential reassignment of transport infrastructure investment is undertaken to reflect changing

General

- 5.1** This chapter considers the need for improvements to both the local and strategic highway network and other forms of sustainable transportation including railways, bus transport, walking and cycling. Improvements to the transport network will be crucial in facilitating the development identified in the North Herts Local Plan; particularly the delivery of the strategic sites.
- 5.2** These works will however need to take place against the background of the requirement to tackle issues with the existing road network, and alongside the promotion of sustainable means of travel and the minimisation of congestion and emissions.
- 5.3** Following the description of the transport baseline below, policies programmes and strategies to support transportation infrastructure investment are described. Modelling and other work to identify mitigation works are the considered and these works have been costed and set against a delivery timeline, together with the proposed arrangements for delivery.

The transport baseline

5.4 Key features relating to transportation in North Herts are shown in the figure below:

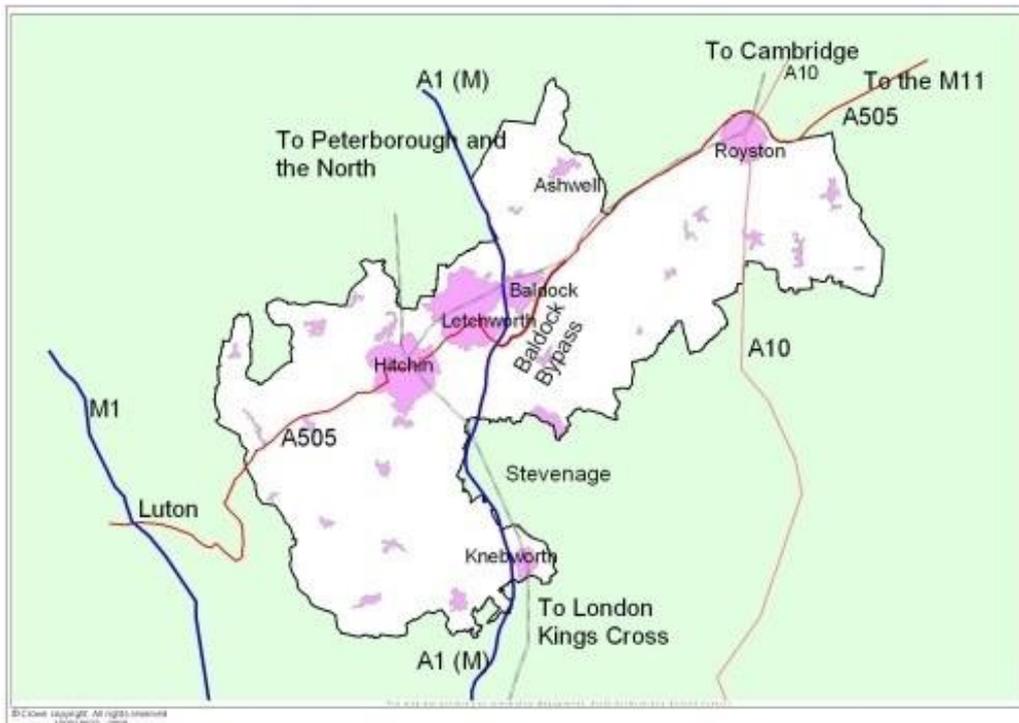


Figure 2: key features relating to transport infrastructure in North Herts

5.5 A number of important considerations underpin transport in North Herts which have a bearing on future infrastructure need, as set out in subsequent paragraphs.

Highways

5.6 North Herts has 821km of roads comprising 14km of motorway (the A1(M), 72.6km of Principal (A) Roads, 61.9km of B Roads, 213km of C roads and 459.1km of unclassified roads. It has no trunk roads.

5.7 Set out below is significant highway data analysis relating to North Herts (source: HCC Transport and Data report 2015):

- the district includes 4 of the 27 most heavily trafficked routes in Hertfordshire
- although the district does not suffer quite the same levels of severe traffic congestion experienced in other parts the county, the local transport network is currently under stress, including the A505/A602 in Hitchin and the A10 south of Royston, and there are also regular difficulties in securing access to the A1(M) from local roads
- traffic levels within the district are expected to increase by 6.8% between 2014 and 2021 and by 16.1% between 2014 and 2031
- the average distance commuted to work in the district rose from 17.2km in 2001 to 19.4km in 2011

- 17% of households in the district have no access to a car, the same as the countywide figure, whilst the national figure is 26%

5.8 The 2015 Herts County travel survey provides an accurate and robust database of travel attitudes and behaviour of a representative sample of Hertfordshire residents. For North Herts it revealed that 21.5% of the district's residents worked at home at least one day a week (the county average was 24.7%) whilst the main modes for travelling to work are as follows:

Main Mode of travel	%
Walk	24
Cycle	1.8
Motorcycle	0.2
Bus	2.8
Train	6.4
Car driver	47.2
Car passenger	16.8
Tube	0.2
Other	0.6

Table 5.1: Main modes for travelling to work

Sustainable Transport

Rail

5.9 The district is served by two railway lines:

- The East Coast Main Line (ECML), which runs from London to Edinburgh via Peterborough, York and Newcastle
- The Cambridge Line, which diverges from the ECML north of Hitchin and then joins the West Anglian south of Cambridge Station

5.10 Both ECML and Cambridge line services can be accessed from Hitchin and Knebworth, with the other stations in North Herts accessing the Cambridge line only.

5.11 Services from Hitchin and on the Cambridge line are provided by Great Northern, part of the Thameslink, Southern and Great Northern (TSGN) operation, a consolidated franchise (and the largest in the United Kingdom) operated by Govia Thameslink Railway. The consolidated franchise has been operating since 25th July 2015 and will run until September 2021. Services on the East Coast main line are operated by Virgin Trains East Coast (VTEC) who took over services on 1st March 2015. That franchise runs to the end of March 2023.

5.12 The district's five railway stations have the following patronage (2015 figures from Network Rail):

Station	Patronage 2005/06 (million)	Patronage 2014/15 (million)	10 year %age change 05/06 - 14/15
Hitchin	2.049	3.036	+ 48%
Letchworth Garden City	1.187	1.752	+ 48%
Royston	1.061	1.394	+ 31%
Knebworth	0.344	0.595	+71%
Baldock	0.386	0.624	+ 61%

Table 5.2: Railway Station patronage

- 5.13** These stations are ranked 7th, 14th, 17th, 26th and 30th respectively out of Hertfordshire's 43 stations based on usage.
- 5.14** Beyond district boundaries but important in terms of rail journeys for North Herts residents is Stevenage railway station, providing access to services on the East Coast Main line. Ashwell and Morden Station on the Great Northern line (in Cambridgeshire but close to the North Herts boundary) which are also used by the district's residents.

Bus

- 5.15** Local bus services are mostly run by commercial operators, the most significant of which are Arriva, Britannia Travel, Cambus, Centrebus, Chambers, Cozy Bus, Landmark, National Express, Richmond, The Shires and Uno. Whilst bus services are reasonable in urban areas (through a combination of circular, through or inter urban routes) it is patchy in rural areas, with service levels to and from individual settlements often depending whether they lie on the line of inter urban or through routes.
- 5.16** From September 2015 Hertfordshire County Council has reduced subsidised services in Hertfordshire, including those in North Herts. Such services no longer run after 7:30pm or on Sundays, except for services that go directly to hospitals, which run till 7:30pm. Some services have been withdrawn completely. A total of 19 bus routes within the district are affected.
- 5.17** 6% of journeys to work are made by either bus, minibus or coach whilst 6% of food shopping journeys and 12% of school journeys use this mode. (Source 2012 Herts County Travel Survey)

Walking and cycling

- 5.18** The district is served by a variety of public footpaths and green links, including the Hitchin Outer Orbital Path (HOOP) (12 miles), the Hicca Way (9miles) and Letchworth Greenway (13.5 miles). 7% of the district's residents walk to work, with a

mean distance of 1.74 miles, whilst walking counts for 43% of school journeys. 9% of the district's residents experience difficulty in walking more than half a mile. (Source 2012 Herts County Travel Survey).

- 5.19** A variety of cycle routes serve the district, chief of which is National Cycle Route 12 (The Great North Way) which traverses the county from Potters Bar to the county boundary north of Letchworth. Other important routes include Hitchin to the Chilterns (23 miles) Royston Circular Cycle routes (17 miles) and Baldock Circular Cycle routes (11 miles)
- 5.20** 47% of households in the district have access to a useable bike whilst 2% cycle to work and 3% cycle to school, all figures above the county average. (Source 2012 Herts County Travel Survey).
- 5.21** The North Hertfordshire District Council Cycling Strategy has been updated to include proposed routes following a comprehensive survey of the district, with a focus on providing a network for short urban journeys linking residential areas to schools, colleges, places of employment, shopping areas, health facilities and transport interchanges.

Published Strategies and programmes

- 5.22** 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.

Local Transport Plan 3 (LTP3)

- 5.23** The third Hertfordshire Local Transport Plan 2011 – 2031 (LTP3) (2011) set out the County Council's vision and strategy for the long term development of transport in Hertfordshire. It did not assume a particular level of growth because at the time of writing the full countywide picture was not known.
- 5.24** Nonetheless LTP3 sought 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.

LTP3 - Highway Schemes

- 5.25** A number of key tenets set out in LTP3 have contributed to the principles outlined in the Local Plan growth strategy and the consequent demand for new infrastructure that arises. The main principles are that:
- major new road schemes that are supported through external funding will normally only be built where new development generates significantly increased traffic flows that the existing network cannot cope with;

- there is strong support for new development to be sited and designed so that maximum use can be made of sustainable modes, including bus travel, in order to access services;
- residents of new developments should be fully informed of sustainable transport options using new technologies;
- developers will be expected to help fund the provision of facilities and services for sustainable travel and contribute to the long term maintenance of highway works.

5.26 Notwithstanding the above, the LTP3 considers that transport infrastructure investment is as much about dealing with existing network issues, as well as accommodating the impact of any natural population growth (and its consequences for the road network) as it is to respond to the impact of development related growth.

5.27 As a consequence measures proposed to support housing and employment will be complemented by measures required to mitigate the impact of specific development sites. It is worth noting that other measures - such as the County Council's aim to achieve a modal shift away from the car to more sustainable forms of transport - will help free up capacity in the network and thus help mitigate the impact of new development; it therefore follows that the success of such an aim is a key part of dealing with the consequences of growth.

5.28 LTP3 identified 3 major schemes within a 2 year programme (2011/12 – 2012/13). None of these are within North Herts, so therefore are not part of this IDP. Of more significance was a second category of 'other significant named projects', 2 of which are in North Herts. These are two rail projects - The Hitchin Flyover Project and Royston Rail Crossing - and both have been implemented.

LTP3 - Urban Transport Plans

5.29 LTP3 outlined the creation of Urban Transport Plans (UTPs) for the identification of a large number of infrastructure schemes. The UTPs for Letchworth and Baldock (July 2007), Royston (May 2010) and Hitchin (March 2011) identified short, medium and long-term strategies to shape travel patterns and provide a transport framework for each of the towns.

5.30 The published plans detail a number of projects that are based on seeking to resolve existing transportation issues in the towns concerned and to respond to additional infrastructure requirements arising from the consequences of growth. The total cost of the schemes for each of the UTPs are as follows:

UTP	Cost (£m)
Hitchin	2.516
Royston	2.803
Letchworth and Baldock	3.687

Table 5.3: UTP schemes for the district's main towns

5.31 Some of these projects have been implemented and appropriate schemes have been included in the Infrastructure Delivery Schedule (IDS) Schedule. Subsequent paragraphs 5.104 – 5.113 below consider in detail which schemes have been selected for inclusion in the IDS. As part of the proposed Growth and Transport Plan (see 5.75 onwards below) the intention is to review all these projects and decide which to take forward (and indeed whether other schemes merit further consideration) and then to prioritise and seek funding for such works as part of a rolling programme of sustainable transport measures.

LTP3 - 'Daughter documents'

5.32 LTP3 included a number of subsidiary documents which contribute to meeting LTP3's goals and challenges. These published documents are:

Document	Purpose	Comments
Active Travel Strategy (2013)	Sets out how the County Council and its partners will identify, deliver and promote interventions to increase the numbers of people walking and cycling in Hertfordshire	Merges and updates the existing Walking Strategy (2011) and the Cycling Strategy (2007)
The Bus Strategy (2011)	A framework of strategic and detailed policies for passenger transport, and the challenges facing Hertfordshire. Forms the basis of network and infrastructure investment including the corridors in which action will be focussed	To be read in conjunction with the Intalink Strategy
The Intalink Strategy (2016)	Stipulates required standards for passenger transport information for service operators	Runs to 2016. To be read in conjunction with the Bus Strategy
The Intelligent Transport Systems (ITS) Strategy (2011)	A strategy to develop ITS to provide safe, efficient, environmentally friendly and affordable multi-modal transport facilities as a precursor to the development of an integrated transport system in the county	Runs to 2019/20
Inter Urban Route Strategy (2012)	A strategy recognising the need to complement Urban Transport Plans with a consideration of cross settlement impacts and cumulative pressures on the strategic transport network, together with the necessary investment required to overcome any issues identified	Strategy seeks to address deficits and provide a strategy for a series of key corridors linking the urban centres within the County and across the borders to neighbouring authorities
Rail Strategy (2011)	Now superseded by the 2015 Version	See 5.41 below

Document	Purpose	Comments
Rights of Way Improvement Plan (RoWIP) (2011)	Provides the context for the future management of and investment in the rights of way network and other access activities, to meet the needs and demands of the people of Hertfordshire and those visiting the county.	Runs from 2011/12 to 2015/16
The Road Safety Strategy (2011)	The county council's aspirations for casualty reduction and prevention.	The intention is to encourage a change in attitude and behaviour and deliver a safer and greener highway environment
Rural Transport Strategy (2012)	A strategy is to help deliver the Rural Transport Policies of the LTP3 and any other policies which may have some significance to rural wards	Aim is to ensure that those in rural areas secure better access to important destinations and services and help reduce car dominance
Speed Management Strategy (2014)	An update in the document has been produced in the light of new government guidance - DfT Circular 01/13 Setting Local Speed Limits	Produced in conjunction with Hertfordshire Constabulary
Urban Transport Plans (various dates)	UTPs for Hitchin, Letchworth/Baldock and Royston	See 9.29 above

5.33 The subsidiary 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.

New and emerging transportation strategies and programmes

The Transport Vision 2050

5.34 Since the adoption of LTP3 there have been significant changes to both national and local planning and the economic context. These include the following key considerations:

- at the national level, enabling and supporting the delivery of economic growth has become a more prominent theme than it was previously;

- at the local level, actual and forecast population growth both within and beyond the county boundary means that Hertfordshire's ten constituent districts and boroughs need to accommodate more housing;
- finally, and crucially there is a strong commitment to enabling economic growth in the county through the Hertfordshire Local Enterprise Partnership, which as noted elsewhere is a business-led partnership with local authority representation.

5.35 Recognising this important change in the landscape, Hertfordshire County Council is updating the County's transport planning framework to ensure that the transport network is able to support and unlock growth. A fundamental aspect of this review is the development of a new Transport Vision for Hertfordshire to 2050; a strategic plan for transport infrastructure in, through and to Hertfordshire that will set out the priorities for investment in the network in the short, medium and long term.

5.36 The Hertfordshire 2050 Transport Vision will form the basis for making major investment decisions in Hertfordshire's transport infrastructure, making the case both within and beyond the county for a visionary approach which stretches into the long term. The time periods for the Hertfordshire 2050 Transport Vision are defined as follows:

- **Short term:** 2015-2021
- **Medium term:** 2021-2031
- **Long term:** 2031-2050

5.37 A 2-month long programme of stakeholder engagement in October/November 2015 led to a revisiting of the broader focus of the Vision to give it a broader focus than economic growth and recognise transport's contribution to other important policy areas. In view of this feedback, and building on previously gathered evidence, an updated set of objectives for the Vision have now been defined. These establish a number of objectives which will provide a framework for how investment in the transport system can aid the delivery of the 2050 Vision, as set out below:

Objectives Transport Vision 2050	
Prosperity	
1.	Improve access to international gateways and regional centres outside of Hertfordshire
2.	Enhanced connectivity between the large and growing towns in Hertfordshire
3.	Improve accessibility between employers and their labour markets
4.	Enhance journey time reliability and network resilience across Hertfordshire
Place	
5.	Enhance the quality and vitality of town centres
6.	Preserve the character and quality of the Hertfordshire environment outside of its key urban centres
People	
7.	Making journeys and their impact safer and healthier
8.	Improving access and enabling participation in everyday life through transport

Cross cutting schemes

Cross-cutting Themes
Reducing carbon emissions
Integration of transport and land use planning
Application and adoption of new technology
Cost effective/value for money delivery/maintenance of the transport network.
Encouraging active travel

- 5.38 A new draft set of objectives will be consulted on over the summer of 2016 and is expected to be adopted by the end of the calendar year.

2050 Transport vision long list of schemes

- 5.39 The draft transport vision is accompanied by a large list of potential schemes. Some of these are countywide, some based on improving east - west links and the remainder based on the three LEP Growth Corridors. The list is lengthy and essentially speculative; there is no guarantee that all will be delivered by 2050 and a probability that a number won't. It is likely that the investment priority will be focused on a small handful of schemes however, the list at least provides a basis for discussion. Key schemes likely to affect North Herts directly include the following:

- A1(M) widening throughout Hertfordshire
- Sustainable walking and cycling improvements between Stevenage, Hitchin and Letchworth
- A505 - A602 Hitchin southern by-pass
- Royston by-pass
- A507 Buntingford - Baldock upgrade including A505 link
- New East - West road between Luton, Stevenage and Stansted

- 5.40 An announcement of a short list of projects (the above represent 6 out of around 100 projects) is expected over the summer of 2016. Whether or not the schemes listed in 5.39 make it onto the shortlist, their appearance on a list of long term transportation projects will help fuel the debate about the justification of such works and how they could be prioritised, funded and delivered in order to respond to the challenges of future growth.

2015 Rail Strategy

- 5.41 The Hertfordshire Rail Strategy was adopted in 2015. This places greater emphasis on the development of improved services to support competitiveness and economic growth, whilst also taking into account anticipated population growth in North Herts and other districts, identifying potential interventions, spotlighting new issues that are arising, and promoting sustainability. There is also a focus on how best to lobby to secure maximum benefits.
- 5.42 The key themes identified in the Rail Strategy are that:

- rail plays a very important role in the Hertfordshire economy;
- a few key rail stations in the county are dominant, particularly for travel to London;
- there is a lack of good orbital (east-west) rail links in Hertfordshire;
- there are issues with station and train facilities that affect the passenger experience of rail in the county;
- rail is an important component of the Hertfordshire transport network in providing mobility and accessibility;
- rail will need to accommodate increased travel demand in future;
- a number of Hertfordshire's rail lines are forecast to be over capacity by 2031;
- a number of rail projects are committed or planned that will transform rail travel in the region in the next 10-15 years.

5.43 The Rail Strategy examines committed, planned and other possible interventions over, short, medium and long term time periods. For North Herts the relevant considerations are interventions to the Great Northern suburban and Cambridge line services and, beyond that, interventions on the ECML (particularly at Stevenage) and other interventions which may be of direct but more likely indirect benefit to the district's residents.

5.44 The direct interventions relating to North Herts are:

- to address physical constraints to enable capacity increases on the ECML (and therefore Great Northern suburban services) to accommodate forecast increases in rail demand on this line;
- to ensure an adequate level of services on the Hitchin to Cambridge line to maintain connectivity between Cambridge and the ECML, as well as ensuring there are sufficient services provided to Cambridge from key stations in Hertfordshire.

5.45 The indirect interventions relating to North Herts are:

- the medium term potential for the development of a Stevenage Interchange hub which would see a new turn back and platform and create a 'Metro style' service on the Hertford loop (with much increased capacity, frequency and speed) all supported by additional new rolling stock
- maintain or improve levels of service for long distance services on the ECML and improve the range of directly served destinations
- the long term potential for transformative east-west rail connectivity in the north of the county through support for the East - West Rail Central section southern option

5.46 The long term potential for transformative east-west rail connectivity in the north of the county through support for the East - West Rail Central section southern option is to a considerable degree compromised by the decision to select the northern option (through Sandy) for the East - West Rail Central section rather than a more southerly route (East - West Rail being a long term project to connect Oxford and Cambridge

through a series of intermediary stations, with onward connections to Norwich, Stansted and the East Coast ports). However, the idea of improved east - west public connectivity - be it road or rail - between, for instance, the towns of Luton, Hitchin and Stevenage remains an interesting possibility and something that future transportation programmes may return to.

- 5.47** A final point on rail worth noting was the publication in March 2016 of the Shaw Report on the future structure and financing of Network Rail, including recommendations for greater devolution to individual routes. The government will respond on the report later in the year; a move toward autonomy of individual routes might in time offer local communities greater say over the structure of services and the funding of rail investment.

A1(M) Strategy - Hertfordshire A1(M) Corridor Consortium

- 5.48** The A1(M) Strategy Consortium is being led by Hertfordshire County Council with the support of other bodies including North Herts District Council and other district councils, and also the Hertfordshire LEP, which has identified it as one of their priorities in the Strategic Economic Plan. It has been set up to campaign for improvements to this road corridor, is supported by a range of key local businesses and is working closely with the Highways Agency and Department for Transport. The issues referred to here are both direct (are located within or immediately adjoining North Herts) and indirect (affects movement to and from the district).
- 5.49** Studies undertaken on behalf of HCC in the spring of 2014 defined the aim of the strategy to determine the extent to which any capacity or performance issues on the road network within the A1(M) corridor might hinder the movement of people and goods as well as new development and economic growth. If such issues were felt to exist, then the aim would be to identify potential mitigation measures, consider their appropriateness, prioritise them and identify future steps including funding sources.
- 5.50** Analysis of traffic conditions noted the following:
- Delays between A1(M) junction 6 and 7 northbound and also at junction 3
 - Link capacity constraints between Junctions 6 to 8 and 1 and 3
 - Junction capacity constraints at junction 4 and local roads
- 5.51** With the national traffic model suggesting that traffic demand may increase by 30% by 2031 within this corridor (and with significant increases in households and jobs predicted) current problems at these locations are certain to worsen.
- 5.52** A range of alternative solutions are being proposed between junctions 6 and 8, in conjunction with the proposed Smart Motorway operation over this section proposed in the Road Investment Strategy (RIS) (see section 5.60 onwards below). A particular focus will be on junction 7 (the Gunnels Wood Rd/Broadhall Way roundabout).

Further away from the district, but also impacting on journeys to and from London by the district's residents, are potential improvements to A1(M) junctions 3 and 4.

5.53 The latest consortium meeting towards the end of 2015 noted the following:

- Highways England has appointed consultants to design the Smart Motorway J6-8 scheme, with the anticipated commencement of construction in 2019/20
- 'Online' solutions to junction improvement have given rise to some issues so that solutions involving additional non highway land intake are under consideration
- The RIS identified strategic study for the entire length of the A1/A1(M) from the M25 to Peterborough was noted
- The success (or otherwise) of the 'Pinch Point' Programme work at junction 6 is being evaluated
- The publication of the Stevenage Central Framework (July 2015) may give rise to the need to consider how the potential for significant levels of new investment in the town centre and adjoining areas will impact on local roads, and how to address this

The London to Leeds (East) Route Strategy

5.54 Highways England is responsible for planning the long term future and development of the strategic road network. Route Strategies represent a new approach to identifying investment needs on the strategic road network. Through adopting the Route Strategy approach, Highways England aims to identify network needs relating to operations, maintenance and where appropriate, improvements to promote and facilitate economic growth.

5.55 Greater participation of local and regional stakeholders in planning for the network is a key feature. The agency has divided the entire motorway and trunk road network into 18 routes, focused on strategic links between key areas of activity and transport. The A1(M) through North Herts is part of the London to Leeds (East) Route Strategy.

5.56 The Route Strategy for London to Leeds (East) route was published in April 2015, the culmination of two years of work consulting with key stakeholders. It is informing the Road Investment Strategy (RIS) Investment Plan (see below) and sets out a statement of how to tackle the most important challenges and opportunities for road users on this route.

5.57 Amongst the Route Strategy's conclusions were:

- Varying levels of congestion - from moderate to severe - between A1/A1(M) junctions 1 - 10, with capacity problems around Stevenage and Welwyn expected to continue without intervention
- Safety concerns with accesses, minor side road junctions and at grade roundabouts, A1 Baldock to Alconbury junctions 30, 31 & 32a.

- 5.58** The development of the precursor to Route Strategies - Route Based Strategies (RBSs) arises from one of the recommendations within Alan Cook's report "*A Fresh Start for the Strategic Road Network*" (November 2011). He recommended that the Highways Agency (to become Highways England in April 2015) should work with local authorities and Local Enterprise Partnerships (LEPs) to initiate and develop route-based strategies for the strategic road network. The government accepted the recommendation, stating that it would enable a smarter approach to investment.

The A505

- 5.59** Aside from the Herts Inter Urban Route Strategy (the content of which is likely to be superseded by the emerging Growth and Transport Plans (see below) there is no overall strategy for the A505 running through the district, notwithstanding the fact that it is an important east - west link (but in many ways seen as the poor relation when compared to those other key east-west links in Hertfordshire, the M25 and the A414. Previous proposals for a Hitchin southern by-pass foundered on the inability to link it to growth in this location and, but its role will come sharply back into focus with the growth proposals around Luton, Baldock, and Royston in particular. A number of improvements to overcome existing congestion hotspots and mitigate the consequences of growth are set out later in this chapter and within the Infrastructure Delivery Schedule (IDS).

The Infrastructure Act 2015, the creation of Highways England and the establishment of a Road Investment Strategy

- 5.60** The Infrastructure Act (Feb 2015) allowed for the creation of Highways England, a government-owned company which is able to access to long term stable funding to ensure improvements on the country's major road network are streamlined, cost efficient and encouraging of investment.
- 5.61** The Act also led to the creation of a Road Investment Strategy to be produced to determine the levels of performance and investment that are to be delivered (over a five year period, similar to the model already in use by Network Rail on the railways), together with a committed revenue stream to provide enhanced certainty for contractors.
- 5.62** The first Road Investment Strategy (RIS) was published in February 2015, with the first Roads Period 2015/16 to 2019/20. Although primarily an identification of investment projects the RIS contains a 25 year Strategic Vision through to 2040 identifying how the Strategic Road Network (SRN) would be shaped over that period.
- 5.63** In parallel with the acknowledgement that the SRN needs investment to secure upgrades to make it fit for modern purpose, the RIS also considers that there would be additional factors that would increasingly shape its form and nature, including:
- better access to data will enable drivers to make smarter, informed travel choices

- Ultra Low Emission Vehicles (ULEVs) which will reduce the carbon and other harmful emissions generated through SRN use
- in the longer term, assisted driving technologies and autonomous vehicles will increase safety and reduce the stress of driving

5.64 Two key highway concepts within the RIS were confirmed:

- **Smart Motorways** Using modern technology to convert the hard shoulder into an additional, controlled running lane, increasing the capacity of England's busiest motorways by a third at a fraction of the cost of traditional lane widening, reducing journey times and improving safety. These often involve 'all lane running' where there is no longer any dedicated hard shoulder. CCTV cameras and variable message signs are used to regulate speed and close lanes in the event of an incident or congestion, and regularly spaced emergency refuges mean that there is always somewhere to go in the event of a breakdown.
- **Expressways** A plan to upgrade those A roads where piecemeal upgrades have often resulted in inconsistency and substandard stretches of the road that are often less safe and a regular cause of congestion. Minimum standards for the new Expressways will include largely or entirely dual carriageway roads that are safe, well-built and resilient to delay; junctions which are largely or entirely grade separated, so traffic on the main road can pass over or under roundabouts without stopping; modern safety measures and construction standards; and technology to manage traffic and provide better information to drivers.

5.65 The RIS also announced a series of ring-fenced investment funds for actions that Highways England considers beyond its core business but which it considers essential to pursue. These are:

- a £300 million *Environment Fund* to deliver improved environmental performance across carbon, noise, water, biodiversity, landscape and cultural heritage for both new schemes and retrofitted improvements.
- a £100 million *Air Quality Fund* to ensure a specific focus and real improvements in this area.
- £250 million for a *Cycling, Safety, and Integration Fund*, aimed at improving safety, increasing provision for cyclists on and near the SRN, and enhancing access for a variety of users, including pedestrians, horse riders and the disabled.
- £150 million *Innovation Fund* to allow development of a technology led SRN that supports innovation and industry to enable the nation to become a world leader in this sphere
- finally, given the importance to the SRN to England's growth a £100m *Growth and Housing Fund* which would match fund infrastructure needed to promote housing and enterprise zones associated with the SRN

- 5.66** The RIS will see work start on over 100 major schemes over the 2015/16–2019/20 Road Period including 69 previously unannounced new road projects. There is provision also for renewal and maintenance and also a long term funding commitment beyond the Road Period – the Statement of Funds Available – to support this programme.
- 5.67** The RIS supports a number of projects in an around Hertfordshire (including the M25 and the M11) and there is a scheme with direct implications for North Herts:
- **A1(M) Junctions 6-8 Smart Motorway** – a newly announced upgrading of the existing two-lane section of the A1(M) around Stevenage to Smart Motorway standards to provide a third lane of capacity
- 5.68** The RIS also confirmed the intention to undertake two detailed studies, all focused on making major improvements to the capacity and connectivity of the SRN. The one of relevance to North Herts is the A1 East of England Study.
- 5.69** The A1 East of England study will look at the southern section of the route from the junction with the M25 in the south to Peterborough in the north to consider in particular the case for improving the non-motorway section linking the two parts of the A1(M) to motorway standard. It will examine how to bring consistency to the southern section of the route and whether improvements, including changing the alignment of the road, could reduce the environmental impact of the existing route and benefit local communities. The study is due to be completed by the end of 2016.
- 5.70** The RIS will also examine the potential for an Oxford to Cambridge Expressway. It is on the face of it most likely that this will be the upgrade of the A428/A421 route via Milton Keynes but there is an outside chance that a more southerly route may be of some benefit to North Herts.

A1(M) Junctions 8,9 and 10

- 5.71** It should be noted that although the future of these junctions will be examined as part of the A1(M) London to Peterborough study and although clearly not as problematic as other junctions on this stretch of road, the impact of growth and any potential mitigation measures should be considered.

2016 Budget statement on the second Roads Investment Strategy 2020/21 to 2024/25

- 5.72** The March 2016 Budget confirmed an overall commitment to investment in transport infrastructure, increasing it by 50% over the lifetime of the current parliament compared to the last, to a total of £61 billion. It also launched the second Road Investment Strategy, which will determine the investment plans for the period from 2020/21 to 2024/25.
- 5.73** The Chancellor's statement also confirmed the establishment of the UK as a global centre for excellence in connected and autonomous vehicles, including trials of

driverless cars on the strategic road network by 2017, removing obstacles to the use of autonomous vehicles on England's major roads, a wireless communication 'connected corridor' from London to Dover and 'truck platooning' trials on the Strategic Road Network.

- 5.74** The government is allocating £151 million from the Local Majors Fund in the first round of allocation, and is launching the bidding process for the second tranche of funding, designed to fund transformative local transport projects.

Growth and Transport Plans

- 5.75** Emerging work within Hertfordshire County Council is looking at aligning transport infrastructure planning and future investment with the LEP's Strategic Economic Plan (SEP) and as such, deriving strategies based on the 3 Growth Areas set out in the document, one of which is the A1(M) Growth Corridor. This would enable transportation planning to have as its key focus the delivery of the twin agendas of meeting the demands for future growth and promoting economic recovery.
- 5.76** The recent focus of local level transport planning has been in the preparation of Urban Transport Plans (as summarised above). These have been successful in identifying local schemes which if implemented, could help respond to the challenges of meeting future growth related demand for transport. We consider this in relation to individual locations in sections 5.104 - 5.113 below.
- 5.77** Essentially however it has come to be recognised that UTPs are not always fit for purpose in responding to emerging transportation challenges; this is because:
- delivering economic growth has become a more significant government and local priority
 - there is a much more competition in terms of funding for the delivery of future schemes
 - large scale development is coming forward in Hertfordshire (including North Herts) and surrounding areas
 - greater co-ordination with different stakeholders and delivery partners is required to co-ordinate improvements and maximise opportunities
- 5.78** Growth and Transport Plans (GTPs) will offer a number of advantages over the UTP approach. The idea is that they will offer solutions tailored to the growth agenda, consider wider scale issues not limited to urban areas and align delivery of growth with investment in new infrastructure. An evidence led approach - backed by local transport models and the countywide COMET model - will enable prospective schemes to withstand scrutiny, and increase certainty of delivering desired outcomes.
- 5.79** Decisions on the boundaries of the GTPs and their intended order of rollout appear pretty fluid apart from a decision to prioritise the Watford/Hemel Hempstead/surrounding area GTP, with commencement on this during the current financial year. Thereafter a potential 6 further GTPs have been identified, and they include one covering the A1(M) Strategic Corridor (and therefore Hitchin, Letchworth

and Baldock) and another - a local corridor/cross boundary study of the A10 north to Cambridge, which would involve Royston.

- 5.80** The potential of these plans to take forward critical infrastructure investment priorities in and adjoining the district will be explored further in the near future. The expectation is that two GTPs could be prepared each year so the worst case scenario would see completion of the two GTPs relating to the district by 2019/20.

Network Rail - East Coast Main Line Route Utilisation Strategy and CP5 and CP6

- 5.81** The district has seen two important rail investment projects in recent years; these are:
- The Royston Rail Crossing (2012), providing a subway to make walking and cycling across the town easier, as previously the railway had effectively cut the town in two
 - Hitchin Flyover (2013), a grade-separated single-track railway flyover on the Great Northern Route to Cambridge, which carries the Cambridge Line over the East Coast Main Line in order to increase the throughput at Cambridge Junction, previously a congested flat ("at-grade") junction with the East Coast Main Line just north of Hitchin, which had imposed severe constraints on capacity on both that line and the Cambridge Line
- 5.82** Network Rail's Control Period 5 (CP5) covers rail infrastructure investment promoted by the agency between 2014 - 2019. There are no projects specific to North Herts within this period, but the lines through the district stand to benefit indirectly through quicker journey times and improved reliability as a result of traction supply upgrades and the introduction of the Intercity Express Programme (IEP) on the ECML from 2018, as well as capacity improvements elsewhere. This includes the construction of a new Platform 5 at Stevenage station. This will provide additional capacity but may result in (some) 'Hertford Loop' services which currently originate in Letchworth Garden City terminating at Stevenage.
- 5.83** After 2019 (during CP6, 2019 - 24), Network Rail's East Coast Mainline Rail Utilisation Strategy notes that it may also be necessary to consider four-tracking of the Digswell Viaduct between Digswell Junction and Woolmer Green in Welwyn Hatfield district if signal upgrades do not deliver the potential for trains running at two-minute intervals through this section. It should be noted however that there have been many previous proposals involving increasing capacity over Digswell Viaduct, none of which have come to fruition.

DfT Rail franchises

- 5.84** The current enlarged Thameslink, Southern and Great Northern franchise was noted in 5.11 earlier. As part of the TSGN franchise there is a commitment by the operator to provide:

- 150 new metro-style EMU cars to replace the existing 1970s stock on commuter services into London's Moorgate station
- A new fleet of 108 coaches 'designed for airline travellers' to be introduced on Gatwick Express airport services by 2016
- Introduction into service in 2016-18 of the 1 140 Class 700 EMU cars which Siemens is currently building for Thameslink services (the first of which have recently entered service)
- Additional direct services to Gatwick airport, including a through Cambridge - Brighton service
- £50m to be spent improving 239 stations
- The 100 busiest stations staffed from first to last train
- Free wi-fi at 104 stations.

5.85 As part of the Virgin Trains East Coast franchise, Stevenage station (the nearest ECML station that North Herts residents can access) will benefit from:

- upgraded train interiors introduced between 2015 and 2017
- the station will be served by new high speed (Intercity Express Programme (IEP) trains from 2020 providing more reliable services, more seats, more luggage space, faster journey times and improved wi-fi and mobile coverage

Hertfordshire Strategic Economic Plan

5.86 As considered elsewhere the publication of the Hertfordshire Strategic Economic Plan (SEP) has resulted in the confirmation, in July 2014, of a Local Growth Deal for Hertfordshire of £199.2 for the years 2015/16 - 2020/21, with £20.9m being made available in the first year. In January 2015 this fund was expanded to £221.5m. A considerable proportion of this investment (around 60%) is transport related. Amongst its priority areas the SEP identifies the enabling of flagship sites for housing and employment to come forward, and the enhancement of transport connectivity, all of high relevance to the transportation elements of the emerging local plan.

5.87 Within the Local Growth Deal £3.8m has been identified for A1(M) (£1.3m in 2015/16) for a series of transportation schemes including the A1(M) sustainable transport package, A602 local congestion measures and 2016 Buslink. For the M11/A10 the Local Growth Deal identified a package of £48.4m including £4.7m in 2015/16.

5.88 Only a small part of North Herts is considered to be within the M11/A10 corridor and the main focus on investment will be elsewhere (A120 Little Hadham by-pass, A602 Stevenage to Ware). In the long term the resilience of the A10 remains an important consideration and the potential improvement of the undualled section from south of Buntingford to Foxton in Cambridgeshire is a scheme that both the Hertfordshire and Greater Cambridgeshire/Greater Peterborough LEP may be keen to promote, something that may give rise to the potential consideration of a Royston by-pass.

- 5.89** For the A1(M) corridor, compared with the allocation of funds for the Croxley Rail link in Watford and the M11/A10 the package is a modest one, and only a relatively small element of this will be directed towards North Herts (albeit some wider investment in transport will have indirect benefits for the district's residents in moving around the county).
- 5.90** There may be some elements of flexibility regarding the future distribution of Local Growth Deal funds, particularly if the stated priorities cannot be realised, and it is also of note that despite the overall 5 year allocation, the commitment of funds beyond the first year is the subject of an annual bidding process (with a range of bids for Growth Deal 3 funding (2017/18) submitted in July 2016. There is therefore perhaps some potential for one or more of the district's priority transportation projects to be brought forward for potential funding through the annual Local Growth Deal bidding process.
- 5.91** Moreover it is anticipated that the LEP may in some point in the near future call for additional transportation schemes and packages to add to those already identified for funding, whilst the anticipated refresh of the Local Growth Deal funding beyond 2020/21 is likely to see a call for appropriate schemes at some point towards the end of the decade. Schemes likely to be in a favourable position to secure funding will be those whose principal objectives align with existing and/or future iterations of the SEP.

Local Transport Bodies

- 5.92** A Local Transport Body (LTB) has been established for Hertfordshire, and has been receiving funding from April 2015. LTBs are partnerships of local authorities in England outside Greater London and the Herts LTB is one of 38 covering similar areas to local enterprise partnerships.
- 5.93** LTBs will be responsible for establishing, managing and overseeing the delivery of a programme of local major scheme priorities (potentially including some trunk road and rail schemes) beyond 2015. In Hertfordshire they will decide which major transport scheme investments should be prioritised and review and approve individual business cases for those investments, to ensure effective delivery of the programme.
- 5.94** The focus for funding is the 'Local Major Schemes' which comprise those large-scale transport infrastructure projects that are generally unaffordable to local areas through conventional transport funding. Following the abolition of both the regional tier of governance and Regional Funding Allocations, 'Local Major Scheme' funding and decision making will be the responsibility of local areas such as Hertfordshire.
- 5.95** The Hertfordshire LTB is working on 5 priority projects, none of them in North Herts. Any decision to promote major road or rail schemes in the district is however likely to be made through the LTB.

Modelling and mitigating the consequences of growth

- 5.96** This section looks at the impact of growth on the district's transportation system.
- 5.97** This assessment is undertaken on an area basis as follows:
- Hitchin and its environs
 - Letchworth/Baldock and its environs
 - Royston and its environs
 - Luton East and North East
 - Stevenage North (and the impact of development west of Stevenage in Stevenage BC)
- 5.98** Key areas of concerns where mitigation is likely to be needed have been identified in the Urban Transport Plans for Hitchin, Letchworth/Baldock and Royston; and through transport modelling work undertaken as part of the emerging Local Plan.
- 5.99** Modelling work is based on the Welwyn Hatfield and Stevenage Hitchin and Baldock/Letchworth local model (WHaSH-BL), itself an updated version of the former Stevenage and Hitchin Urban Transport Model (SHUM) and extension to the Welwyn Hatfield and Stevenage/Hitchin model (WHaSH).
- 5.100** It integrates two separate models and covers most of the length of the entire A1(M) corridor in Hertfordshire and has been extended to include Letchworth and Baldock to assess the impacts of Local Plan growth.
- 5.101** The above modelling work does not include Royston and the consequences of proposed growth in and around that town. This has been assessed using the County Council's Transport Model (COMET covering all A, B and C roads in Hertfordshire and beyond the county boundary) and which is complemented by a separate public transport model. A great deal of data has been collected to support the development of this model, including mobile phone records, and it also has built in growth assumptions. (It should be noted that there are a number of as yet unanswered questions about the use of the COMET model in relation to Royston which will be addressed in future iterations of this IDP).
- 5.102** Modelling work has been undertaken for Stevenage Borough Council using the SHUM and WHaSH models to support their evidence base as well as a separate S-paramics model for Stevenage Town Centre. Modelling work to assess the impact on the Luton Highway Network and NHDC highway network for site allocations to the east of Luton has also been undertaken using the Central Beds and Luton Traffic Model (CBLTM); this is to support the Luton Local Plan and NHDC evidence base. All the traffic models are 'strategic' models and provide a regional based overall assessment of traffic impacts related to the growth scenarios. The strategic models do not provide local assessments and local modelling will be required as and when development is forthcoming to review the key problem junctions raised through the strategic modelling exercise.

5.103 All modelling work (as noted above) and the way in which transportation issues are dealt with (as identified below) needs to take into account that it should not simply be a matter of ‘predicting and providing’ highway mitigation works. Hertfordshire County Council promote a recognition that other factors (e.g. measures to encourage a modal shift or wider cultural changes around the ownership and use of road vehicles) are of growing influence in planning for future highway infrastructure.

Summary of transportation issues at key junctions

5.104 The strategic modelling work has concluded that there are traffic delay issues that require resolution at 20 junctions within the WHaSH-BL modelled area.

Ref	Location
1	A1(M) J9/Letchworth Gate/A505, Letchworth
2	A1M J8/A602, Stevenage
3	Station Road/Royston Rd/Clothall Rd, Baldock
4	A602/Trinity Rd, Stevenage
5	A1155/A602, Stevenage
6	A505/Norton Way, Letchworth
7	Woolgrove Road/Cambridge Rd/William Rd, Hitchin
8	Pirton Road/A505/Upper Tilehouse St / Wratten Rd, Hitchin
9	Cadwell Ln/Wilbury Way/Woolgrove Rd, Hitchin
10	Upper Tilehouse St/A602/Paynes Park, Hitchin
11	A602/Monkswood Way, Stevenage
12	Six Hills Way/A602, Stevenage
13	London Road/Monkswood Way, Stevenage
14	Hitchin Road/Arch Rd, Hitchin
15	A602/B656/Gosmore Rd/St John’s Rd, Hitchin
16	Six Hills Way/Homestead Moat, Stevenage
17	Clovelly Way/Gunnels Wood Rd/Bridge Road W, Stevenage
18	A602/Corey’s Mill Ln, Stevenage
19	A1072 Martin’s Way/Canterbury Road, Stevenage
20	B197 Gravely Road/North Road, Stevenage

Table 5.4: The 20 key junctions where there are traffic delay issues

5.105 It should be noted that a number of these schemes (numbers 2, 4-5, 11-13, 16-20) are in Stevenage, but are referred to in this IDP because the need for mitigation arises because of the consequences of growth in both districts. It should further be noted that the requirement for many of these schemes is triggered by background growth in traffic levels alone (albeit that future development then makes use of that additional capacity). Further work will be required between Hertfordshire County Council, North Hertfordshire District Council, Stevenage Borough Council and other parties to determine an appropriate programme of delivery and apportionment of costs reflecting these factors.

5.106 The following sections consider both the level of mitigation needed and additional transportation investment identified in UTPs but not yet delivered, where it is judged that the UTP measure is considered sufficiently linked with the Local Plan growth strategy to be included in this IDP. Such works are considered on a settlement by settlement basis.

Hitchin

5.107 The main characteristics of Hitchin are as follows:

- located to the west of the A1(M) on several highly trafficked routes, namely the A505, A600 and A602
- these routes carry a significant proportion of through traffic as well as local traffic and often experience peak hour congestion
- within Hitchin, the town centre is situated between a one-way system around Paynes Park to the west and the B656 to the east.
- the one-way system directs a large amount of traffic through the western part of the town centre
- a constrained network with isolated congestion problems at specific locations during the peak hours. A number of key junctions within Hitchin are already at 80-100% capacity at peak times and the addition of further vehicular traffic will compound this issue
- in addition, some junctions are already at 100% capacity at peak times and would require an intervention to increase capacity should any further traffic from development be added to the network
- historic core which operates a pedestrianised zone at certain times
- three major bus stop areas located close to the town centre and market
- a recently upgraded railway station to the east of the town centre
- a network of pedestrian footways following the highway network with the majority of crossing facilities concentrated on the A600 and A505 routes

5.108 There are 6 problem junctions identified in the table in paragraph 5.104 within Hitchin, whilst a total of 14 additional schemes identified within the Hitchin UTP are included here and shown below as they are judged to be sufficiently linked to the consequences of growth and therefore are included in the IDP and Infrastructure Delivery Schedule.

Scheme	Details	Costs (£000)
Schemes identified by Local Plan modelling		
Woolgrove Road/Cambridge Rd/William Rd	Signal controlled system at junction	323
Pirton Road/A505/Upper Tilehouse St/Wratten Rd	Change to a signal controlled junction	842
Cadwell Ln/Wilbury Way/Woolgrove Rd	Connect Wilbury Way and Cadwell Road to N of industrial area, plus redesign of Cadwell Land Junction	5838
Upper Tilehouse St/A602/Paynes Park	Change to a signal controlled junction	1485
Hitchin Road/Arch Rd	Change of junction priorities	18.8
A602/B656/Gosmore Rd/St John's Rd	Widening approach arms and signalling	1221

Scheme	Details	Costs (£000)
Schemes identified by pre-existing Urban Transport plans or other models		
Upgrading pedestrian crossings at 3 locations across Hitchin	3 key junctions identified in the UTP. Involves upgrading and where possible new Toucan crossings	487
General footway improvements across Hitchin to improve pedestrian links to industrial areas	Includes new lighting and signing	20
Cycling – general initiatives around Hitchin	Includes advance stop lines, improved signage and covered parking in the town centre	48.79
Cycling – routes from town centre/railway station to other parts of Hitchin	A total of 6 new routes plus crossing at Nightingale Road (also benefits pedestrians)	631.17
Hitchin integrated strategy for marketing sustainable modes	A strategy to bring together public transport, cycling, walking and highway schemes	375
Upgrade bus stops in Hitchin	Including Kassel kerbing, shelters level boarding etc. Allowance here is for 10 stops	210
Traffic calming measures on Stotfold Road	To reduce vehicle speeds	110
Improve signalised junctions and pedestrian phasing in Hitchin	4 key junctions identified	100
Improved road signage throughout Hitchin	Tackling poor signage	140
Junction improvements along the A505/A602 corridor	To deal with capacity issues along these routes in the town	50
Improve Caldwell Lane junction	Safety improvements	125.8
Investigation of vehicle speeds	To determine whether traffic calming measures are required	154
Shared surface scheme for town centre	3 roads identified for partial/total space sharing	1100
Car park real time information	Matrix to identify available spaces	68

Table 5.5: Transportation infrastructure schemes in Hitchin

Letchworth and Baldock

5.109 The main characteristics of Letchworth and Baldock are as follows:

- Letchworth and Baldock are closely linked, not just physically but also economically, with the towns are separated by a narrow strip of agricultural land and the A1(M) and can therefore be considered on a joint basis
- Baldock Bypass was completed in 2006 and has significantly reduced congestion in Baldock, with traffic on Hitchin Street/Whitehorse Road reduced by over 50%
- traffic on the B656 (former A505) as it passes through Baldock (Hitchin Street/Whitehorse Street) was historically a significant cause of congestion in the area. However, this has reduced by over 50% following the completion of the Baldock Bypass and associated works
- although Letchworth was the first Garden City in the country, it was still conceived and developed before the age of mass car ownership and as such also suffers from congestion in a number of locations, most notably Letchworth Gate, Baldock Road and Broadway

5.110 There are 3 problem junctions identified in the table in paragraph 5.104 within Letchworth and Baldock whilst a total of 8 additional schemes identified within the Letchworth and Baldock UTP are included as well because they are judged to be sufficiently linked to the consequences of growth and therefore are included in the IDP and accompanying Infrastructure Delivery Schedule. Proposals for development to the north and south of Baldock will require the provision of new link roads. These have been included in transport modelling to understand the impact upon traffic flows, but their provision (in terms of both cost and delivery) is assumed to be absorbed within the specific proposals for these areas and they are subsequently not specifically identified in this IDP.

Scheme	Details	Costs (£000)
Schemes identified by Local Plan modelling		
A1(M) J9 Letchworth Gate/A505	Signalised entries to the roundabout	800
A1(M) J8/A602	Signalised entries to the roundabout and associated work	800
Station Road/Royston Rd/Clothall Rd	Signal optimisation with mini roundabout	20
Schemes identified by pre-existing Urban Transport plans or other models		
Promotion of bus shuttle to Lister Hospital	Involves promotional campaign to increase awareness	20
Letchworth Station forecourt improvements	Segregation of activities, increased cycle provision, improved crossings	500
Leys Avenue/Gernon Road/Town Centre signing	Improving existing arrangements and enhancing traffic flows	405
Letchworth Gate link improvements	Scheme to ease peak congestion, increase safety and improve pedestrian crossings	3850
Speed limit compliance Wilbury Road (west of Cowslip Hill)	Improved road markings	3.5
Clothall Road Baldock	Promotion of safer routes to school	30
Scheme	Details	Costs

		(£000)
Cycling – routes from town centres/railway station to other parts of Letchworth/Baldock and other routes	A total of 8 routes plus major new crossings	1770
Letchworth and Baldock Town Centre parking review	Supply and demand issues between commuters/residents, charging structures etc	100

Table 5.6: Transportation infrastructure schemes in Hitchin/Baldock

Royston

5.111 The main characteristics of Royston are as follows:

- The town is centred around the intersection of the old east- west A505 Baldock Road / Newmarket Road route, and the Old North Road (A1198) extending northwest from The Cross. This road provides the only vehicular crossing of the railway line through the town
- The A505 Bypass extends around the north side of the town providing intersections with the A1198 and the A10
- The Hitchin-Cambridge line runs on a north-east/south-west direction through the town, with the railway line located 500 metres to the north of the town centre on the Old North Road
- The alignment of the primary road network and the railway through Royston create a significant amount of real and perceived severance within the town and on its boundaries. The A505 arcs around the northern edge of the town and acts as a barrier to the surrounding countryside
- The A10 acts as a barrier to local east-west movements within the town and strongly delineates the south-eastern boundary of the Town Centre itself. Melbourn Street and Baldock Street also create barriers to pedestrian movement within the Town Centre. These two streets carry east-west through traffic and their presence creates a north-south split in the Town Centre
- Any development within the town would need to be integrated with the rest of the town rather than having direct links to the A505 to encourage use of sustainable modes of transport.

5.112 None of the problem junctions identified in the table in paragraph 5.104 are within Royston, due to Royston not being included within the WHaSH-BL model. It should be noted that there has been some modelling of traffic conditions in Royston using the COMET model but that there will need to be further modelling (either using COMET, extending the WHaSH-BL model or some other form of bespoke model) to determine whether mitigation works should be pursued at key junctions within and around the town; if so these will be included in the Infrastructure Delivery Schedule in a later iteration of the IDP.

5.113 There are however 13 additional schemes identified within the Royston UTP included here as they are judged to be sufficiently linked to the consequences of growth and therefore are included in the IDP and the IDS.

Scheme	Details	Costs (£000)
Schemes identified by pre-existing Urban Transport plans or other models		
Crossing north of railway station	Pelican crossing proposed	80
Royston Town Centre	Three town centre enhancement schemes	468
Railway crossing improvements	Improvements in crossing from Green Drift to South Close/Orchard Road	17.5
Completion of final phase of town-wide cycling network	Various proposals to link work undertaken to date with southern half of Royston and A505	400
A505 N of Royston	Cycling improvements along and across the A505	190
Toucan crossing Newmarket Road	New crossing facility	24
Bus infrastructure	Improvements to bus infrastructure including bus stops throughout Royston	15
Promotion and co-ordination of bus services including to outlying areas	Aim would be to increase bus mode share	40
Enhanced Royston bus station	Short term enhancements pending potential longer terms redevelopment	150
Old North Road modifications	Modifications of road from York Way roundabout to A505 roundabout	90
Traffic calming measures	Green Drift, Tannery Drift and Newmarket Road area	60
Review town centre parking	Signage, pricing, controls etc	20
Sustainable transport promotional activities	All sustainable passenger transport modes	50

Table 5.7: Transportation infrastructure schemes in Royston

Funding of transportation infrastructure within villages

- 5.114** The transport infrastructure investments identified above relate to activities within the districts 4 towns, Stevenage and the major road network (including the Strategic Road Network). One exception is the Arch Road/Hitchin Road junction which is located in Great Wymondley but is listed above under Hitchin schemes.
- 5.115** The transport modelling undertaken does not identify any other specific mitigation scheme requirements within villages expected to be the subject of significant growth within the plan period or any other villages due to the strategic nature of traffic modelling. However, in some villages there are existing highways issues – for instance in Knebworth, where, the High Street is an existing pinch point which is exacerbated when delays or incidents on the A1(M) result in the B197 being used as an alternate route between Welwyn Garden City and Stevenage. Highway management measures could be introduced in this location - provided they protect the continued vitality of the local centre - although there are no specific proposals or funding for such works.
- 5.116** Where new development is proposed in villages it will be appropriate to ensure that the Transport Assessments for such development takes such matters into account, providing traffic modelling of the local highway network if required and making

appropriate contributions to any mitigation measures or wider strategies that will address these issues. As for Royston (see above) villages have not been the subject of modelling and the potential for doing so (with the subsequent identification of mitigation schemes potentially) needs to be explored in future. Again, the outcomes of such investigations can be fed into both the IDP and IDS.

The generic funding of transportation infrastructure

5.117 Location specific funding has been identified within individual settlements as set out in paragraphs 5.10 – 5.113 above. Generic funding may also need to be identified for a range of transportation initiatives relating to the entire North Herts district, with the following identified:

- The funding of bikeability courses for school children
- Smarter travel measure packages such as travel marketing, travel plans and car clubs to reduce reliance on the car
- Real time information
- Introduction of further bus priority measures
- Improved public transport information
- Introduction of car sharing clubs
- More work travel and school travel plans

The funding of infrastructure works within major new developments

5.118 The mitigation works and their anticipated costs identified above are all measures external to new development sites themselves. Major new development will also be required to identify and fund appropriate transportation measures as part and parcel of overall site masterplanning, and to fund such development related measures where appropriate. In addition to anticipated highway measures to serve the scheme, the following are expected to be identified and funded by the developer:

- Permeability within new developments and an internal footway network connecting to the existing pedestrian provision
- Provision of subsidised bus services and/or new bus services
- Quality cycling routes with connections to the wider cycleway network
- Development related travel plans including appropriate hard and soft measures
- Supporting Smarter travel measures including real time information

The provision of cycleways within major new development

5.119 A specific requirement concerns the funding of cycleway provision within major new development. The local authority is keen to promote sustainable transport measures and one key impact of this is to ensure that major new development in particular provide adequate cycleways, both segregated within the new development and connected to the wider road network if possible. The within the major schemes the IDP has identified around 10.8km of new cycleway provision that should be sought at

an overall cost of £0.54m, with funding secured as part of overall development costs (on site) and through s106/s278 agreements off site,

Discussions with key agencies

- 5.120** The County Council's transportation officers are committed to working with North Herts District Council to identify transportation infrastructure investment required as a consequence of growth and to help secure the necessary funding to enable its delivery. Regular liaison is taking place on the strategic transport modelling work, the identification of infrastructure priorities and to ensure that HCC is part of any engagement the District Council pursues with other agencies. These discussions are ongoing.
- 5.121** As noted previously, the identification by the County Council of a long term vision of transport in Hertfordshire through to 2050 has incorporated a desire for it to work with local agencies including district councils to realise this vision. This vision appears certain to contain some radical elements which take as their starting point the view, for instance, that ongoing investment in new roads in perpetuity to deal with ever increasing demand for road space is simply not sustainable.
- 5.122** The effects of such a vision may not be felt immediately but in later stages of the rollout of the Local Plan there is an expectation that this approach (which will look in detail at ideas around demand management and the promotion of significant modal shifts away from the unfettered use of the private motor car) will start to bear fruit. It also increasingly takes up the consequences of innovation and the increasing demands for environmental sustainability on transport patterns and movement levels. Should this be the case, the pattern of future investment in transportation infrastructure may change markedly.
- 5.123** Highways England has been reviewing the emerging Local Plan and its impact on the operation, maintenance and improvement of the strategic road network, and those discussions will continue. Initial discussions have also taken place on the emerging Local Plan proposals with adjoining districts (under the principles of the 'Duty to Co-operate) with, in some instances, these other districts sharing their own emerging local plan proposals when they have been able to do so.
- 5.124** Discussions have taken place with the Hertfordshire LEP on the transportation element of the LEP. The LEP's current priorities for support are set out in the Strategic Economic Plan which runs to 2020/21, and this contains a number of projects it supports through the Growth Deal. There are no specific transportation schemes within the SEP relating to North Herts. However, there is currently an annual round of submissions for new funding (Growth Deal 3 submissions were made during July 2016) and in addition the LEP is currently looking to refresh the SEP.
- 5.125** It is instructional to look at the general criteria that that the LEP are required to employ when seeking to define whether or not to support infrastructure and other SEP related projects. A letter from then Communities and Local Government Minister

Greg Clark to all LEPs in March 2016 advised that regardless of any other merits, funding support should only be for those projects which, inter alia:

- secure levels of growth over and above those being achieved within previously supported Growth Deal projects
- show collaboration and reformed governance arrangements
- deliver greater private sector involvement
- alignment with government objectives
- are informed by evidence of progress on earlier projects

5.126 These are themes we will return to in Chapter 13 - the delivery of infrastructure

Infrastructure Funding and Delivery

5.127 Infrastructure funding and delivery is considered in detail elsewhere in this document, so this chapter considers the headline issues associated with funding and delivering growth

5.128 Funding sources comprise public funds, private funds and developer contributions. Developer contributions in the main are in the form of CIL (if it is introduced in the district) or s106 as well as franchise secured investments by the Train Operating companies, and public funds comprise the transport element of the Local Growth Deal, the County Council's capital programme, Highways England's funding programme (through Route Based Strategies), one off funding programmes (e.g. the Pinch Point programme) the Roads Investment Strategy, and Network Rail's investment throughout successive Control Periods.

5.129 Capital funding from local authorities is likely to be much reduced whilst developer contributions are in transition (with the current uncertainty over whether CIL will be introduced in the district and the scaling back of s106 obligations which took place in April 2015 also having an effect). Given that most public funding regimes operate over a maximum 5 year programme (the Local Growth Deal, Network Rail's Control Periods) it is difficult to be certain about funding for some infrastructure which may not actually be needed for 10 - 15 years.

5.130 Notwithstanding this the funding potential transportation infrastructure needs should be identified and is set out in the transport section of the Infrastructure Delivery Schedule in Appendix 1. The key to new investment will be aligning the local authority growth strategy with economic and competitiveness objectives. This, transport projects which can deal with the consequences of growth and at the same time increase competitiveness, foster innovation and enterprise and enable employers to provide goods and services to their markets more easily are likely to be successful in securing funding.

5.131 In recent years the use of s106 agreements has become critical in the funding of transportation infrastructure. The advantage with s106 is that it is possible to translate development numbers into transportation investment needs and identify from that a cost to be secured from the development promoters. Even if CIL is

introduced some uncertainty about levels of developer contribution will remain with the forthcoming limitations on s106, as the County Council as highway authority cannot be certain whether it will achieve access to similar levels of developer contributions via CIL, although it is able to make a case for CIL revenues to the district council as charging authority under whatever governance arrangements are adopted. This all assumes that the district council will introduce CIL; as noted previously a decision is likely to be made once the government's review of CIL has been completed and the conclusions known.

- 5.132** Even with the introduction of CIL (if indeed it is introduced) s106 will however remain relevant for the securing of site related highway and sustainable transport infrastructure through developer contributions and there is an emerging consensus that for large development sites (of 500 dwellings or more as well as potentially smaller schemes) site related transportation needs will continue to be met by this means (subject to viability considerations and the application of the 'rule of 5', the rule which prevents the collection of more than 5 obligations towards a specific project or type of infrastructure).
- 5.133** Given this it might mean that most of the transportation needs of the proposed urban extensions and some of the larger urban capacity/windfalls/village developments will be funded via s106, assuming this source of funding continues to remain available.
- 5.134** For the transport needs arising from all other development CIL (if introduced) can contribute and indeed even entirely meet the cost of transportation infrastructure, although it will be competing for such funds with other forms of infrastructure such as school and GP surgeries.
- 5.135** To meet the potential funding gap that could be expected to arise it will be important to work up both a strategy for future transportation investment and the schemes themselves so that access to public funding regimes such as the Local Growth Deal can be promoted. Bringing forward the Growth and Transport Plan will be the ideal vehicle for progressing such work.

Transport Chapter – 2018 Update

- 5.136** The key changes reviewed here are:
- progress on LTP4
 - The North Herts Transport Strategy
- 5.137** Additionally Chapter 13 (The Funding of Infrastructure) reflects on new funding programmes announced by the government in the 2017 Spring and Autumn budgets which will assist with the delivery of transportation infrastructure, along with the potential for borrowing (through bonds, loans and land value uplifts).

Progress on LTP4

- 5.138** The draft LTP, which is currently the subject of consultations, comprises an overall strategy, a series of 21 policies a set of Transport proposals. The overall strategy is

expected to be firmed up during 2018 with daughter documents covering a series of detailed issues becoming available during 2019.

5.139 Of interest to North Herts are the following:

- of the 7 key multimodal corridors relating to Hertfordshire North Herts has an interest in proposals to be developed for London – Stevenage – Peterborough, but also Stevenage – Cambridge, Luton – Stevenage and Stevenage – Stansted
- a confirmation of the progression of the North Central Hertfordshire GTP will be prepared during 2017/18
- the identification of the new site access onto the B656/A505 and A507 (with highway links through the site) at North Baldock is one of the 6 key transport improvements to support new development within the County
- Baldock, Hitchin, Letchworth Garden City and Royston all being identified as Cycle Infrastructure Improvement Towns

North Herts Transport Strategy (October 2017)

5.140 The Key Principles of the Transportation Strategy are to:

- Improve access opportunities for the local economy – this could include better access to employment areas and better transport choice for workers;
- Reduce carbon emissions and the impacts on air quality management areas;
- Manage the transport network in a manner appropriate to the local conditions – this will include, depending on requirements, the ‘smoothing’ of traffic movements where there are pinch points, reductions in speeds and better travel conditions for sustainable modes, and the provision of appropriate capacity where this will not lead to a severe impact on other policies.
- Reduce the demand for travel by encouraging sustainable travel (on foot, by bicycle, by public transport, or via shared mobility) as an alternative to the private car; and
- Ensure all development is supported by the necessary provision of, or improvements to infrastructure, services, and facilities in an effective and timely manner to make development sustainable and minimise its effect upon existing communities.

5. 141 In order to deliver these principles the key policies proposed are:

- Ensuring that the **new developments have sustainable transport ‘built-in’**
- Adoption of a **transport user hierarchy**;
- Deliver a **step change in cycling and improved walking** within the main urban centres through travel behaviour change and better facilities;
- Deliver **an improvement in bus-based public transport** in the main urban centres, including better bus interchange and journey times;

- A '**Sustainable Spine**' corridor along the **A505**¹² with a focus on enhanced public transport and cycling connectivity between the towns.
- A **traffic management plan** for each main urban town, which focuses on managing traffic to reduce air quality, congestion and severance issues, rather than increasing traffic volumes through the towns.
- **Rural management and improvement measures** aimed at resolving particular traffic issues or taking opportunities to better link villages to each other or the main urban towns and
- Review, provide for and utilise **technology improvements** through the strategy

5.142 The Transport Strategy notes that the IDP currently identifies broad funding requirements for transport of some £23.3m over the plan period, derived from recent HCC modelling and traffic assessment work and proposals in the UTP's. The latter include some other highways schemes and sustainable transport measures. Given the changed focus of the Transport Strategy, it is suggested that there needs to be a divergence from the current IDP principles, although the Transport Strategy recommends the retention of the overall sums required for investment in transport projects over the Plan period. It proposes the following reallocation to:

- Identified highway schemes
- A general allowance for other highway, traffic management and safety schemes arising from strategy studies
- Behaviour change programme funding
- Funding for public transport and parking measures.

5.143 There will need to be some flexibility over the remaining 15-year plan period on how this funding is spent between these categories, as the behaviour change programme progresses.

5.144 The sums allocated are shown in Table 5.8 below. The overall funding in the IDP has been retained, but some low value for money or duplicated schemes have been reallocated to other works-streams in line with the strategy. These do not, at this stage, represent fully costed proposals, but more an indication of changed priorities in investment.

Category of scheme	Details	Letch worth/ Baldo ck	Hitchin	Royst on	Rural/ villages	Total
Highways (schemes identified)		£1,961	£3,890	£100		£5,951
Traffic management/safety /measures identified through strategy studies	Mixture of schemes likely, some highways/safety/ma nagement and 'hard' measures for travel behaviour change.	£1,750	£1,330	£1,250	£1,350	£5,680

¹² And B656 between Letchworth and Baldock

Category of scheme	Details	Letch worth/ Baldo ck	Hitchin	Royst on	Rural/ villages	Total
Travel Behaviour change	Employment of champion (£60k per year, 2 shared between 3 towns and rural areas), measures £75k per year per town + rural areas, Includes 'soft' campaigns and minor hard measures.	£810	£810	£750	Covered in town resources	£2,370
Walking measures	UDP/previous studies. TBC in strategy study	£500	£1,707	£100	Inc. in traffic mngt/safety	£2,307
Cycling measures	UDP/previous studies. TBC in strategy study	£1,770	£680	£500	£750	£3,700
Public transport	£50k pa, 15 years - schemes, subsidy or promotion	£750	£750	£750	£750	£3000
Parking	Measures arising from parking strategy	£100	£100	£100		£300
Totals		£7,641	£9,267	£3,550	£2,850	£23,308

Table 5.8: Possible reassignment of IDP transportation investment priorities identified in the Transport Strategy

5.145 In relation to the Growth and Transport Plan for North Hertfordshire, the Transport Strategy notes that HCC is currently in the process of developing a GTP for North Hertfordshire, expected to be complete by mid-2018. The GTP will identify how the LTP Objectives can be delivered at a local level, be aligned with growth proposals in Local Plans and Neighbourhood Plans. The GTP is distinct from the LTP3 Urban Transport Plans and will be subject to separate consultation. Evidence packs for Hitchin and Letchworth/Baldock have been made available for the Transport Strategy and contributes significantly to its evidence base; in turn, the Transport Strategy will provide strategic input into the GTP process.

6. Education including extended schools

January 2018 Update

There are several relatively modest changes to this Chapter in two specific areas:

The first addresses the modest overestimation of health in infrastructure needs because, as covered in detail in Chapter 4, the 2016 IDP is based on growth figures that have been reined back in the submission Local Plan. Table 6.8 at the end of this Chapter recalculates health infrastructure need in the light of these changes

Secondly since the drafting of the IDP Free Early Years Education has been extended to a wider range of 2 – 3 year olds

General

- 6.1** Education provision North Herts takes many forms, including pre-school, primary, secondary, further and higher education. This section looks at existing education provision and determines new facilities required to support housing growth.

Education planning including the role of Hertfordshire County Council

- 6.2** Hertfordshire County Council (HCC) is the local education authority and is subject to a number of statutory duties and responsibilities including:
- Promoting high standards of education
 - Planning and commissioning school places in its local authority area
 - Extending diversity and choice
 - Co-ordinating admissions for all maintained schools
 - Co-ordinating admissions for Academies and Free Schools
 - Resourcing the shared maintenance, improvement to, and provision of, the built school environment, and securing value for money
- 6.3** When deciding the most appropriate strategy in response to development growth proposals, HCC seeks solutions which take into account each of these elements.

School Planning Context

- 6.4** HCC has a duty to secure sufficient school places in the county, ensuring that every child has access to a school place. HCC fulfils these planning responsibilities by forecasting the demand for school places in order to identify an appropriate balance between supply and demand. HCC negotiates the right number of places on an annual basis, whilst in parallel undertaking longer term strategic planning. HCC has no statutory duty in determining the most appropriate format(s) of future provision though plainly need to ensure that the school place need is deliverable.

Rising Demand

- 6.5** Hertfordshire has experienced a significant rise in the demand for primary places across the County in recent years, in line with national trends. The rise is not consistent across the county. Some areas experience substantial increases in the primary aged population, whilst in some more rural areas demand is less pressing or remains fairly static. More information on the rising demand is available through HCC's strategy document '*Meeting the Rising Demand for School Places*', available at:
<http://www.hertsdirect.org/services/edlearn/aboutstatesch/risingdemand/>

Forecasts

- 6.6** HCC produces pupil forecasts every six months for both Reception and Year 7 demand. At primary level, HCC publish forecasts four years ahead and secondary forecasts stretch to 10 years in the future. The forecasts have taken account of an assumed housing growth trajectory for the longer term, as provided by Hertfordshire's District and Borough Councils. Latest forecasts project demand for admissions into Reception and Year 7 and do not include any margin. HCC would normally plan a surplus of 5-10% across an area to allow for fluctuations in forecast demand.
- 6.7** Further information on the methodology used to determine pupil forecasts can be found at:
www.hertsdirect.org/services/edlearn/aboutstatesch/planning/

New Schools

- 6.8** The way in which new schools are set up has undergone significant change in recent years. The County Council's role as a commissioner of places is such that where it considers there is a basic need for a new school it must:
- Seek proposals to establish an academy/free school; or (if unsuccessful)
 - Hold a statutory competition; or (if unsuccessful)
 - Publish its own proposals for a new maintained school
- 6.9** Where the new school provision is meeting basic need the County Council remains responsible for providing the sites and meeting all associated capital and pre/post-opening costs, in instances Therefore, the County Council continues to hold the key role in negotiating S106 contributions for, and the provision of, all school infrastructure.

Principles

- 6.10** An important initial consideration is the fact that as noted previously most of the district operates a two-tier education system, with the exception of Royston and villages near it which have a three-tier system of first, middle and upper schools.

Forms of Entry

- 6.11** School provision is often described in terms of 'forms of entry'. 1 form of entry (fe) equals 30 places per year group.
- 6.12** Primary schools have seven year groups from Reception through to Year 6. HCC has a preference for primary schools of 2fe or more, as this larger size provides improved opportunities for delivery of a broad education curriculum and staff development, as well as offering the ability to better manage fluctuations in demand. A 2fe primary school will have 7 year groups of 60 pupils (420 in total), plus a Nursery class where offered.
- 6.13** Secondary schools have five year groups, from Year 7 through to Year 11, and Sixth Forms with lower and upper year groups. HCC has a preference for secondary schools of 6 to 8fe as this offers improved opportunities for the delivery of a broad education curriculum. A 6fe school will have 5 year groups of 180 pupils (1080 in total) plus a Sixth Form.
- 6.14** Currently, on average, approximately 60% of students continue in education and take up places in the sixth form, although this varies greatly in specific areas across the county. As a result of government policy this proportion is expected to rise to an average of 80% as the number of places in education and training for 16 to 18 year olds increases to meet the rise in the participation age. Local authorities have a duty to ensure that sufficient, suitable places are available to meet the reasonable needs of all young people, and to encourage them to participate.

Pupil Yield

- 6.15** When undertaking high level school place planning related to new residential development, HCC's approach to child yield is based on a ratio of 1fe per 500 dwellings to be 97.5% confident of not underestimating yield.
- 6.16** This is based on a study of 49 Hertfordshire developments undertaken by HCC's demographer (c. 2008). This work produced a yield range of 1fe per 500 dwellings (42 children per 100 dwellings / 97.5% confidence) to 1fe per 850 dwellings (24.7 children per 100 dwellings/50% confidence (i.e. the average yield identified by the survey)).
- 6.17** The County Council applies the upper end of the range, 1fe per 500 dwellings, in the first instance to ensure prudent planning. The HCC approach has been used in this IDP though the issues arising from this approach are considered further in paragraphs 6.76 and 6.77.
- 6.18** When considering actual proposals or planning applications, the County Council uses specific development forecasting models to ascertain more tailored demographic profiles, including pupil yields.

Site Size

- 6.19** School site standards have recently changed (School Premises Regulations, 2012) and provide a much less stringent approach to school site standards. The County Council is now using the site areas that refer to Building Bulletin 103 area guidelines for mainstream schools.

Detached Playing Fields

- 6.20** A school should have all of the facilities it requires, including playing fields, provided on a single site.
- 6.21** There may, however, be situations where in order to provide additional school place capacity at an existing site a detached playing field may be required. For a primary school, this facility should ideally be located within 400 metres of the main school site and be appropriate in scale to enable delivery of the PE curriculum.

Green Belt Boundaries

- 6.22** Some school sites fall within the Green Belt and in some instances, it is therefore necessary to plan for the provision of new schools for sites within the Green Belt. Whilst the planning policy issues associated with this in terms of planning applications (i.e. the need to demonstrate *very special circumstances*) are noted, the County Council ask that this issue be taken into account when reviewing Local Plans and that such sites be considered for removal from the Green Belt when it is appropriate to do so.

Types of School

- 6.23** There is a diverse range of schools within Hertfordshire, and HCC has the statutory duty to ensure sufficient school places within its area irrespective of how education is provided. HCC is only the admitting authority for Community and Voluntary Controlled schools in the county. All other schools (Academies, Free Schools, Voluntary Aided and Foundation Schools) are their own admitting authorities, determining their own admissions policies and over-subscription criteria.
- 6.24** All admitting authorities' admissions rules and policies must abide by the Admissions Code but HCC, in its role as commissioner of places rather than a provider, has no power to direct schools that are their own admitting authority to provide additional places.

Education Planning Areas

- 6.25** For the purposes of school place planning, HCC is divided into geographical education planning areas (epas). There are a total of 22 secondary epas within the county and each of these contains one or more primary epas. The forecasts are produced to planning area level, not to individual schools.

Pre-school Education

- 6.26** The County Council has a duty to secure sufficient free early education and childcare places. Annually the County Council publishes a Childcare Sufficiency Report which details where places are required across the county. The County Council works with the PVI (private, voluntary and independent) sector and schools to ensure adequate places. It also assists and enables the provision of day nurseries, play schemes and after school clubs, making sure there are sufficient places for parents to access across the county. The 15 hours of free early education can be provided in maintained provision (e.g. school) or the PVI sector.

Free Early Education

- 6.27** Free early education is a central government funded scheme whereby all children from the term after which they are 3 until they reach school age are eligible for a free place for a maximum of 15 hours per week (max 38 weeks or a total of 570 hours per year) This free place can be offered in a state maintained school or PVI provision such as a preschool, day nursery or childminder. Where new primary school sites are identified.
- 6.28** Free early education is a central government funded scheme whereby all children from the term after which they are 3 until they reach school age (as well as eligible 2 year old children are eligible for a free place for a maximum of 15 hours per week (max 38 weeks or a total of 570 hours per year) This free place can be offered in a state maintained school or PVI provision such as a preschool, day nursery or childminder. In September 2017, a new extended entitlement of an additional 15 hours free childcare has been introduced for 3 – 4 year olds where both parents (or a lone parent) is working a minimum number of hours and where the household income is less than £100,000 a year.

Maintained Nursery School

- 6.29** These are funded by the state where only children aged 3 and 4 receive their free early education entitlement before attending primary school. There are 15 such schools in Hertfordshire.

Maintained nursery classes

- 6.30** Maintained nursery classes are classes based in primary schools where children aged 3 and 4 received their free early education entitlement until they move up to reception.

Preschool/Playgroup

- 6.31** This provision usually educates children between the ages of 2 and school age. These settings are often able to offer free early education to eligible 2 year olds as well as all 3 and 4 year olds. These settings are run by PVI providers in local communities and some children attending will be accessing their free early education

place and others will be accessing additional services for which parents pay. These settings will usually be set up in community buildings or schools and will usually be open term time only.

Day Nurseries

- 6.32** Day nurseries offer childcare and early education for children from 0 to 5. These settings are used predominately by working parents for childcare purposes. They also usually offer free early education for eligible children but with most children accessing additional services which parents pay for. This provision is market led.

Childcare

- 6.33** The Local Authority has a statutory duty to ensure there is sufficient childcare for working parents, this duty cover 0 – 14 years (19 for children with Special Education Needs and Disability) (S.E.N.D.). Childcare can take place in preschools, day nurseries, and childminders and out of school provision such as holiday clubs and after school clubs depending on the age of the child and therefore can take place in school buildings or community use buildings. New schools should be designed to be able to offer FEE/childcare to children (aged 2 years upwards).

Hertfordshire Sure Start Children's Centres

- 6.34** Legislation about children's centres is contained in the Childcare Act 2006. The Act places a duty on local authorities to improve the well-being of young children in their area and reduce inequalities between them. Specifically, they must:

- ensure there are sufficient children's centres to meet local need
- ensure each children's centre is within the remit of an Advisory Board
- ensure there is consultation before any significant changes are made to children's centre provision in their area
- ensure that the local authority, local commissioners of health services and Jobcentre Plus jointly consider whether the early childhood services they provide should be provided through children's centres in the area
- ensure that after receiving a report from Ofsted following the inspection of a children's centre an Action plan is prepared and published

- 6.35** The core purpose of children's centres, as defined by the Department for Education, is to improve outcomes for young children and their families, with a particular focus on those families in greatest need of support. Centres are expected to support:

- **Child development and school readiness** - supporting personal, social and emotional development, physical development and communication and language from pre-birth to age 5, so children develop as confident and curious learners and are able to take full advantage of the learning opportunities presented to them in school.

- **Parenting aspirations and parenting skills** - building on strengths and supporting aspirations, so that parents and carers are able to give their child the best start in life.
- **Child and family health and life chances** - promoting good physical and mental health for both children and their family; safeguarding; supporting parents to improve the skills that enable them to access education, training and employment; and addressing risk factors so that children and their families are safe, free from poverty and able to improve both their immediate wellbeing and their future life chances.

Number of Hertfordshire Centres

- 6.36** There are 82 children's centres in Hertfordshire of which 10 are in North Herts. These were developed in three phases between 2004 and 2010. At that time, each centre covered a geographical area containing an average of 800 children aged 0-4 years (0-4s means all children under the age of 5).

Child population

- 6.37** In 2011 the population of children aged 0-4 in Hertfordshire is 74,492 (Mid Year Estimate 2011). 81% of children aged 0-4 are currently registered with a children's centre. The population of 0-4's has increased by 10,000 children from approximately 64,000 in 2005 when the programme of centres was being planned. As population has grown, the average catchment for each children centre is now 1000 children.

Children's Centre Premises

- 6.38** There are 73 children's centre buildings which received Dfe capital funding for extensions/refurbishment. The terms of the Dfe grant mean that the premises must be used for delivery of children's centre/early years services and that Dfe reserves a right to claw back the capital funding if the premises are no longer used for these purposes. Some provision is delivered through shared use of community buildings where no dedicated location was identified. All Children's Centre utilise some community buildings to deliver their wide range of services and make them accessible to the whole community.

How Centre Services Are Delivered

- 6.39** All centres are commissioned. Contracts are in place between Hertfordshire County Council (HCC) and 50 lead agencies to manage the centres. Children's centres offer access to a range of early childhood services aimed at supporting parents-to be, young children aged under five and their families. These include;
- Activities (e.g. stay and play sessions, toddler groups) and information (e.g. early education and childcare, pre-schools, day nurseries) for families
 - Outreach and family support
 - Evidence-based parenting programmes

- (Family Links Nurturing Programme is delivered by some centres in Hertfordshire)
- Access to adult learning and employment support -
- (this may include language, literacy and numeracy support, family learning, access to apprenticeships and volunteering opportunities as steps toward +employment and links to Jobcentre Plus)
- Child and family health services
- (delivered by community midwives and health visitors).

6.40 Children's Centres aim to meet the needs of their local families so services offered by centres will vary according to the population served by the centre.

Current provision

6.41 The latest information held by Hertfordshire County Council in the district's ten Children's Centres is shown in the table below:

Children's Centre	Free Early Education places for 2, 3 & 4 year olds 2016 / 2017	30 hours free childcare places available for 3 and 4 year olds from September 2017
NH1 Royston and villages	+ 204 GREEN	+30 GREEN
NH2 Baldock Ashwell and Weston	+266 GREEN	+160 GREEN
NH3 Letchworth North	+146 GREEN	+59 GREEN
NH4 Letchworth North East	+ 79 GREEN	-29 RED *
NH5 Letchworth South	-50 RED *	-110 RED *
NH6 Oughton and villages	+ 224 GREEN	+ 111 GREEN
NH7 Hitchin North East	+ 152 GREEN	+ 42 GREEN
NH8 Hitchin South and villages	+ 74 GREEN	-55 RED *
NH9 Graveley and Great Ashby	+126 GREEN	+52 GREEN
NH10 Knebworth and Woolmer Green	+149 GREEN	+78 GREEN

Table 6.1: Data on Children's Centres in North Herts * Data suggests that there are insufficient places in the given area. (Red = insufficient places available which may prevent families in accessing provision; Amber = near sufficient places available/some difficulties accessing education; Green sufficient places/provision matches need)

6.42 7 out of the 10 Children's Centres areas have free early education places. The pressure on these places would however increase if a higher proportion of social housing was developed in these areas, as families who meet the eligibility criteria do not tend to be home owners, particularly for the 2 Children's Centres in North Herts that fall into the 20% most disadvantaged within Hertfordshire.

6.43 In addition the rating for any area can quickly change, if for example a preschool or nursery was to reduce the number of children it could accommodate or if a preschool or nursery were to close. Future requirements will depend on a number of factors, including changes in birth rate, level of provision and changes in regulations and new government initiatives relating to the sector.

6.44 The local plan recognises and supports the needs of young children and their

families. Although not all children's centre services need to be 'building-based' there is still a need to have some 'community' facilities from which such services can operate. Children's centres can share premises with other community agencies that would ensure that they are community inclusive.

- 6.45** Hertfordshire County Council has stated that, as a guide, for every 2,500 new homes constructed, this would create the requirement for a new children's centre based on an anticipated figure of 800 children aged 0 - 5 years. Given the number of new dwellings that remain to be constructed over the Local Plan timescale is, as identified in Chapter 4 is c14,400 new dwellings there may be the requirement for up to **six new Children's Centres** to be provided within the district, most probably associated with new and expanded primary school provision.

Primary Education Service Planning

- 6.46** There are a total of 54 primary schools providing primary education in North Herts, including infant, junior and first schools. As noted previously most of the district operates a two-tier education system, with the exception of Royston and villages near it which have a three-tier system of first, middle and upper schools. The first schools within Royston are included within this primary section.
- 6.47** The current status of existing school provision in North Herts and the ability of such schools to cope with housing growth is set out in the table below:

School Planning Area	School	Current Capacity	Expansion Capacity	Comments
Baldock	Ashwell Primary Ashwell	1fe	0	No expansion potential
Royston	Barkway VA (C of E) First School	0.4fe	0	No expansion potential Reserve site in the village
Royston	Barley C of E (VC) First School	0.5fe	0	Limited expansion potential
Hitchin	Breachwood Green JMI School	0.5fe	0	Small site, no obvious expansion potential but need to investigate
Hitchin	Cockernhoe Endowed C of E Primary School, Luton	0.5fe	0	No expansion potential
Welwyn GC	Codicote C of E Primary VC School, Codicote	2fe	+1fe	Temporary expansion by 1fe to 2fe in Sept 2016. Additional land proposed in local plan to enable permanent expansion
Letchworth	Garden City Academy	1fe	+1fe	Potential to expand by 1fe

School Planning Area	School	Current Capacity	Expansion Capacity	Comments
Letchworth	Grange Junior School, Letchworth	2fe	+1fe	Potential to expand to 3fe, but may need a DPF
Stevenage	Graveley Primary School Graveley	0.5fe	0	Possible expansion potential. DPF needed to expand to 1fe
Baldock	Hartsfield JMI School, Baldock	2fe	+1fe	Potential to expand to 3fe. Site located in an Area of Archaeological Significance and is a Scheduled Ancient Monument.
Hitchin	Hexton JMI School, Hitchin	0.3fe	0	No expansion potential
Hitchin	Highbury Infant School & Nursery, Hitchin	2fe	0	No expansion potential
Hitchin	Highover JMI & Nursery School, Hitchin	2fe	0	No expansion potential.
Letchworth	Hillshott Infant School & Nursery, Letchworth	2fe	0	No expansion potential
Hitchin	Ickleford Primary School, Ickleford	1fe	0	No expansion potential
Letchworth	Icknield Infant and Nursery School, Letchworth	3fe	0	No expansion potential
Royston	Icknield Walk First School, Royston	2fe	+1fe	Potential expansion to 3fe, however highways constraints may restrict this potential
Hitchin	Kimpton Primary School, Kimpton	1fe	0	No expansion potential without additional land or DPF
Stevenage	Knebworth Primary and Nursery School, Knebworth	2fe	0	No expansion potential without additional land or DPF
Letchworth	Lordship Farm Primary School	2fe	0	No expansion potential
Hitchin	Mary Exton Primary School, Hitchin	1fe	+1fe	Possible expansion potential to 2fe but will need a DPF
Letchworth	Northfields Infant & Nursery School, Letchworth	2fe	?	Potential expansion to 3fe, but challenging due to site size
Letchworth	Norton St Nicholas Church of England (VA) Primary	1fe	0	No expansion potential
Hitchin	Offley Endowed Primary School	0.7fe	0	Limited expansion potential
Hitchin	Oughton Primary and Nursery School, Hitchin	1fe	+1fe	Potential to expand to 2fe

School Planning Area	School	Current Capacity	Expansion Capacity	Comments
Hitchin	Our Lady Catholic Primary School, Hitchin	1fe	+1fe	Potential to expand to 2fe
Hitchin	Pirton School, Pirton	0.7fe	+0.3fe	Potential to expand to 1fe
Letchworth	Pixmore Junior School	2fe	0	No expansion potential
Hitchin	Preston Primary (VC) School, Preston	0.5fe	+0.5fe	Potential to expand by up to 0.5fe, but dependent on DPF or acquisition of adjoining land
Hitchin	Purwell Primary School Hitchin	1fe	1fe	Possible expansion potential to 2fe, but will need a DPF
Royston	Reed First School, Reed	0.4fe	0	Limited expansion potential
Royston	Roman Way First School, Royston	2fe	0	No expansion potential
Stevenage	Round Diamond Primary School, Stevenage	2fe	0	No expansion potential.
Hitchin	Samuel Lucas JMI School, Hitchin	2fe	0	No expansion potential
Baldock	Sandon JMI School, Sandon	0.5fe	0	No expansion potential
Hitchin	St Andrew's C of E VA Primary School & Nursery	1fe	0	No expansion potential
Hitchin	St Ippolyts C of E (Aided) Primary School	0.7fe	+0.3fe	Potential to expand to 1fe, but likely to require a DPF or acquisition of adjoining land
Baldock	St John's RC Primary School, Baldock	1fe	0	No expansion potential
Royston	St Mary's Catholic Primary School, Royston	1fe	+1fe	Potential to expand to 2fe
Baldock	St Mary's Church of England (VC) Infant School, Baldock	2fe	+1fe	Potential to expand to 3fe
Baldock	St Mary's Church of England (VC) Junior School, Baldock	2fe	+1fe	Potential to expand to 3fe
Hitchin	St Paul's Walden Primary School, Hitchin	0.5fe	+0.4fe	Potential to expand to 1fe
Letchworth	St Thomas More Primary School, Letchworth	1fe	0	No expansion potential
Letchworth	Stonehill School, Letchworth Garden City	1fe	+1fe	Potential to expand subject to removal of mobile classrooms on site
School	School	Current	Expansion	Comments

Planning Area		Capacity	Capacity	
Hitchin	Strathmore Infant and Nursery School, Hitchin	2fe	+1fe	Potential to expand subject to widening the access road (linked with Wilshere - Dacre Junior Academy)
Royston	Studlands Rise First School, Royston	1fe	0	No expansion potential
Royston	Tannery Drift School, Royston	2fe	0	No expansion potential
Royston	Therfield First School, Therfield	0.4fe	0	Limited expansion potential may need a DPF.
Baldock	Weston Primary School	0.7fe	0	Possible expansion to 1fe, but challenging site
Hitchin	Whitehill Junior School, Hitchin	2fe	0	Some expansion potential with DPF. Linked to Highbury Infants where no expansion potential
Letchworth	Wilbury Junior School, Letchworth	3fe	0	No expansion potential
Hitchin	The William Ransom Primary School, Hitchin	2fe	0	No expansion potential
Hitchin	Wilshere-Dacre Junior Academy, Hitchin	2fe	+1fe	Possible expansion potential to 3fe, but likely to need additional playing field space. (Linked with Strathmore Infant School)
Hitchin	Wymondley JMI School, Little Wymondley	0.5fe	0.5fe	Possible expansion potential to 1fe

Table 6.2: Existing primary school capacity (DPF = Detached Playing Field)

6. 48 The County Council adopts a proactive approach to meeting rising demand for school places, either by planning for the provision of new schools and expanding provision at existing schools where appropriate. In the last two years the response to rising demand has seen the following changes in the district:

2015

- Temporary enlargement of St Ippolyts primary school by 0.33fe (10 places)
- Temporary enlargement of Stonehill School Letchworth by 1fe (30 places)

2016

- Temporary enlargement of Codicote Primary School by 1fe (30 places)
- Permanent enlargement of William Ransom Primary School Hitchin by 0.73fe (22 places)
- Permanent enlargement of Wilbury Junior School by Letchworth 0.3fe (9 places)

- Permanent enlargement of Roman Way and Tannery Drift First School Royston each by 0.5fe (15 places)

- 6.49** HCC has appraised all the primary schools in the district for expansion. Many of the more straightforward sites have already been expanded. With others it should however be noted that there has to be a level of uncertainty regarding the practical implications of expansion, with planning/environmental issues being but one factor. Other factors include changing school space standards, the implications of Free Schools and Academies to make their own decisions about their premises including future expansion, and faith issues. What remains is the statutory duty on HCC to ensure there are sufficient school places within the Local Authority area for every child who wants one.
- 6.50** To reiterate the points made in 6.15 and 6.16 HCC consider that as part of any prudent spatial planmaking a child yield in the range of 1fe for every 500 dwellings should be used when calculating the primary school requirements from new developments. It should be noted that in this instance 1fe is longitudinal and relates to 210 pupils (i.e. seven year groups of 30 pupils, but not nursery classes).
- 6.51** HCC's policy has historically been to seek the provision of 2fe primary schools, plus a nursery, where possible; however, there are variations in provision– for example in rural areas where smaller schools are appropriate - and the role of the County Council has changed. 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.

Identification of primary school needs

- 6.52** Given the assumption identified by Herts County Council above that 1fe equates to 500 dwellings and given that around 14,400 new dwellings remain to be delivered within the plan period 2011 – 31 HCC consider that around **29 forms of entry** will be required in the years to 2031 to deal with growth in accordance with such growth, which theoretically equates to the provision of **14 or 15 new 2fe primary schools in total**. (However as noted in 6.76 and 6.77 below, these figures are based on pupil yields from new development that may be difficult to justify, and a review of yields to levels adopted by other local education authorities may mean that a much lower level of provision is actually required).
- 6.53** Provision will be secured either through the expansion of existing schools or by the construction of new ones. Extending existing schools may not be possible or appropriate: there may be site constraints; the school would become too large (as already noted, HCC preference is for no more than 2fe schools) or new development would not be in close enough proximity of an existing school.
- 6.54** At this stage it is possible only to provide an indication of where this new demand would be met. On the basis of current provision and taking into account where new growth is expected to be located, shown below is an indication as to where future

primary education provision could be met, although it should be borne in mind that this will be the subject of further detailed planning.

Location	Possible growth related primary provision to 2031
Letchworth	One new 2fe primary school to be sought to the north of the town plus the expansion of existing schools. The emerging local plan has a presumption in favour of on-site provision of a primary school to the north of Letchworth, whilst elsewhere in the town, further work is needed to establish the capacity to expand existing primary schools to meet rising need
Baldock Town	Up to three new primary schools to be sought plus the expansion of existing schools. The emerging local plan seeks up to 6 fe primary age provision in the proposed North of Baldock development with a further 2fe to meet the needs of growth elsewhere in the town although the exact distribution of new primary schools between the existing town and the North of Baldock scheme needs to be resolved through masterplanning
Baldock Villages	Most probably need will be met by expanding existing schools
Royston Town	A new 2fe first school capacity required plus the expansion of existing schools, although it may be appropriate to meet needs through expanding other schools due to the location of most new development on the peripheries of the existing town
Royston Villages	Most probably need will be met by expanding existing schools. The emerging local plan notes that there is a reserve school in the village which offers the opportunity to meet rising need
Hitchin West	Most probably need will be met by expanding existing schools. The emerging local plan notes the presence of a detached playing field which could facilitate the expansion of nearby schools by helping to fulfil their playing field need
Hitchin South and North	New 2fe primary school required at Highover Farm plus expansion of existing schools.
Hitchin Villages South	Most probably need will be met by expanding existing schools; the emerging local plan notes however that it may be possible to establish a new school in Little Wymondley, but that this is an issue requiring further exploration
Ickleford	The emerging local plan considers the need for a new 2fe primary school to overcome the constraints of an over capacity and constrained 1fe school (in addition to meeting the needs of nearby Lower Stondon potentially in adjoining Central Bedfordshire); it identifies a site where this could be achieved
Knebworth	New primary school required, as sought in the emerging local plan, as the existing school has no capacity. Dialogue between the local authority and the County Council is needed over whether a new 2fe site, the existing school site can be extended by acquiring adjoin land and made 3fe or whether a 4fe 'all through' school incorporating secondary age provision is most appropriate; these are matters beyond the scope of this IDP

Location	Possible growth related primary provision to 2031
The Waldens, Kimpton, Breachwood Green	Most probably need will be met by expanding existing schools
Luton expansion in North Herts	Most probably the equivalent of 2 primary schools required (i.e. 4fe). The emerging local plan seeks this level of provision
Codicote	Additional land to be sought to enable expansion of the current primary school, as sought in the emerging local plan
Stevenage North West	New primary school required. The emerging local plan seeks an integrated solution with development in Stevenage Borough adjoining the shared administrative boundary, particularly given adjoining development in Stevenage will also give rise to primary education requirements
Stevenage North East	New primary school required. The emerging local plan considers a 2fe primary school is required (together with primary school expansion in Stevenage) to deal with new development and existing capacity issues

Table 6.3: The potential to meet future primary school need arising from growth

Secondary Education Service Planning

- 6.55** North Herts has a total of 6 secondary schools within Letchworth, Baldock and Hitchin. Royston operates on a three tier system with one upper school and two middle schools. The upper and middle schools within Royston are included within this secondary section.
- 6.56** HCC's assessment of the current status of existing secondary school provision in North Herts and the ability of such schools to cope with housing growth is set out in the table below on a settlement by settlement basis:

Location	Current capacity	Ability to cope with housing growth
Letchworth	Sufficient capacity in the short term at least	Despite capacity some growth needs will need to be met
Baldock	At capacity	Poor – new school required
Royston	Surplus in upper school. Sufficient capacity in the middle schools in the relatively short term	Rising demand so capacity issues in the medium term
Hitchin	Deficient (although expansion planned to meet short term demand)	Poor – additional capacity needs to be identified
Luton expansion in North Herts	N/A	N/A
Stevenage North West	Sufficient capacity in the relatively short term only	Additional secondary school places required by 2020/21

Table 6.4: Existing secondary school capacity

- 6.57** As with primary schools the County Council adopts a proactive approach to meeting rising demand for secondary school places, either by planning for the provision of new schools and expanding provision at existing schools where appropriate. In the

last two years the response to rising demand has seen the following changes in the district:

2015

- Temporary enlargement of The Priory in Hitchin by 1fe (30 places)
- Reduction in the admission number of Fearnhill in Letchworth by 1fe (30 places)
- Highfield in Letchworth's buildings are currently being rebuilt by the Government through its Priority Schools Rebuilding Programme (completed in December 2016)
- Permanent increase in the admission number John Henry Newman in Stevenage by 1fe (30 places)
- Barnwell in Stevenage admission number reduced by 1fe (30 places)

2016

- No works planned

- 6.58** The school yields identified in 6.15 and 6.16 above (which in essence seek the education premises provision of 1 form of entry for each additional 500 new dwellings) applies to secondary provision as it does for primary provision. Furthermore, there may also be the opportunity to plan for “all through” schools, which essentially cater for children from nursery age until when they leave school at 18. This promotes opportunities for ‘dual use’ of facilities given that there would be a nursery school, primary school and secondary school on the same site.

Identification of secondary school needs

- 6.59** Given the assumption is identified above that 1fe equates to 500 dwellings and there are approximately additional 14,400 new dwellings to be delivered over the plan period to 2031 then the estimate is that **28 – 29fe of new secondary school provision** will be required. Given that the usual size of secondary school is 6fe – 8fe (occasionally 10) this equates to the provision of the equivalent of **3 or 4 new secondary schools**. (Again, however, as noted in 6.76 and 6.77 below, these figures are based on pupil yields from new development that may be difficult to justify, and a review of yields to levels adopted by other local education authorities may mean that a much lower level of provision is actually required).
- 6.60** Provision will however be secured either through the expansion of existing secondary schools or by the construction of new ones. Extending existing schools may not be possible or appropriate: there may be site constraints; the school would become too large, or new development might not be in sufficiently close proximity of an existing school.
- 6.61** At this stage it is possible only to provide an indication of where this new demand would be met. On the basis of current provision and taking into account where new growth is expected to be located, overleaf is an indication as to where future primary education provision could be met, although it should be borne in mind that this will be the subject of further detailed planning.

Location	Possible growth related primary provision to 2031
Letchworth	Expansion may be required in the longer term. As with primary schools, the emerging local plan notes that further work is needed to establish the capacity to expand existing primary schools to meet rising need
Baldock	Future demand can initially be met but a new school of at least 6 forms of entry is needed to accommodate secondary age requirements for the development North of Baldock; additional needs beyond such provision can be met by the potential expansion of Knights Templar School to meet some of the additional demand, and some potential short or medium term needs being considered in the south of the town pending long term arrangements
Royston	Future demand can initially be met but growth needs will be met in both Middle School or Upper School provision, although whether this is secured through new or expanded schools will need to be determined
Hitchin	Given the level of growth and there is only one school in Hitchin left with expansion potential (and that is problematical) there is a need for further consideration as to how the additional 5FE growth related secondary school need can be accommodated.
East of Luton	No capacity in schools in nearest location in Hertfordshire to this development. Potential to address needs through a new 6FE school (which could also pick up shortfall identified at Hitchin) although need can be addressed within Luton. Further masterplanning required
Stevenage	Secondary education needs to be considered in relation to development expected to take place in Stevenage.
Knebworth	There is no secondary school within this settlement and in the emerging local plan the district council considers the case for establishing a new secondary school (possibly an "all through" school). This is a matter requiring further dialogue.

Table 6.5: The potential to meet future secondary school need arising from growth

The cost and funding of new education infrastructure provision

Costs

6.62 The County Council has previously advised on the following costs:

- a new children's centre £0.48m
- a new 2fe primary school £7.64m
- a new 6fe secondary school £18.4m

6.63 This gives rise to the following likely costs:

Education area	Number	Cost (£M)	Notes
Children's Centres	6	2.88	Land cost may need to be factored in.
Primary Provision	(say) 14 (equivalent)	106.96	This is the cost of building new schools and that of extending others combined. Excludes any land costs
Secondary Provision	2 x 6fe, 2. x 8fe (equivalent)	88.9	This is the cost of building 2 new schools plus expansion of others. Plus any land costs.
Total cost (£M)		198.74	

Table 6.6 likely education infrastructure costs

- 6.64** Additional costs would need to be factored in if land was required to be purchased, and whilst the expectation would be that such land would be gifted as part of the masterplanning of new development, the additional cost of such land could add somewhere between 60% - 100% to the costs identified above if it was residential valued land and it had to be acquired separately.
- 6.65** These initial calculations of the overall education infrastructure bill (education and demand) suggests that it could be in the order of £200m. It is important to give consideration as to how this bill will be met.

Funding Mechanisms

- 6.66** Funding mechanisms for new education provision are in transition (with the anticipated introduction of CIL in the district within the next 2 years, the scaling back of s106 obligations that took place in April 2015, the abandonment of the Building Schools for the Future (BSF) programme, and limitations around other forms of public funding) and it is difficult to be certain about funding for some infrastructure which may not actually be needed for 10 - 15 years.
- 6.67** Notwithstanding this the funding potential for education infrastructure needs should be identified and set out in the Infrastructure Delivery Schedule.
- 6.68** Since the demise of Basic Needs funding, the main source of funding in future will be the use of s106 funds and capital receipts that may be obtained from the disposal of HCC land.
- 6.69** In recent years the use of s106 agreements has become critical in the funding of additional school places. The advantage with s106 is that it is possible to translate development numbers into school places and identify a cost to be secured from the development promoters.
- 6.70** The district council is not committed to introducing a CIL but were this to be the case, the County Council cannot be certain that it would have access to CIL funding in compared to the direct negotiating role it has with developers with s106 agreements. The restrictions on the pooling of s106 is also a concern for the County Council (although the government announced in November its intentions to ease some of these restrictions subject to consultation).
- 6.71** Notwithstanding this, even if CIL were to be introduced, s106 would remain relevant for the securing of site related infrastructure through developer contributions and there is an emerging consensus that for larger development sites education needs will continue to be met (subject to viability considerations and assuming the future lifting pooling restrictions for this scale of development).
- 6.72** Given this it might mean that most of the urban extensions (possibly over two thirds of future education needs, or around £135m) could be funded via s106, assuming this source of funding continues to remain available.
- 6.73** There is some potential for other development (urban capacity/windfalls and villages) could also be the subject of s106 agreements to fund education infrastructure, but

their ability to do so may be limited by pooling restrictions and the fact that such development may also be required to pay CIL¹³.

6.74 For all other development CIL (if introduced) could contribute to the cost of education infrastructure. Other sources of funding include the Priority Schools Building Programme and any capital support for Free Schools, Academies and sixth form colleges.

Variables in the calculation of education infrastructure need

6.75 There are a range of factors which may influence the provision of education facilities, including:

- Possibly building in a 5% tolerance in school place planning¹⁴: This is recommended HCC practice, and could add an additional 1fe into the planning process for both primary and secondary schools
- Rising requirements - 16 to 18 year olds: since 2015 students have been required to be in full time education until their 18th birthday. This is having implications for secondary school planning as although 16 - 18 year olds are not required to attend secondary schools, some will and therefore need to be catered for
- Rising requirements - 2 year olds: if the extension of early years provision for 2 year olds increases beyond the current criteria to cover the entire year cohort then this may have implications for children's centre needs and nursery provision

Potential reduction in pupil yield

6.76 As noted in paragraphs 6.15 and 6.16 above Hertfordshire County Council's calculation equates to a pupil yield of 42 new primary age pupils per 100 new dwellings (or 1 form of entry for each 500 new dwellings) for both primary and secondary age pupils. The is very high in comparison with other education authorities, however, as the following table indicates through examining the practices of other education authorities:

Education Authority	Date published	Primary Age Pupil Yield/100 dwellings	Secondary Age Pupil Yield/100 dwellings
Cambridgeshire CC	2015	25 - 35	18 - 25
Derbyshire CC	2014	20	20
Devon CC	2013	25	15
Essex CC	2015	30*	20*
Lancashire CC	2012	17	9
Northants CC	2015	29	16
Hertfordshire CC	2016	42	42

Table 6.7: Comparison between local education authorities and their assumptions for pupil yield

* Yield for new houses. Yield from new flats is at half these levels.

¹³ And it would be necessary to avoid 'double dipping' – requiring a development to fund a specified item or type of infrastructure through both s106 and CIL contributions

¹⁴ The district council regards this as high, and it is one of the areas of sensitivity testing identified in the funding of infrastructure need as set out in Chapter 13

- 6.77** Reducing anticipated pupil yields for new school places to 850 dwellings per fe would mean a pupil yield of 25 pupils per 100 dwellings, bringing Hertfordshire's requirements down to a level comparable with other education authorities. This would reduce overall requirements for both the primary and secondary sector from 28-29fe to 17fe. The district council accepts that this may be due to the demographic effects of families moving out of London as their children reach school age, although further research is required to verify this.
- 6.78** Further consideration is also required around the issues of phasing (the HCC approach effectively assumes peak demand from all future developments occurring simultaneously), demand from the existing housing stock (which is held constant in contrast to demographic forecasts of declining household sizes) and the relationship between the requirements derived from HCC forecasts and the population projections which underpin the Local Plan.

Developer Contributions

- 6.79** The co-ordination of new infrastructure provision to ensure that all development contributes appropriately to infrastructure requirements is an approach supported by HCC. The County Council supports the opportunity for joint working with local planning authorities to determine the most effective trajectory for development. This will ensure that its services are able to deliver supporting infrastructure in a timely and efficient manner.
- 6.80** HCC is currently reviewing its Planning Obligations Toolkit to support the funding of infrastructure provision through S106 but it has indicated that within districts where CIL has yet to be introduced it would encourage its implementation at the earliest opportunity. The cumulative impact of smaller sites can create additional demands and burdens on existing infrastructure which must be addressed through developer contributions. As noted previously, since April 2015, the ability to pool S106 planning obligations is restricted and it is increasingly difficult to fund projects which mitigate the impact of smaller developments. The County Council considers that the implementation of a CIL is currently the most viable option of supporting the development of these sites and the provision of infrastructure, particularly strategic infrastructure such as secondary schools.
- 6.81** In its education service planning HCC also encourages the development of masterplans for strategic sites. This is felt to assist in delivering a transparent process whereby each stakeholder is aware of their roles and responsibilities. This is considered particularly important where there are cross boundary issues associated with sites bordering neighbouring authorities, for example. It may also be necessary to consider how infrastructure contributions might be passed across administrative boundaries for cross boundary sites. For example, development directly adjacent to a settlement outside of one local authority administrative area might reasonably be expected to make contributions towards service provision at an adjoining authority, and vice versa.

A recalculation of Education Infrastructure Needs based on Submission Plan figures.

6.82 As noted in Chapter 4, the infrastructure needs for education (and health) as defined in the 2016 IDP are an overestimate of requirements, as growth requirements assessed for the IDP were at a higher level to that proposed in the Submission version of the Local Plan. Overall, the 2016 IDP calculations are 4.4% too high. Table 6.8 below recalculates the requirements:

Education area	IDP Infrastructure need calculation	Submission Plan Infrastructure need calculation
Children's Centres	2.88	2.75
Primary Provision	106.96	102.25
Secondary Provision	88.9	84.98
Total cost (£M)	198.74	198.98

Table 6.6 likely education infrastructure costs

7. Healthcare

January 2018 Update

There changes to this Chapter in two specific areas:

Firstly, the conclusions in this report relating to the future of primary and secondary healthcare have been reshaped to take account of the transformative plans the government has unveiled in the planning, delivery and maintenance of both primary and secondary healthcare infrastructure since the drafting of the 2016 IDP

These changes cover:

- ***The requirements of NHS England's regional teams to produce Sustainability and Transformation Plans (STPs), to drive the organisations Five Year Forward View to 2020/2; the Hertfordshire and West Essex Plan was published in December 2016***
- ***The Naylor Report (April 2017) covering the reshaping of the NHS estate***
- ***Announcements in the Spring and Autumn 2017 budgets on capital funding support of £10.425bn to drive forward the Naylor recommendations and STP proposals***

The full implications of the above initiatives have yet to work their through into detailed local healthcare investment plans, but when these are known they are likely to be far reaching. For the meantime paragraphs 7.55 – 7.68 sets out the aspirations for change

The second consideration is around the modest overestimation of health in infrastructure needs because as covered in detail in Chapter 4, the 2016 IDP is based on growth figures that have been reined back in the submission Local Plan. Table 7.9 at the end of this Chapter recalculates health infrastructure need in the light of these changes

Background to healthcare

- 7.1** This section focuses on the primary, community and secondary healthcare needs of the district. Primary healthcare includes General Medical Services (GMS), delivered by GPs, dentists, pharmacists and optometry.
- 7.2** Community Services e.g. community nurses, chiropody, phlebotomy, community midwives and some mental health services operate out of some GP premises as well as other community based clinics.
- 7.3** 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).

Structure of the NHS

- 7.4** The 2012 Health & Social Care Act redefined the way in which healthcare in England is structured and delivered since it came into force on April 1st 2013. Prior to that date a single Primary Care Trust (PCT) for Hertfordshire commissioned the provision of healthcare in the county. NHS England and East and North Herts Clinical Commissioning Groups (ENHCCG) are currently working in a joint commissioning arrangement. The CCG is expected to move to full delegation in the near future.
- 7.5** The new arrangements see NHS England retaining responsibility for the overall health budget and the planning, delivery and day to day operation of the NHS in England whilst in addition retaining direct responsibility for commissioning a range of primary care services from self-employed providers such as GPs, dentists, optometrists and pharmacists.
- 7.6** NHS England also provides offender healthcare and some services for members of the armed forces. It has a number of regional teams, but exists as one single organisation, NHS England, operating to a common model under one board. The NHS England area team that covers the majority of North Herts is 'Midlands and East (Central Midlands)'; however, the NHS England Midlands and East (East) team covers the area around Royston.
- 7.7** All other healthcare services are now commissioned by the 211 Clinical Commissioning Groups (CCGs) operating across England, including two covering Hertfordshire. North Herts is covered by the East and North Hertfordshire Clinical Commissioning Group (ENHCCG) which also covers Welwyn Hatfield, East Herts, Stevenage, and Broxbourne. A separate CCG (the Cambridgeshire and Peterborough CCG) covers Royston and its locality. The CCGs commission a wide range of hospital and community based healthcare, including district nurses; mental health and learning disability services; and urgent, emergency and elective care, much of which but not exclusively is provided in hospitals. CCGs are increasingly moving the delivery of these services out of hospitals and into the community.
- 7.8** CCGs are led by local clinicians (doctors and nurses) supported by administrators. ENHCCG is currently working on a co-commissioning basis with NHS England. Midlands and East (Central Midlands). Although ENHCCG is the responsible organisation for commissioning services in the North Herts area, an important exception to the commissioning remit of the CCG is that of primary care contracts which remain with NHS England Midlands and East (Central Midlands).
- 7.9** ENHCCG serves over half a million people (552,900) registered at 60 GP Practices operating out of 87 surgery premises across east and north Hertfordshire. The CCG's mission is:

- To reduce health inequality and achieve a stable and sustainable health economy by working together, sharing best practice and improving expertise and clinical outcomes
 - To work with patients, manager and clinical colleagues from all sectors to commission the best possible healthcare for our patients within available resources.
- 7.10** ENHCCG comprises six locality groups, each with an allocated health budget. GPs are elected by the local practices to lead and represent the local area for each locality group. These elected GPs come together at the CCG Governing Body meetings to make decisions about health services for the whole of east and north Hertfordshire.
- 7.11** There are two locality groups covering North Herts, the North Herts locality is made up of 12 GP practices covering the area of Hitchin, Letchworth and Baldock, providing care for a population of just over 110,000, and a second covering Royston and surrounding villages.
- 7.12** The majority of the budget for the North Herts locality group is spent on acute hospital care which includes emergency treatment, planned operations, tests and investigations. The main priorities for the locality include:
- Supporting the frail and elderly (i.e. those over 75s) and those with Long Term Conditions
 - Improving cancer outcomes
 - Improving care of COPD patients in the community
 - Promoting healthy lifestyles
 - Working jointly to improve patient access and care
 - Working to reduce hospital admissions
- 7.13** In addition some public health functions have now transferred to local authorities providing them with a duty to take such steps as are appropriate to improve the health of people in its area, including the provision of information, services or facilities to promote healthy living. This function has passed to the County Council in Herts.
- 7.14** The County Council now has the task of coordinating the local NHS, social care, children's services and public health functions through a new Health and Wellbeing Board (HWB), whose aims include the development, interpretation and use of Joint Strategic Needs Assessments (JSNAs) to shape health commissioning and spending plans, as well as the preparation of a health and wellbeing strategy. The Hertfordshire HWB includes representatives from NHS Hertfordshire and clinical commissioning groups, Hertfordshire Healthwatch, and county and district councils.
- 7.15** A final general point concerns the ownership of assets. As of April 2013, the former PCT assets transferred to either NHS Property Services, Community Health Partnerships Community or Foundation Trusts. The majority of GPs in Hertfordshire do not operate out of NHS owned facilities, with GPs owning or leasing their premises, receiving rent and rate reimbursement from NHS England. All acquisitions,

disposals and requests for funding are submitted to the Midlands and East (Central Midlands) by GPs and are considered in conjunction with the relevant GP.

Defining growth related Primary Care Infrastructure Needs

- 7.16** Primary care includes a range of clinicians including doctors, nurses, dentists and pharmacists.
- 7.17** GPs look after the health of people in their local community and deal with a whole range of health problems. They also provide health education, offer advice on smoking and diet, run clinics, give vaccinations and carry out simple surgical operations. GPs are 'independent contractors' meaning that whilst they have a contract for service with the NHS, they are not directly employed by them.
- 7.18** Dentists are responsible for looking after patients' oral health. The NHS enters into a contract to dentists to provide health services under the NHS, however there are no ongoing capital and revenue issues. Dentists are contracted to provide an agreed level of units of dental activity, for which they receive an income. All running costs are charged against this income. A number of dentists also operate privately however and do not provide an NHS service.
- 7.19** Pharmacists play a key role in providing quality healthcare, ensuring the safe supply and use of medicines by the public. A pharmacist has to be registered with the General Pharmaceutical Council (GPhC) to practice and as an independent contractor works under a contractual arrangement with NHS England and may receive reimbursement for pharmaceutical services provided. The NHS does not financially support the initial provision or ongoing costs of pharmaceutical premises and this is therefore a private sector function.

Existing Provision in North Herts

- 7.20** The existing primary healthcare provision is detailed in Table 7.1

Name of Practice	Patients/sq.m.	Spare capacity?	No of additional patients that could be accommodated
Baldock			
Astonia House	18	Yes	1000
Hitchin			
Regal Chambers	16	Yes	3250
Courtenay House	14	Yes	3260
Orford Lodge	18	Yes	300
Portmill	18	Yes	1460
Letchworth			
Birchwood	27	No	- 3528
Nevels Road	27	No	- 2425
Garden City	16	Yes	1614
Sollershoot East	15	Yes	1600

Name of Practice	Patients/sq.m.	Spare capacity?	No of additional patients that could be accommodated
Royston and Eastern Villages			
Royston Health Centre ¹	32	No	- 5571
Barley Practice (including the branch Market Hill Surgery, Royston)	20	No	-1809
Roysia Surgery	24	No	-2053
Southern Villages			
Whitwell	13	Yes	1360
Knebworth Medical Practice	33	No	-5000
Marymead (Knebworth Branch in Stevenage) ¹	15	Yes	1400
Ashwell ³	10	Yes	4600
Bassingbourn ²	18	Yes	450
Net Overall capacity within North Herts GP services			178

Table 7.1: current GP provision in North Herts

Key

¹ Plans to ease constraints but this will not increase capacity

² Outside of North Herts district

³ Rural Location

7.21 The following points need to be noted:

- best practice principles are that whatever the size of practice, the number of registered patients at that practice should not exceed a density of 20 patients per square metre
- in Letchworth surgeries that currently have a surplus provide the capacity for those that are at capacity, an arrangement that however reduces patient choice and is unlikely to be a popular message
- some surgeries that provide for North Herts residents are actually located outside of district boundaries

7.22 North Herts has seven health centres, clinics/hospitals and administrative bases in the district. These include a hospital at Royston, and Health Centres in Royston, Baldock, Letchworth and Hitchin. Royston Health Centre houses both community nursing and GP services. As noted in the secondary healthcare section below, some of these facilities are not fit for purpose and will not meet future demand, whilst others are underutilised.

Planning for new primary healthcare facilities

7.23 Given the current arrangements for commissioning primary healthcare, this section is primarily concerned with the provision of GP practices in the district to respond to the proposals set out in the local plan, together with underlying demographic changes.

7.24 Taking the figures shown in the Growth Chapter (Chapter 5) and comparing these with current GP capacity shown in Table 7.2 overleaf provides a broad indication of how much future growth will place pressure on existing provision and therefore where new GP facilities might be concentrated.

Location	Total no dwellings	Estimated registrations required @ 2.4 persons per dwelling ¹⁵	Estimated GP requirements	Capacity (+) or Shortfall (-) In 2016	Overall position (GPs) with growth to 2031
Baldock	3296	7910	4.0	+1.1	- 2.9
Hitchin	1884	4521	2.3	+2.5	+0.2
Letchworth	2171	5210	2.6	-1.4	-4.0
Luton	2100	5040	2.5	0 ¹⁶	-2.5
Royston	996	2390	1.1	-0.9	-2.0
Stevenage	1830	4392	2.2	0 ¹⁷	-2.2
Villages	2145	5148	2.6	+2.2	-0.4
Total	14422	34611	17.3	+3.5	-13.8

Table 7.2: GP needs associated with growth to 2031 compared to current overall GP provision as at 2013

- 7.25** Table 7.2 shows that all growth requires additional GMS provision but where new services to meet those needs are located will be partially at least dependent on current capacity and shortfall and strategic estate planning in line with joint commissioning strategies.
- 7.26** The exact provision of new GMS services will be determined by a range of factors and is based on the assumption of a new practice of 3 GPs per practice. There would seem to be a strong case for new or expanded practices at Letchworth and Baldock, and also a case at Royston, whilst separately there is a case for new health facilities for developments within the districts at Luton and Stevenage as part of the overall masterplan for the area.
- 7.27** There are a range of factors which will influence the provision of new GP practices necessary to serve new development, these include:
- GP practices accept patients from within an agreed practice boundary, meaning that the location of new development within a district will impact on some practices more than others, particularly in more rural areas, where the demand for services from the increased population may fall on only one or two practices covering that area
 - The solution sometimes proposed to this is the opening of branch surgeries to treat a smaller, more local population, but healthcare provision has moved away from this model as branch surgeries are not considered to be fully

¹⁵ The figure of 2.4 persons per dwelling is a standard NHS England assumption when planning for future GP services; however, this is at odds with the emerging Local Plan which is based upon a ratio between increased population and new homes of 1.9 persons per new dwelling¹⁵. Were the NHS to adopt the Local Plan standard this would reduce the overall GP requirements by around 25%

¹⁶ The current assumption is that development within North Herts to meet Luton's needs will meet future GP provision on site without either being reliant on Luton itself or helping to meet the needs of Luton; however, this is an issue that will need to be considered further in future masterplanning by NHS England

¹⁷ GMS requirements will also need to be considered in relation to existing GP capacity or shortfall in both Luton and Stevenage

effective if the core services provided do not replicate the main surgery. They are also less popular with GPs

- Indeed, in recent years, healthcare provision has moved towards the establishment of larger surgeries, which are often co-located with other health services and cover a greater area. The advantage with this model is that such surgeries are more efficient, offer a wider range of co-located primary services, drive down costs and maximise land use
- Such surgeries will have a number of GPs and as such are sometimes able to pool existing surplus capacity and can absorb some new housing growth. This can be a combination of physical extension of premises, or more intensive use of existing premises

7.28 Given these considerations in practice format, it will be important for new development in the district to consider the 'net' capacity of existing services in the area.

7.29 The development of new housing in the district will take place over many years, and the timing and phasing of such developments will need to be discussed with health providers as they are planned to agree the best way of ensuring that there are appropriate local primary health care resources in place to cope with the increased demand. This additional capacity can be delivered in a number of ways and this will be taken forward in dialogue with health providers.

Health Infrastructure Needs - Primary Healthcare

7.30 NHS England regularly provides an assessment of GP primary care general medical services (GMS) future capacity in relation to new development (for planning applications, local plans and the preparation of CIL Regulation 123 lists). NHS England is also responsible for primary care General Dental Services (GDS), Optometry and Pharmacy Services and will need to provide evidence on the potential implications of future capacity requirements in relation to new development in respect of these services.

7.31 GPs deal with 90% of all patient contact with the NHS, and therefore require the necessary premises to support and enable future GMS primary needs to be met. This will come increasingly under pressure, given the changing nature of patient care pathways and the requirement that more services are provided locally within the community (rather than in a secondary care setting), and that development may take place in locations where there is currently no (or limited) health coverage.

7.32 Set out overleaf is the capacity planning calculation, used by NHS England Midlands and East (Central Midlands) based on GMS provision, which can be used to calculate the contribution required to support new GP provision for the development levels set out in the local plan. (It should be noted that NHS England Midlands and East (East) (which covers the area around Royston use a slightly different formula but the calculations are understood to be similar). This calculation aims to provide consistency for all the 25 local

authorities covered in the region as part of the single operating model of best practice that has been developed. In time the build cost figure will need to be reviewed but this should only happen when fresh and robust evidence can be presented by the health agencies.

7.33 The calculation is derived as follows:

$w \times 2.4 = x$ Multiply the numbers of dwellings in any given development (w) by 2.4 to give x new patients
$x/2000 = y$ Divide the number of patients by 2000 to give the numbers of GPs needed (y) (based on the ratio of 2,000 patients per 1 GP (as set out in the NHS England “Premises Principles of Best Practice, Part 1 Procurement & Development”)
$y \times 199 = z \text{ m}^2$ of additional GMS space Multiply the number of GPs required by 199 to convert to new GMS space (199 m^2) being the amount of floorspace required by each GP (again as set out in the NHS England “Premises Principles of Best Practice, Part 1 Procurement & Development”)
$z \times \text{£}2,600^* = \text{£}$ Multiply the floorspace by £2,600 which represents build cost per m^2 including fit out and fees to give a total cost (£)
$\text{£}/\text{number of dwellings} = \text{£}620.88$ (rounded to £621 per dwelling) Dividing the total build cost by the number of dwellings provides a standard contribution required from each new dwelling towards the cost of providing GMS services for that development

Table 7.3: Calculation of primary healthcare infrastructure

7.34 Applying this formula, for the development anticipated in the emerging Local Plan (see will give rise to the following requirements (note there is no deduction for the spare capacity identified in Table 7.1 as this is judged to be negligible):

Location of growth	Anticipated new dwellings	GPs (full time equivalents)	Cost (£m)
Urban capacity, unidentified broad locations and windfalls (see Table 5.3)	2514	3.0	1.56
Greenfield extensions (see Table 5.4)	9763	11.72	6.06
Village allocations (see Table 5.5)	2145	2.58	1.33
Total		17.3	8.95

Table 7.4: Summary of growth related GMS provision

7.35 The headline figure for new GMS development associated with the local plan growth target to 2031 is therefore **17.3 full time equivalent additional GPs, at a cost of £8.95m for new surgery provision**. However, the precise provision of new facilities will ultimately be influenced by a variety of considerations:

- as table 7.1 notes there is currently a very small net spare capacity of 178 within North Herts surgeries; however, given the overall population of the district is

around 130,000, this is a figure of no great significance in terms of primary healthcare planning

- a very small overall capacity spare GP capacity within Hitchin and some rural locations and the extent to which this can absorb the needs of new development
- conversely, the need to deal with underprovision in Letchworth and Royston
- individual decisions taken by existing and new GP practices on the scale, nature and location of any new or expanded surgery provision
- spare capacity outside North Herts relevant to meeting its future GMS needs (but equally the implications on GP provision arising from new development beyond the district boundary and potential issues of underprovision in those locations)
- The emerging local plan considers that new GP surgery will be required in the North of Baldock development, whilst there is planning consent for a new health centre at Knebworth which will meet future needs

7.36 As noted previously no decisions have been made about where additional GMS capacity is likely to be provided and there is likely to be considerable debate about the precise nature of what is provided. However, the larger scale developments (E & NE Luton, N of Baldock, N of Letchworth, N of Stevenage for instance) offer considerable scope to plan for such facilities at the outset as part of the overall masterplanning of the area.

7.37 In 2016 NHS England indicated that their preference was moving towards the provision of large multi facility superclinics providing a range of additional services in addition to GMS services, serving populations of 20,000 or more and potentially up to 60,000 residents (whilst recognising that in villages the existing model of smaller more localised provision with limited scope for additional facilities) is likely to remain the model for services in these locations. The district council may take the view that GMS services need to be smaller and more localised within the communities they serve, and sustainable greenfield extensions proposed in the plan offer a readymade opportunity such provision which should not be overlooked. These differences need to be discussed and agreed, with discussions based on a clinical assessment of how best to deliver services to patients.

Secondary Healthcare

7.38 The East and North Hertfordshire Clinical Commissioning Group commissions secondary healthcare from a number of bodies.

7.39 The East and North Hertfordshire NHS CCG is responsible for commissioning services at Lister Hospital in Stevenage and Peterborough and Cambridgeshire CCG is responsible for commissioning services at Addenbrookes within Cambridge.

7.40 Mental healthcare in Hertfordshire is provided by the Hertfordshire Partnership NHS Foundation Trust, which provides the majority of health and social care for people with mental ill health and learning disabilities. Acute mental healthcare for the district is currently provided from the Lister hospitals, with other community based mental healthcare services provided locally within the district.

7.41 The Hertfordshire Community NHS Trust provides community health services across Hertfordshire. These services are targeted at adults and children and

young people and range from community nursing to health education.

Service Planning

- 7.42** It is anticipated that increases in the population of North Herts to 2031 will place additional pressure on all secondary healthcare services in the district and surrounding areas. The changing age profile of the district'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.
- 7.43** Given the district's planned housing growth to 2031 together with growth planned in adjoining districts, pressures will be placed on secondary healthcare provision, particularly Lister Hospital in Stevenage.

Health Infrastructure needs to 2031 - Secondary Healthcare

- 7.44** The district council has worked with ENHCCG to establish likely capital costs for additional acute and community services needs as a result of growth.
- 7.45** Admission/attendance rates per 1,000 population for acute services within ENHCCG as at 2013/14 are as set out below:

Activity type	Attendees per 1,000 population
Non elective admissions excl maternity	82
Maternity admissions	17.17
Elective admissions	23.79
Day Case admissions	78.83
A & E attendances	325.50
Outpatients first attenders	334.37
Outpatients follow up attenders	704.20

Table 7.5: acute services attendance rates

- 7.46** By applying a population growth figure for the 5 districts in the CCG and then dividing this with an occupancy rate of 2.4 gives a figure for a total increase in dwelling numbers (35,881) from which additional space requirements from growth are:

Infrastructure type	No Required (total area in m ² in brackets)	Build cost per m ² (£)	Total Capital cost (£m)
Wards	6.8 (7,818)	6,820	53.3
Theatres	3.9 (1,927)	6,957	13.4
A & E Space	28% increase (1,067)	5,833	6.3
Outpatients Suite/consulting rooms	2.1 (1,609)	4,998	8.0
MRI CT and X Ray equipment	N/A	N/A	12.65
Total			93.65

Table 7.6: Defining secondary healthcare infrastructure need at CCG level

- 7.47** Dividing the total capital cost (£93.5m) with the total number of additional dwellings gives a per dwelling infrastructure cost of **£2,600 for each new dwelling for the provision of growth related acute services**
- 7.48** A similar calculation using the same methodology for mental health provision establishes a per dwelling infrastructure cost of **£202 per dwelling**.
- 7.49** A final secondary healthcare consideration relates to community services and here the methodology establishes a cost of **£272 per dwelling for community services**.
- 7.50** Applying figures to the growth proposed in the Local Plan establishes the following secondary healthcare infrastructure capital costs, shown below:

Activity	Cost (£)
Acute services	37.55
Mental health services	2.92
Community Services	3.93
Total	44.4

Table 7.7: Defining secondary healthcare infrastructure need at North Herts district level

- 7.51** A couple of additional points need to be noted in relation to secondary healthcare however:
- There is precedence for large scale secondary healthcare (new wards and indeed new hospitals) being funded directly by the Department for Health and the extent to which any new provision will be the subject of contributions from new development; certainly, the track record of new development funding such provision through s106 or CIL is limited
 - Secondary healthcare is subregional in scale, so infrastructure issues are as much matters for the IDPs of Stevenage Borough Council (Lister Hospital) and Cambridge City Council (Addenbrookes Hospital) as indeed they are for other local authorities
 - The delivery of secondary healthcare is something that could changes substantially over time (see the Stevens Five Year Forward View below) so requirements (facilities/location/form of delivery) may change drastically in future

Summary

- 7.52** A number of agencies are involved in the provision of secondary healthcare facilities in North Herts, including the East and North Hertfordshire NHS Trust, the Hertfordshire Partnership NHS Foundation Trust and Hertfordshire Community NHS Trust. Royston is covered by the Cambridgeshire and Peterborough CCG.
- 7.53** The limited availability of information, at this stage, makes a comprehensive assessment of future secondary healthcare requirements difficult. However, population increase related to planned housing development can be assumed to

increase pressure on services. This is especially so given the likely increase in the proportion of the population over 65, and will be most acutely experienced in locations where growth is concentrated.

- 7.54** ENHCCG's strategic vision will need to consider the demand for and supply of healthcare infrastructure, and will plan services accordingly. North Herts District Council will continue to engage 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.

The future of healthcare provision - the Stevens Report Five Year Forward View

- 7.55** There is considerable expectation that there will be further future changes in healthcare provision which will have considerable implications for health infrastructure planning and delivery. In October 2014 NHS Chief Executive Simon Stevens published the NHS Five Year Forward View to 2020/21 which identifies a range of radical changes considered necessary to make healthcare provision fit for purpose in the future. In addition to calls for an additional injection of public funding and major efficiency savings (which collectively should have the effect of increasing the available budget by £30bn p.a.) the Forward Review calls for:

- a radical upgrade in prevention and public health
- giving patients greater control of their own care
- more care being delivered locally health, and between health and social care, but with some services in specialist centres, organised to support people with multiple health conditions, not just single diseases
- new options to permit groups of GPs to combine with other specialists (e.g. community health services) to create integrated out-of-hospital care
- the redesign across the NHS of urgent and emergency care services to secure better integration
- smaller hospitals being granted new options to help them remain viable, including forming partnerships with other hospitals further afield,
- Clinical Commissioning Groups being given the option of more control over the wider NHS budget
- an improved focus on health technology coupled with expansions in research and innovation

- 7.56** Whereas the 2012 Health and Social Care Act's primary focus was on the structure of health care provision and its procurement, the Forward Review looks in detail at its operation and as such, stands to revolutionise the way in which such services operate in the district in the future.

Responding to the 5 Year Forward View – Sustainability and Transformation Plans (STPs)

- 7.57** To assist in meeting these challenges NHS England and others produced in December 2015 *Delivering the Forward View: NHS Planning Guidance 2016/17*

- 2020/21. This requires local NHS teams to produce a five-year Sustainability and Transformation Plan (STP), place-based and driving the Five Year Forward View; as well as a yearly Operational Plan, organisation-based but consistent with the emerging STP.

7.58 The Hertfordshire and West Essex STP was published in December 2016. In seeking future transformative change in the way that health services are provided in the future it seeks to serve the following objectives:

- to maintain people in the community, living as independently as possible
- to support people to manage their own health and well-being
- to reduce the burden of disease
- to reduce the demand on health and social care and provide services at lower cost

7.59 The conclusions from the STP is that in time there will be a much greater emphasis on delivering health services on a more local basis with a shift of emphasis in primary healthcare (through GP surgeries, specialist clinics and health centres) away from large district hospitals. In infrastructure planning terms this provides the planning system with much greater control over securing contributions towards the cost of new health infrastructure although it may in time put pressure on ensuring sufficient funds are directed towards such requirements if there are viability pressures and equally deserving investment priorities (school, transport) to consider.

7.60 In July 2017 the Department for Health announced the first round of capital funding to support the implementation of STPs. A total of £325m was allocated for 25 projects across 15 of England's 44 STPs, and although none of these are in the Herts and West Essex STPs, a further tranche of projects to receive funding will be announced in the autumn 2017 budget.

The Naylor Report (2017)

7.61 Another significant event which will help shape the healthcare provision of the future is the publication of the Review of NHS Property and Estates in April 2017. This wide-ranging review sets out an ambitious new NHS estates strategy focused on delivering improved care, the release of £2bn of assets for reinvestment, and delivery of land for 26,000 homes.

7.62 Naylor's key recommendations are as follows:

- the establishment a new and strategic NHS Property Board at arm's length from Department for Health to act as the primary voice on estates matters
- proposals to integrate the primary and secondary estate within an overarching Estates Strategy, incorporating a long-term vision for the NHS; a clearer understanding of the current estate; clarity on leadership; appropriate governance; and improved skills
- ensuring the Estates Strategy is compatible with the vision of the Five Year Forward View

- improved guidance on building standards to ensure that future capital investment in new facilities is fit for purpose
- An overall £10bn investment in the NHS Estate to render health infrastructure fit for modern purpose

7.63 Of particular significance for primary and secondary healthcare infrastructure investment is the recommendation of Naylor that:

- STPs and health infrastructure providers who develop long terms investment plans, and should not be granted access to capital funding either through grants, loans or private finance until they have agreed plans to improve performance against benchmarks
- the Department for Health and the Treasury should provide assurances to STPs that any sale receipts from locally owned assets realised in line with STP plans will not be recovered centrally but retained locally for reinvestment; further, Naylor recommends that the government should provide additional funding to incentivise land disposals through a “2 for 1 offer” in which public funds match disposal receipts;
- NHS England should provide guidance on the roles of healthcare providers and STPs with regard to estate matters;
- NHS England and the NHS Property Board should ensure primary care facilities meet the vision of the Five Year Forward View, and consider linking payments to the quality of facilities and greater use of 'fit for purpose' standards, with the NHS Property Board supporting GPs to meet these standards, making use of the opportunities around private sector investment.
- substantial capital investment is needed to deliver service transformation through STPs plans, with investment needs being met by contributions from three sources; property disposals, private capital (for primary care) and government funding through the Department for Health

Responding to the Naylor Report – the Autumn 2017 Budget

7.64 The government has responded to the £10 billion package of investment recommended by the Naylor Review by providing a further £3.5 billion of new capital funding for the NHS in England, on top of the £425 million already provided at Spring 2017 Budget This will be allocated as follows:

- **£2.6 billion** will be for STPs to deliver **transformation schemes** that improve their ability to meet demand for local services, with more integrated care for patients, more care out of hospital and reduced waiting times. Alongside the Budget, the government has announced the first group of schemes to benefit from this funding, subject to the usual approvals processes
- **£700 million** will support **turnaround plans** in the individual trusts facing the biggest performance challenges, and tackle the most urgent and critical maintenance issues that trusts are facing
- **£200 million** will support **efficiency programmes** that will, for example, help reduce NHS spending on energy, and fund technology that will allow more money and staff time to be directed towards treating patients

- 7.65** This £3.5 billion will allow the NHS to increase the proceeds from selling surplus NHS land and buildings to at least £3.3 billion, almost doubling the scale of investment available to the NHS, and unlocking land for housing. It will also be accompanied by private finance investment in the health estate where this provides good value for money.
- 7.66** Additionally it will be complemented by work to review and improve the rules that inform trusts' use of capital funding, to help make sure that they maintain their facilities most effectively.
- 7.67** In a separate announcement, the government confirmed its commitment to parity of esteem between mental health and physical health. In the first action in pursuit of this objective, the government published a Green Paper in 2017 setting out the government's plans to transform mental health services for children and young people.

Overall implications of future changes

- 7.68** Taking the NHS 5 Year View, Sustainability and Transformation Plans, the Naylor Report and the announcements in both the Spring and Autumn 2017 budgets, primary and secondary healthcare infrastructure investment is set to be the subject of significant changes in future years which will have profound implications on where, when and how it is provided. Future iterations of this IDP will be in a position to mark the implications for the district and the growth set out in the Local Plan.

Infrastructure Funding and Delivery

The phasing of new health infrastructure

- 7.69** The health infrastructure needed as a result of growth in North Herts needs to be introduced in accordance to the phasing of growth over the plan period. Taking the figures for primary and secondary healthcare infrastructure needs and feeding in the proposed phasing of growth shown in Chapter 5 of this report gives the following phasing profile below:

Category	Total (£m)	Cost Phasing (£m)		
		To 2021	2022 - 26	2027 - 31
Primary healthcare	8.95	1.5	3.95	3.5
Secondary healthcare	44.4	7.5	19.5	17.4
Total	53.35	9.0	23.45	20.90

Table 7.8: Summary of primary and secondary healthcare in total and in 5 year tranches

The funding and delivery of health infrastructure

- 7.70** A full analysis on how overall infrastructure need could be funded and delivered is considered in detail in Chapter 13, so this chapter considers the headline issues associated with funding and delivering growth related health infrastructure.
- 7.71** Funding sources for health infrastructure are variable and NHSE capital is limited. Where the need arises for health infrastructure as a result of the impact of new development ENHCCG and NHSE seek the support of the local planning authority to secure developers contributions through s106 or CIL
- 7.72** In the light of this, the use of s106 agreements has become increasingly important in the funding of primary health infrastructure. The advantage with s106 is that it is possible to translate development numbers via an evidenced formula into health investment needs and identify from that a cost to be secured from the development promoters. The CCGs works with its providers and requests s106 contributions based on evidenced formulae, as appropriate.
- 7.73** The possible future introduction of CIL introduces some uncertainty with the limitations on s106 as the health bodies cannot be certain whether they will achieve access to similar levels of developer contributions via CIL, although it is able to make a case for CIL revenues to the district council as charging authority under whatever governance arrangements are adopted.
- 7.74** Even with the possible introduction of CIL, s106 will remain relevant to the securing of site specific health infrastructure through developer contributions and there is an emerging consensus that for large development sites (of 500 dwellings or more as well as potentially smaller schemes) site related health needs will continue to be met by this means (subject to viability considerations and the application of the pooling restrictions).
- 7.75** Larger development and CIL uncertainties may mean most of the health infrastructure needs of the proposed urban extensions and some of the larger urban capacity/windfalls/village developments will be funded via s106, assuming this source of funding continues to remain available.
- 7.76** For the health infrastructure needs arising from all other development CIL, if introduced could contribute to the cost of such infrastructure, although it will be competing for such funds with other forms of infrastructure such as schools and transportation projects.

A recalculation of Health Infrastructure Needs based on Submission Plan figures

- 7.77** As noted in Chapter 4, the infrastructure needs for health (and education) as defined in the 2016 IDP are an overestimate of requirements, as growth requirements assessed for the IDP were at a higher level to that proposed in the Submission version of the Local Plan. Overall, the 2016 IDP calculations are 4.4% too high. Table 7.8 overleaf recalculates the requirements:

Category	Total (£m)	Cost Phasing (£m)		
		To 2021	2022 - 26	2027 - 31
Primary healthcare	8.56	1.43	3.78	3.35
Secondary healthcare	42.44	7.17	18.64	16.63
Total	51	8.6	22.42	19.98

Table 7.8: Summary of primary and secondary healthcare in total and in 5 year tranches, recalculated in reflect the growth proposed within the submission version Local Plan

8. Social Infrastructure

January 2018 Update

There are a few minor textual and factual alterations to this chapter

- 8.1** Social infrastructure is vital for the creation of sustainable and cohesive communities and includes indoor sports facilities, community buildings, libraries, play areas, facilities for different faith groups, youth provision and leisure activities. Adult care provision is also covered under this chapter.
- 8.2** This section provides an overview of existing social infrastructure within the district and sets out where new provision is required to support housing growth.

Indoor Sports Provision

- 8.3** NHDC commissioned an Indoor Sports Facilities Study in 2015. The Assessment Report was completed in February 2016.

Sports Halls

- 8.4** Indoor multi-sport sports halls are key facilities for community sport because they have great versatility in being able to provide a venue for many different activities. The standard method for identifying a sport hall capacity is its ability to accommodate at least one badminton court measuring at least 10m x 18m and including specifically designed sports halls, such as leisure centres and school sports halls. Additionally, there are “activity halls”, venues which are not specifically designed for sports but sporting activities may take place within them, such as school assembly halls, community buildings and village halls.
- 8.5** There are 31 sports halls identified within North Hertfordshire, 22 of these have at least one badminton court marked and 11 can be regarded as main halls, having 3 badminton courts or more. All 11 main halls are available for community use, although hours of public use are restricted at 9 of these locations as they are educational establishments.
- 8.6** The largest facility is at Fearnhill Sports Centre, Letchworth which has a five court sports hall. The district council is replacing the sports hall floor at North Hertfordshire Leisure Centre in Letchworth, although the configuration of the sports hall limits ability to host a range of activities.

Future provision of sports halls

- 8.7** Demand for future sports halls can be determined by a variety of factors, including projected population growth, the extent to which current facilities are used, their accessibility and their overall condition. The district council use Sport England’s

Sports Facilities Calculator (SFC) to calculate future needs. Taking all relevant factors into account, the SFC calculation finds **that an additional 10 Badminton Courts worth of sports hall space** is required within the Local Plan period, to be provided in a suitable combination of facilities.

Swimming Pools

- 8.8** Following the closure of the pool at Meridian School in 2011 there are 13 swimming pools in North Hertfordshire, five of which are outdoor pools. 6 of the indoor pools can be classified as main pools. The largest main pool is at Hitchin Swimming Centre & Fitness @ Archers Hitchin. In addition, there are five pools outside the District within a 15-minute drive time and a further three pools within a 20-minute drive.
- 8.9** The Council has recently invested in North Herts Leisure Centre in Letchworth to ensure the facility is fit for purpose for the next 20 years. The improvement work will include a new learner pool, new café, refurbished wet changing rooms, refurbished corridors, new sports hall floor and lighting and a new multi-functional room. Work will be completed by 2017. In the longer term, investment will also be needed in the main pool hall to bring it up to the standard of the rest of the refurbished facility.
- 8.10** The SFC helps to assess the strategic provision of community sports facilities. In North Hertfordshire the assessment includes all pools over 20m in length or 160sq m in water area in community use. Outdoor pools are excluded. The SFC shows that the supply of swimming pools in the district is relatively high, with 18.72 sq.m. of water space per 1000 people, compared with 12.65sq m per 1000 people in England.
- 8.11** Notwithstanding, this, it is important in future swimming pool planning to consider the age of the premises and their accessibility as well of course the impacts of growth. Taking all the factors into **consideration there is the need for an additional 332.52 sq.m. of additional water space, or the equivalent of 6.26 swimming lanes.** Provision may take the form of a new swimming facility or the expansion of others.

Health and Fitness Centres

- 8.12** Health & fitness facilities are normally defined by a minimum of 20 stations. A station is a piece of static fitness equipment and a larger health and fitness centre with more stations offer a more attractive package to both members and casual users. Fitness suites can provide a valuable way for people of all ages, ethnicities and abilities to introduce physical exercise into their daily lives with the obvious benefits in health, fitness and wellbeing.
- 8.13** The Indoor Sports Facility Assessment identifies 16 health and fitness suites located across 16 sites with a total of 711 stations. Just one of these facilities has less than 20 stations - the health and fitness suite at Letchworth Garden City RUFC. The other venues have more than 20 stations each, the largest being three facilities with 80 stations, these being Hitchin Swimming Centre & Fitness @ Archers Hitchin, Odyssey Health & Fitness Club (Knebworth) and Xchange Fitness.
- 8.14** 8 of the 15 larger fitness centres are commercially owned with 4 on education sites and 3 local authority owned. All but three are available for use with the choice of

either 'pay and play' or membership. Participation rates for fitness centre use in the district are at 14%, above the national average of 12%.

- 8.15** There is some inbuilt spare capacity in the district's fitness centres, with national penetration suggesting the need for 449 stations against a current supply of 711. However, demand in the district is higher than average. While no additional provision can be identified at present, the likely impact of future growth means that this is something that needs to be kept under review.

Indoor Bowls

- 8.16** There is one pay and play bowls facility at Riverain in North Hertfordshire, providing 6 rinks. There is also a 6 rink facility within a 20 minute drive of this facility at Stevenage Arts and Leisure Centre. Consultation with the English Indoor Bowls Association (EIBA) suggests there is sufficient supply of indoor bowls facilities within North Herts and surrounding districts to meet current and future demand.

Indoor Tennis

- 8.17** There is one indoor tennis facility at Letchworth Sports and Tennis Club in North Hertfordshire and this has 3 indoor courts and 8 outdoor courts as well as offering a range of other sporting activities. There is another in Stevenage that is accessed by North Herts residents. North Herts is not in a Lawn Tennis Association (LTA) priority area and there is no obvious demand for an additional indoor tennis facility.

Squash Courts

- 8.18** There are 12 squash courts located across six sites in North Hertfordshire, all but one of which are pay and play. Four courts are located at North Hertfordshire Leisure Centre, Letchworth and two of these are glass backed. The other squash courts in the district are all standard courts.
- 8.19** The four courts located at North Hertfordshire Leisure Centre are all assessed as above average, while the one court located at Hitchin Sports Centre is assessed as below average. Although all remaining courts were not assessed, it is expected that all are above average condition (or better) having been refurbished within the last six years or, in the case of the two courts located at Odyssey Health & Fitness Club, are expected to be of a quality to cater for the commercial sector membership market.
- 8.20** Both nationally and regionally there has been a long term decline in participation in the game and the aim in North Herts will be protection of existing facilities rather than planning new ones.

The funding of indoor sports

- 8.21** This document identifies potential provision of additional sports hall and swimming facilities and both of these are included in the Infrastructure Delivery Schedule. Some of these could be linked to the major development extensions at set out in the local plan growth strategy (and could therefore be considered for s106 funding), whilst others are more general in nature and are potential beneficiaries of CIL funding if introduced. Detailed proposals may need to be worked up if the providers are to benefit from either form of funding.

Play Provision

- 8.22** Play is an essential part of every child's life and is vital for the enjoyment of children as well as social, emotional, intellectual and physical development. Research shows that play has many benefits for children, families and the wider community, as well as improving health and quality of life. Facilities for play services can be seen as a focal point for communities and provide a sense of community spirit. Parents often feel more secure knowing their children are happy, safe and enjoying themselves through organised play provision.
- 8.23** Play provision is covered by a combination of Children's Centres in Hertfordshire run by a variety of lead agencies, and voluntary and private sector groups. There is currently no funding for such play provision provided by North Herts District Council.

Infrastructure Requirements

- 8.24** As with youth provision, many play services are not necessarily provided for within purpose built facilities in the district, but instead take place within a variety of settings. This could be play rangers in the park or holiday clubs in community meeting places. It is therefore important to ensure that existing and new community buildings, together with green spaces, are sufficiently flexible to accommodate the needs of children. Accessing these facilities is also an important factor in relation to location and affordability.

Libraries

- 8.25** Library services in North Herts are the responsibility of Hertfordshire County Council (HCC). They are managed by Libraries and Heritage Services (LHS), part of HCC Resources Department.
- 8.26** The Library Service is a statutory service in accordance with the Public Libraries and Museums Act 1964. Libraries offer free, authoritative, non-judgemental services. They provide access to books, DVDs, magazines, community language material, computers and the Internet, online reference resources, ICT-based and other learning opportunities. They also offer neutral places to promote community wellbeing.
- 8.27** In 2014, the government published William Sieghart's Independent Library Report for England. This called for clear local decision-making and a national strategy to secure the future of public libraries in England.
- 8.28** "**Libraries Deliver: Ambition for Public Libraries in England 2016-2021**" was the response to that call. It was produced by the Leadership for Libraries Taskforce – a partnership of organisations committed to delivering a successful and vibrant future for public libraries in England – at the request of the Department for Culture, Media and Sport (DCMS).
- 8.29** "Libraries Deliver" sets out a "vision of the value and impact of public libraries, a national network that delivers transformation and progress for people, communities and the nation".

8.30 Alongside the final published document there was an action plan showing how local and national government and the library profession will work together with local communities and other partners to make shared ambitions a reality.

8.31 In 2014 the HCC Library Service launched ‘Inspiring Libraries: A new strategy for Hertfordshire Libraries 2014-24’. This sets the direction for the library service over the next ten years and will inform future decisions about the operation and delivery of library services. It has three main ambitions which are to create:

- A sustainable library service, delivered in partnership with local residents, organisations and communities
- A service that is ambitious in its use of technology and digital formats for the benefit of customers
- Libraries that enrich the lives of Hertfordshire residents of all ages through reading, learning and access to culture

8.32 The key to the delivery of Inspiring Libraries is the introduction of tiers of libraries:

Tier 1	Libraries located centrally in the heart of the largest towns in Hertfordshire. They will offer the broadest range of library services and the longest opening hours
Tier 2	Libraries located in the smaller towns, offering core library services
Tier 3	In the smaller communities and villages there will continue to be the opportunity to issue and return books, and access to IT and study space. The Library Service will invite local communities to add value to these services through volunteer staffing and the provision of additional services as decided by the local community

8.33 Central to the delivery of Inspiring Libraries will be:

- a high quality online library service
- co-location of libraries with other services
- exploiting technology to improve service delivery
- increasing the use of volunteers to support library services and extend opening hours
- effective promotion of the service

Existing provision

- 8.34** North Hertfordshire has five libraries, which are in Baldock (Tier 2), Hitchin (Tier 1), Knebworth (Tier 3), Letchworth Garden City (Tier 2), and Royston (Tier 2). Stevenage has two libraries; Stevenage Central Library (Tier 1) and a smaller one in the Old Town (Tier 3). The Library Service also provides a Home Library Service for people who are housebound. North Herts residents also access library facilities in towns outside the district including Welwyn Garden City, Stevenage and Harpenden.
- 8.35** In terms of assessing capacity the Museums, Libraries and Archives (MLA) recommends a benchmark of 30 sq.m. per 1,000 residents for library space. With an estimated the total population in the district of 126,186 people this would equate to 3,786 sq.m. of library floor space. Existing total floorspace for the libraries in the district is 18.6 sq.m. per 1,000 population which is well below the MLA recommendation.
- 8.36** The County Council has provided a breakdown of each library in relation to its floorspace, quality and current provision. The last column indicates future requirements as a result of growth taking into account the MLA guidelines.

Library	Tier	Area (sq.m.)	Current provision	Additional provision required
Baldock	2	325	Small community library, fit for purpose	Additional stock, shelving and IT
Hitchin	1	660	Extremely well used library, on 2 floors with public lift. Scheduled to be refurbished in 2016/17	Additional stock, shelving and IT
Knebworth	3	234	Small community library, adequate. Scheduled to be re-provided in a shared building (with NHS England) in 2017/18	Additional stock, shelving and IT
Letchworth	2	606	Well used larger library. Good location, but internal layout compromises the delivery of modern public services	Improvements to shelving and introduction of new layout, as well as additional stock, shelving and IT
Royston	2	476	Well used larger library in good condition and fit for purpose	Additional stock, shelving and IT

Library	Tier	Area (sq.m.)	Current provision	Additional provision required
Stevenage	1	1114	HCC are planning a new enlarged library as part of shared service development within the town centre	New and enlarged library as part of shared service
Stevenage Old Town	3	106	Small satellite library, adequate	Additional stock, shelving and IT

Table 8.1: Qualitative assessment of North Herts libraries

8.37 In most cases it is unlikely that the provision of additional floorspace will be practical. In addition, the Government's drive for efficiencies and co-location of facilities are likely to influence overall space requirements. It was originally intended that this could either result in an increased use of library accommodation for community facilities, or a reduction in the library space in existing buildings due to additional facilities being moved in, such as local council services.

8.38 The County Council has indicated that it intends to improve existing facilities rather than building new libraries. It is also exploring any efficiencies which can be achieved by use of other premises. It is likely that, in future, any increase in library services as a result of growth will be provided as part of a shared facility with other local services.

The Funding and Delivery of library services

8.39 No costs for the proposed upgrading and expansion of library facilities as a result of growth have been identified. The district council will work with the County Council to ensure that the latter develops a detailed infrastructure package for new library provisions including details and phasing of schemes, delivery responsibilities and means of funding including developer and public purse contributions as deemed appropriate.

Adult care facilities

8.40 Adult care covers specialist facilities for older people, people with learning disabilities, those with a physical disability or sensory impairment, and people with mental health issues within the district.

Older People

8.41 Residential and Nursing: Demographics suggest that in the future there will be a demand for more residential and nursing services in the private sector. There is an increase of 17% of people aged over 65, according to Joint Strategic Needs Assessment (JSNA) data. By 2025 for older people HCC predicts there will be an increase in demand in North Herts of 134 residential care places and 87 nursing home places. An increase in the need for flexicare (extra care) places is expected,

the quantity required is currently under review. In terms of the emerging local plan, provision of up to 350 bed spaces in suitable supported accommodation will be sought to meet the needs of those who cannot live on their own.

- 8.42** In view of the demographic increases, HCC will also seek new developments to provide Extra Care Schemes across the district. Further discussions with HCC will need to take place to determine the costs associated with this and how these schemes will be delivered, including new development at Strategic Sites. Some sheltered/extra care housing will most probably be delivered by the market and the expectation is that some of this provision will be delivered on the larger strategic sites.

Learning Disability

- 8.43** HCC has a target to convert up to 50% of residential care placements to supported living by the end of 2019/20. HCC have identified more than 40 residential schemes countywide that could be converted and are identifying where new supported living accommodation might be developed, such as new build general needs housing schemes.
- 8.44** HCC lacks specialist services for complex needs and wants to increase community living accommodation provision, including bespoke property solutions e.g. individual, detached properties, for people with specific needs.
- 8.45** In 2016-17 130 young people are expected to move into adult social care countywide and HCC is looking to develop a comprehensive exit strategy for moving into adulthood to ensure suitable provision to provide young people with the care and accommodation they need.
- 8.46** HCC is looking to commission a specialist short break unit for individuals with autism and challenging behaviour to meet this current gap in the market.

Physical disability/ Sensory Impairment

- 8.47** The number of adults aged 18-64 with a moderate/serious physical disability is expected to increase by 10% to nearly 78,000 by 2025. Whilst still needed for some specific care needs. HCC wants to move away from 'traditional' residential services and instead develop alternative housing options with various types of tenures to promote independence. This includes developing more integrated community services and supported living, and making better use of existing stock in the private rented sector by securing affordable and sustainable tenancies. Local Plan policies additionally seek to ensure that 20% of new homes can be adapted to be wheelchair accessible and adaptable.
- 8.48** HCC is reviewing all current housing stock with partners and district councils to design future projects including identifying/developing 1 or 2-bedroom specialist, wheelchair adapted properties. HCC also wants to work to make best use of existing

housing stock and reduce the number of adaptations installed by matching service users' needs with the identification of available housing stock. In 2016 130 young people are due to move into adult social care and HCC wants to stimulate the market to encourage more properties to be owner occupied.

- 8.49** HCC has a gap in specialist provision to meet specific needs, including longer term placements for people who have a neuro rehab need, and placements for individuals with alcohol induced Acquired Brain Injury (ABI)/Korsakoff syndrome.

Mental Health

- 8.50** Dementia diagnoses are projected to increase 15% by 2020 and 34% by 2025, and MH prevalence is set to increase at an estimated 6% over the next 10 years. HPFT directly provide inpatient services for people with dementia who meet NHS Continuing Care eligibility and will be looking to the market to provide approx. 80 of these beds.
- 8.51** HCC wants to reduce use of traditional residential care/ group home settings for people with MH conditions, and increase alternative housing and support options, including working with the private rented sector to secure affordable and sustainable tenancies.
- 8.52** HCC wants to stimulate the market to encourage more properties suitable for people with a mental health condition, focusing on the recovery model; this includes accommodation settings for rehabilitation, residential and supported living settings. These placements will not be a home for life, but part of a pathway designed to equip individuals with skills they need to move on from these settings to independent living.
- 8.53** HPFT have recently reviewed people accessing MH placements and found the following requirements countywide for move-on accommodation for individuals with a well-managed mental health diagnosis: 30 people who require supported living; 50 people currently in supported living who are ready for general needs/independent housing; 20 older adults who would benefit from sheltered accommodation. The particular demand across the county is for 1 bedroom flats/studios or self-contained provision.

The funding and delivery of adult care needs

- 8.54** No costs for any of the requirements identified in the section above have been identified, nor has the means of delivering them. The district council will work with HCC to ensure that the latter develops a detailed infrastructure package including details and phasing of schemes, delivery responsibilities means of funding including developer contributions and public funding contributions as deemed appropriate.

Youth provision

- 8.55** The Education and Inspections Act 2006, Part 1, Section 6: Education Act 1996, Section 507B states that Local Authorities have a 'responsibility to ensure young

people have access to sufficient educational leisure-time activities which are for the improvement of their well-being and personal and social development, and sufficient facilities for such activities; that activities are publicised; and that young people are placed at the heart of decision making regarding the youth work / positive activity provision'. To clarify the Government's expectations of local authorities, the Department of Education published the Statutory Guidance for Local Authorities on Services and Activities to Improve Young People's Well-Being (June 2012).

8.56 Hertfordshire County Council Youth Connexions (YCH) provides youth work, information, advice, guidance, work related learning, outdoor education and support for young people aged 13-19 (up to 25 for young people with learning disabilities). It also provides support for young people leaving care, up to the age of 21, through the YCH One Stop Shops. Alongside the voluntary and commercial sectors it delivers services to young people. An 11-19 Local Youth Strategy Group exists to facilitate coordination and promotion of this work and is chaired by the YCH Team Manager.

8.57 The focus of YCH is prevention and early intervention. It supports young people by providing high quality informal education opportunities to promote young people's personal and social development, enabling them to make informed decisions, have a place in their community and ultimately, to reach their potential and make a successful transition to adulthood. This will enable young people to:

- Make informed decisions based on the information which is available to them, thereby avoiding risky behaviour.
- Be confident that they can present their views, including those of others, and influence decisions.
- Develop resilience by knowing how they can help themselves and others.
- Recognise when they need support and where they can go to access it.
- Be able to recognise and develop healthy relationships thereby being less vulnerable to child sexual exploitation (CSE).
- Develop a sense of purpose and self-belief, and recognise what they contribute to society thus ensuring a sense of emotional well-being and positive mental health.

8.58 The priorities for YCH is to:

- Provide high quality youth work provision, programmes and opportunities that enable young people to develop and improve their personal and social skills during term-time, school holidays, Friday and Saturday evenings; and at the weekend.
- Target the delivery of youth work opportunities to the following:
 - young people in a locality of need, e.g. area of high deprivation, high levels of anti-social behaviour or where there is a high possibility of young people engaging in risky behaviour.

- young people from vulnerable groups. In line with the Children's Services Strategic Plan, there is a particular emphasis on the following young people: NEET, Children Looked After (CLA), Care Leavers, young people at risk of offending or re-offending, young carers, those with learning difficulties, and young parents
- Reduce referrals made to specialist services by building young people's resilience and emotional well-being targeting those who are vulnerable.
- Support the Early Intervention and Prevention agenda by providing young people with the positive, preventative and early help they need to improve their well-being, giving them an alternative to engaging in risky behaviour.
- Provide programmes to address the CSE agenda targeting young people engaged or likely to engage in risky behaviour; raising awareness, improving young people's resilience, and developing their skills and strategies to keep themselves safe. This will be delivered through youth work projects, detached work and work with partners including schools.
- Work to reduce the number of CLA and CLA related spending by providing additional support to young people who are most vulnerable.
- Provide volunteering opportunities and social action projects for young people and involving them in their communities.
- Actively promote and deliver to the Voice of the Child agenda. Co-producing provision and services with young people through youth work projects, youth forums, youth councils, youth issue groups, steering groups, UKYP, and Herts1125.
- Strategically lead on the development of educational leisure time activities for the improvement of young people's well-being in Hertfordshire through the local 11-19 Youth Strategy groups and equivalent forums and groups.
- Provide appropriate access to quality and up to date information regarding the Youth Offer.
- Maximise opportunities to draw in income that enables a high quality service to be maintained for the young people of Hertfordshire.

8.59 YCH youth work is predominantly delivered through 10 local youth work teams. Each team has a local youth work offer which reflects the needs of the locality and includes:

- Work with:
 - Young people in deprived areas
 - Young parents
 - Young carers
 - Young people who are looked after
 - Young people with learning disability
 - Young people who are lesbian, gay, bisexual, transgender or questioning

- The following styles of work :
 - Duke of Edinburgh Award project
 - Youth Councils / Forums
 - National Citizen Service projects
 - Friday and Saturday evening; and weekend projects
 - Detached projects targeting hard to reach and those at risk

8.60 For locality teams that have One Stop Shops the offer will include:

- C-Card, chlamydia and sexual health services
- Support for care leavers up to the age of 21
- Access to information, advice, guidance and support for education, work, training and volunteering, advice on drugs, finance, health, housing and other issues which are important to young people.

8.61 All HCC Youth Connexions youth work is delivered through planned curriculum programmes which are based on identified need resulting in recordable personal and social development outcomes.

8.62 Needs are identified in a variety of ways: through the planning and evaluation process; co-production with young people; consultation with stakeholders, elected Members and the local 11-19 Youth Strategy Groups. Outcomes are identified and a programme of work is designed and delivered.

8.63 Delivery can be through a variety of media depending on the needs and interests of the young people, e.g. through sports, music, drama, art, peer mentoring, outdoor education etc. The outcomes, however, will be linked to at least one of the key curriculum areas: drugs and smoking, alcohol, sexual health and relationships emotional wellbeing including bullying and cyber bullying, youth engagement including youth councils, forums, UKYP, Herts1125, decision making, volunteering, preparation for education, training or work, youth crime and personal safety, ethnicity, diversity and culture, health and fitness, resilience.

8.64 There are a number of styles of youth work and delivery will depend on the young people who are being targeted. Delivery styles include centre-based provision, detached, school holiday provision (NCS), school delivery and mobile provision.

8.65 YCH operates in a variety of settings including YCH Centres, schools, colleges, community centres, youth projects, One Stop Shops, training provisions and detached locations such as parks and streets.

8.66 Once a piece of work is completed, it is evaluated by young people and staff. The results of the evaluation are used in the development of future work.

8.67 YCH have the following targets for its delivery of youth work:

- 25% of 13-19 year olds to be in contact with the service.
- 15% of 13-19 year olds to be participating in projects.
- 30% of participants demonstrate a change in their personal and social skills.
- 10% of participants receive nationally recognized accreditation.

- 8.68** Details regarding the current YCH youth work offer can be found on the Youth Connexions website www.youthconnexions.org/youth-work

The funding and delivery of youth provision

- 8.69** No costs for any of the youth provision requirements have been identified, nor has the means of delivering them. The district council will work with HCC to ensure that the latter develops a detailed infrastructure package for any new or expanded youth facilities including details and phasing of schemes, delivery responsibilities means of funding including developer contributions and public purse contributions as deemed appropriate.

Community Centres

- 8.70** Community centres, town and village halls provide a range of facilities such as meeting places, club venues, opportunities for learning, sports, leisure, party venues, play groups and more. They are an important focal point for the development of local groups and promote a sense of belonging to a community for the district's residents. They are becoming increasingly important as many organisations seek to locate their services within community centres.
- 8.71** North Herts District Council is responsible as landlord for a number of local community centres and halls. A significant number are now also run by local community groups, an initiative the Council is keen to develop further.
- 8.72** The Community Centres and Halls Strategy was adopted in October 2011, and although it will need to be updated in the light of the emerging local plan growth strategy, it still forms the basis of an investment strategy in new and improved facilities. The Strategy includes a comprehensive survey of local halls, not only those in the ownership of the Council, but also those owned and run by parish, town and community councils.
- 8.73** The Community Halls Strategy also identifies that passing the running of a local hall to a community or voluntary group can prove more cost effective and engage communities better in what then becomes 'their' centre. This is an area the district council will investigate and encourage more to ensure future sustainability of these important centres.

Existing Provision

- 8.74** There are 11 community centres, 4 town halls and 34 village halls in North Herts. All the community centres, predominantly located in urban areas of the district, are owned or leased by NHDC. They are in turn sublet to local community groups who operate them on behalf of the local community.
- 8.75** Since the adoption of the Community Centres and Halls Strategy the following investments and changes have been made:

- Baldock Town Hall is now leased by a Charitable Trust
- Clothall Village Hall has opened
- Extra capacity has been created at the Greater Ashby Community Centre
- A new Westmill Community Centre offers a third more space than the previous building, offering much more flexibility to multiple hirers
- Hitchin Town Hall has been refurbished
- The John Clements Centre replaced the Codicote Sports and Social Club in April 2015
- The authority plans to close and demolish Bancroft Hall in Hitchin later this year
- The emerging local plan considers there will be the need for a new community hall in the North of Baldock development

The funding of new community facilities

8.76 New community and youth facilities will be required to support housing development in the district. It is anticipated that these facilities will be delivered within the major growth locations within the district and could be co-located with other services. New community and youth facilities should be accessible by public transport and ideally provide an area of outdoor space for recreation. Enhancements will also be sought to existing community and youth facilities where new development places extra demand upon these services.

8.77 The district council expects to continue its capital works grants scheme providing funding for up to £50,000 to qualifying community centres and halls in the district for various operational (usually internal) capital improvements to help them increase/expand the extent of their service provision to local communities. As schemes for new and improved community facilities come forward in the district these will be included in updates to the Infrastructure Delivery Schedule, but on present evidence, the expectation is that the following should be budgeted for:

- 3 new community centres at a cost of £1.0m each
- refurbishment/expansion of Royston Town Hall – 650k
- a general fund for the refurbishment/expansion of other community centres to cater for the remaining impact of new growth

8.78 In development terms, community and youth facilities are best provided after the community has established in an area in order to determine the specific requirement of the community and their commitment to support with management of the facility. However, if there are delays in provision then there could be adverse implications on the spare capacity in existing areas which will be needed to serve additional infill development. Also, it could affect the sense of belonging to a community or even whether people choose to use sustainable transport measures or not. So, in reality, it is most appropriate that youth and community facilities are provided early in the build programme.

- 8.79** With regards to the funding of new community and youth facilities it is envisaged that this will be taken forward through section 106 or CIL if introduced.

Faith provision

- 8.80** There are estimated to be 120 recognised places of worship in the district in the following locations

Letchworth – 29

Hitchin – 26

Rural locations – 18

Royston – 16

Baldock – 12

Knebworth – 4

Other (outside the district but serving district communities, unspecified locations, non-premises based worshipping) - 15

- 8.81** These places serve a variety of practising faiths and include churches, temples and synagogues. Places of worship are managed by the individual faith groups and in most instances the buildings are also owned by the respective faith organisations e.g. the Church Commissioners in the case of Church of England Churches. Some faith groups also lease or rent rooms in other buildings/ community halls used for evening or weekend worship.
- 8.82** The council will work with faith groups in the district to explore ways in which the needs of religious groups can be met as part of the delivery of new housing in the district. New provision could, for example, take the form of a shared community facility.

9. Emergency Services

January 2018 Update

There are a few minor textual and factual alterations to this chapter

Police

- 9.1** Hertfordshire Constabulary is responsible for policing within this district and Stevenage. In April 2010 Hertfordshire Constabulary restructured from three policing areas into a combined single Local Policing Command Unit (LPC), underpinned by District/Borough Safer Neighbourhood Policing Teams. The Neighbourhood Policing Teams are made up of Neighbourhood Constables, Police Community Support Officers (PCSOs) and Special Constabulary Officers.
- 9.2** Following the election of the Police and Crime Commissioner in November 2012 the Commissioner produced The Police & Crime Plan for Hertfordshire entitled 'Everybody's Business'. Details of the plan are available via the following weblink:

<http://www.hertscommissioner.org/fluidcms/files/files/pdf/84615-Herts-Police-and-Crime-Plan-v3.pdf>

- 9.3** The North Herts Community Safety Partnership (NHCSP) comprises organisations who work together to reduce crime and disorder in North Hertfordshire. The 'Responsible Authorities' of NHCSP are; NHDC, Hertfordshire Constabulary, Hertfordshire Probation Trust, Hertfordshire Fire and Rescue Service, Hertfordshire County Council, NHS and East and North Herts Clinical Commissioning Group (CCG). The NHCSP structure consists of strategic, tactical and local working groups, all working together to address local priorities. Details are available via the following weblink:

http://www.north-herts.gov.uk/index/community_and_living/community_safety/north_herts_community_safety_partnership.htm

Existing Provision

- 9.4** North Hertfordshire is divided into Safer Neighbourhood Policing Teams which generally follow ward boundaries. Policing priorities for each of these neighbourhoods are identified on the Herts Police website
- 9.5** Hertfordshire Constabulary Headquarters are located in Welwyn Garden City, this provides support and administration for the Constabulary. The Chief Inspector for North Herts is located at Hitchin with police stations are located also in Letchworth and Royston.
- 9.6** There is also a police station within Stevenage which provides custody facilities for North Herts, and due to the reduced operating hours and closure of other offices, will act as the central station for many aspects of crime reporting, production of

documents etc. The custody facilities at the stations within North Herts are no longer used as they do not meet current Home Office Standards.

9.7 The number of staff and buildings required to police an area is based on a range of factors such as:

- Response times – geographical issues
- Demographics
- Crime levels and type
- Public safety
- Objectives of the local policing plan agreed by the Police Authority

9.8 The capacity of each station is assessed by undertaking space utilisation. This comprises floor area (NIA) verses number and type/function of Officers/Staff located at each station. This assessment is then used internally by the Constabulary and as part of the Police National Benchmarking system to identify surplus accommodation. Hertfordshire Constabulary has indicated that based on Officer/Police Staff there is currently sufficient accommodation within North Herts and Stevenage, although there is a need to replace a number of the existing facilities to reflect the requirements of modern day policing and to maximize the benefits of working with partner organisations.

Planned/Committed Provision and Future Changes

9.9 Hertfordshire Constabulary has indicated that it is currently looking at efficiencies to address budget cuts and are responding in a variety of ways as outlined below:

- Collaboration with Bedfordshire and Cambridgeshire Police
- A review of the property portfolio is currently being undertaken as a result the Constabulary is currently working with NHDC to explore the potential to share accommodation
- To reduce running costs and provide a joint approach to sharing services, the Constabulary has and continues to actively progress opportunities to share accommodation with Local Authorities. As a result, deployment bases in Rickmansworth, Borehamwood and St. Albans are now located within their respective Local Authority Civic Offices

Infrastructure Requirements

9.10 Hertfordshire Constabulary has indicated that there will need to be new Safer Neighbourhood Policing Team bases for any large scale strategic sites, this would also include one within or adjacent to new development within Baldock. These bases will require approximately 150m² of office accommodation, with secure parking for approximately five operational vehicles.

Costs and Funding Sources

9.11 The Constabulary has indicated that a Safer Neighbourhood Policing Team Base costs approximately £150,000. Hertfordshire Constabulary are looking at the possibility of co-location of facilities with other community uses.

Fire and Rescue

- 9.12** Hertfordshire County Council (HCC) is the Fire Authority, known as the Hertfordshire Fire and Rescue Service (HFRS). They have produced an Integrated Risk Management Plan 2014-18 (IRMP), which analyses areas of risk and identifies the current provision within Hertfordshire.
- 9.13** HFRS publish five annual District Plans covering the County of Hertfordshire; North Herts is included within the Stevenage and North Herts District and is incorporated within their District Plan 2015-16. The HFRS District Plan sets out specific priorities for each area and includes an action plan highlighting areas where the Fire and Rescue Service can contribute to making North Herts a safer place, it highlights three main priorities:
- Prevent and Protect
 - Plan and Respond
 - Be an Excellent Organisation
- 9.14** The rationale behind these priorities is detailed in the Hertfordshire Community Protection Directorate's Corporate Plan 2013-17.
- <http://www.hertfordshire.gov.uk/statweb/corpplan/HertsCorpPlan2013.pdf>
- 9.15** These priorities are determined by a number of influences including:
- The Fire and Rescue Services Act 2004
 - The Fire and Rescue Service National Framework Document 2012
 - HCC Sustainable Community Strategy (Hertfordshire 2021)
 - North Hertfordshire Sustainable Community Strategy (2009-21)

Existing Provision

- 9.16** There are three fire stations located within North Herts, located at Baldock, Hitchin and Royston. These stations employ a total of 68 personnel made up from a combination of wholtime and retained/on call firefighters. There is also a two pump fire station in close proximity based in Stevenage.
- 9.17** The HFRS IRMP (2014-18) identified that stations serving the district were located in areas that enable the Fire and Rescue Service to meet agreed attendance standards to incidents relating to property fires, road traffic collisions and chemical spillages.
- 9.18** The Fire and Rescue Service also has a statutory duty to ensure all developments have adequate water supplies available for firefighting purposes in the event of a fire. In relation to new development this requirement is usually addressed through the provision of fire hydrants.

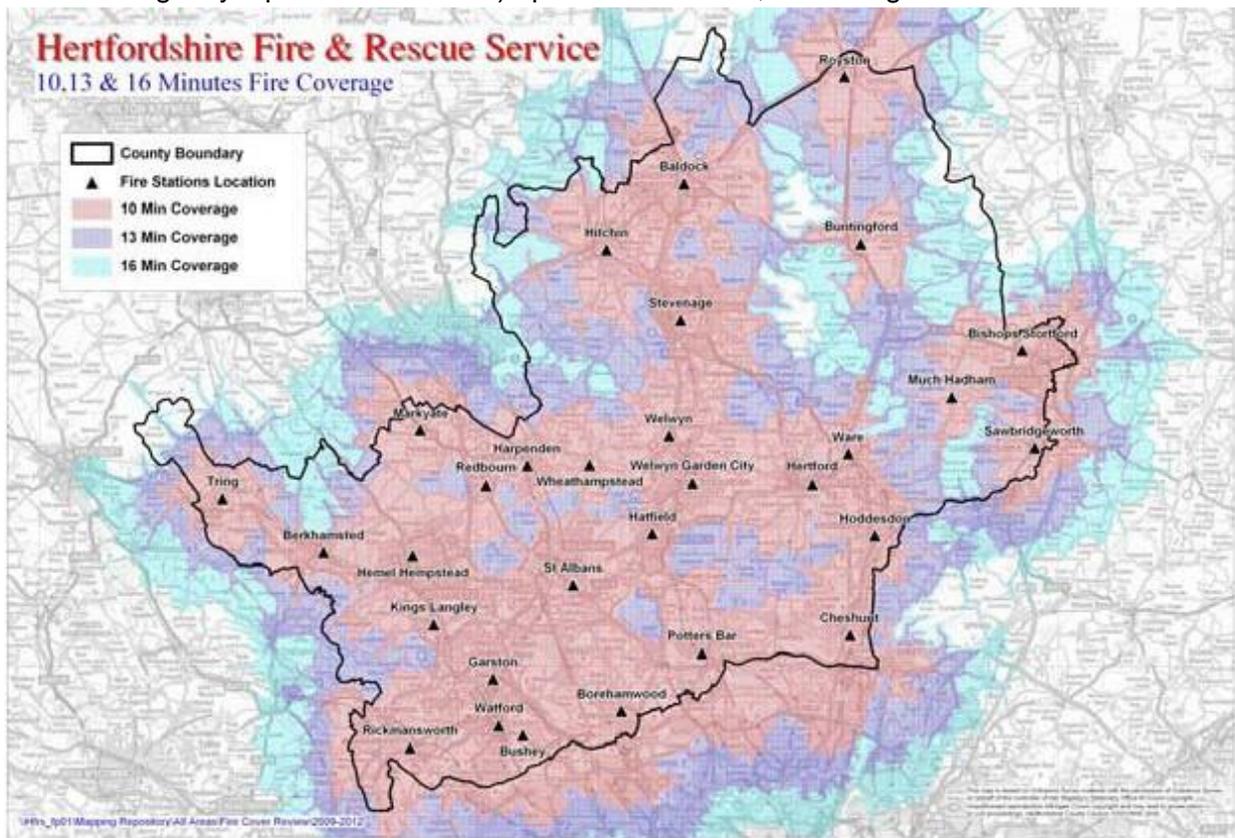
Planned/committed provision including future changes in service provision

- 9.19** The Herts Fire and Rescue service have not been able to identify any new requirements in respect of any new provision of fire and rescue related infrastructure.

- 9.20 Fire and Rescue attendance within 10, 13 and 16 minutes is identified on the map overleaf; this is an extract from the IRMP 2014-18.
- 9.21 Planned growth and future plans for development within the district appear to be covered by the Fire Authority's ten-minute attendance standard using the existing Fire and Rescue Service resources within the district (this includes areas of possible growth in and around Stevenage).
- 9.22 In areas of planned development, the absence of sufficient or existing water supplies may prove to be problematic and are likely to require the installation of new water mains and hydrants for firefighting.

Ambulance Services

- 9.23 There are three ambulance stations located within the district. One in Hitchin and the others in Letchworth and Royston. There is also an ambulance station in Stevenage.
- 9.24 North Herts is covered by the East of England Ambulance Service NHS Trust (EEAST). The trust provides a range of services including: emergency 999 ambulance and rapid response provision; a scheduled patient transport service; and primary and call handling urgent care (clinical). Control rooms (known as Health Emergency Operations Centres) operate in Bedford, Cambridge and Norwich.



- 9.25 The ambulance service is predominantly demand driven, as opposed to purely population driven. The service's targets are for patients with life threatening conditions to be attended within 8 minutes 75% of the time.

- 9.26** In response to concerns about failing response rates the service the Trust has recruited 400 new student paramedics across the region as well as 267 ambulances in 2014-15.
- 9.27** Current operations are essentially 'command and control' with appliances operating out of premises, but in time a more flexible 'hub and spoke' approach may be adopted, with operational staff not assigned to a single centre and only going there as required (e.g. for training). This could reduce the number of command centres and, therefore, its property portfolio.
- 9.28** The service is keen to establish Foundation Trust status which would free it from central government control and potentially hasten service changes. At the present time the council has not been made aware of the need to provide additional ambulance services within the district to support housing growth. The district council will continue to engage with the EEAST on this issue.

10. Green Infrastructure

January 2018 Update

The main change is to include new evidence taken from the 2016 Open Space Review and Standards completed after the 2016 IDP had been finalised. Further information on funding sources for recreational open space are included. There are also a few minor textual and factual alterations to this chapter

- 10.1** Green Infrastructure relates to the physical environment both within and outside the district's towns and villages. The phrase green infrastructure is a generic term covering a wide network of multi-functional open spaces, including protected sites, nature reserves, formal parks and gardens, children's play areas, sports pitches, woodlands, green corridors, waterways, street trees and open countryside. It makes a valuable contribution to the district's environmental resources, such as ecological assets, habitats and landscapes. Green Infrastructure is vital in the creation of sustainable communities.
- 10.2** Projects to enhance existing or create new green infrastructure are strongly supported in the emerging local plan, which expects new development to provide net gains to the quantity, quality and biodiversity of green infrastructure.

The Green Infrastructure Plan (2009)

- 10.3** The North Hertfordshire Green Infrastructure Plan (GIP) was prepared in 2009. This has a more strategic role than the Green Space Management Strategy examining as it does assets within the district and those which extend across the district boundary such as routeways and river corridors. It identifies assets which create networks of multi-functional open space which provide a variety of benefits such as sustainability, health, biodiversity and access.
- 10.4** The GIP includes a green infrastructure hierarchy for North Hertfordshire as an action plan and implementation strategy that should be used in identifying and prioritising investment opportunities. The criteria used in prioritising projects were:
- Likely benefits of delivery
 - Need, including stakeholder support
 - Broad costs

- General consideration of phasing e.g. any projects which could be implemented as advanced green infrastructure at the pre-development stage
- Contribution to relevant social and environmental targets

10.5 Table 10.1 below identifies the highest priority projects identified in the Green Infrastructure Plan:

Location	Scope of works	Cost band
River valley corridors (e.g. Hiz, Ourwell, Oughton, Pix and Ivel with associated works to water meadows/floodplain)	Enhanced blue links and wetland creation to rivers/tributaries/valley corridors including functional floodplains at Letchworth and Hitchin and a new river valley park/green space for Hitchin	High
Ashwell	New green links to connect to Icknield Way and farmland landscape to the north	Medium to High
Royston	Green link to connect to Icknield Way and Chain Walk	Medium to High
Roman Road routes	Extended and enhanced routes for the benefits of pedestrians, cyclists and horse riders	Medium to High
Hitchin	New greenway formed by new river valley park (see above) to create a hierarchy of routes for pedestrians, riders and cyclists	High to Very High (potentially)
Baldock and Royston	Peri urban greenways for both settlements, ties in with green transport connections/urban rural fringe enhancements	High to Very High (potentially)
Chalk landscape/woodlands south of Royston	New woodland for buffering/attenuation including woodland management	High to Very High (potentially)
A1(M) corridor	Woodland buffering and attenuation works including landscape improvements and improved access	High to Very High (potentially)
General (especially within new development)	Strategic SuDS for sustainable water management, amenity and diversity	High to Very High (Potentially)
Country Park	Enhanced urban greenway linkages to connect it to key urban spaces such as Fairlands Valley Park	Medium High to High
North of Stevenage	New strategic greenspace to remedy current deficiency, provide a buffer and conserve landscape character	Very High (Major Project)
General (especially within new development)	Creation of semi natural greenspace	High to Very High (potentially) (Major Project)

Location	Scope of works	Cost band
Knebworth Woods/Park	Additional community parkland/green space to form development setting/buffer	High
Stevenage surroundings	Peri urban greenway for Stevenage including links to Stevenage Outer Orbital Path	High

Table 10.1 Green Infrastructure Plan investment priorities

- 10.6** In addition to the above there are 13 other lower/medium priority projects identified in the Green Infrastructure Plan including new links, landscape enhancement and habitat restoration.
- 10.7** None of these projects has a specific cost associated with it, so for this reason it is not at this stage appropriate to incorporate such works in the Infrastructure Delivery Schedule. It will be important to revisit these proposals and provide definitive costs so that a detailed strategy can be established to secure funding for them in future, particularly as the trajectory of new development increases over the duration of the plan.

Open Space Review and Standards

- 10.8** The IDP is also informed by the District Council's Open Space and Review Standards (2016). This study reviewed the authority's level of open space provision, updating work that had last reviews in 2009, and is in line with current practice. For its definition of open space, it adopted the terminology set out in the NPPF, which defines it as:

"All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity".

- 10.9** The typologies defining the differing forms of open space remain unchanged, but the study did set out what it considered to be the primary purpose of each of the different forms of open space it could identify, as set out below:

Type of open space	Primary purpose	Examples
Parks and gardens	Parks and gardens: Accessible, high quality opportunities for informal recreation and community events.	Urban Parks
Amenity Greenspace (including recreation space)	Opportunities for informal activities close to home/work or enhancement of the appearance of residential areas	Informal recreation spaces, housing greenspaces, domestic gardens, village greens, and other incidental space

Type of open space	Primary purpose	Examples
Provision for children and young people	Provision for children and young people: Areas designed primarily for play and social interaction involving children and young people	Equipped play areas, ball courts, skateboard parks, 'hanging out' areas including teenage shelters
Outdoor sports facilities (including schools when available for community use)	Outdoor sports facilities, including schools: Participation in outdoor sports, such as pitch sports, tennis, bowls, athletics or countryside and water sports	Tennis courts, bowling greens, sports pitches, golf courses, athletic tracks, school playing fields, institutional playing fields and other outdoor sports areas
Natural and Semi-Natural Greenspace	Wildlife conservation, biodiversity and environmental education/awareness.	Woodland and scrub, grassland, heath/moor, wetlands, open and running water, wastelands and bare rock habitats (e.g. cliffs, quarries, pits) and Local Nature Reserves.
Green Corridors	Walking, cycling or horse riding, whether for leisure purposes or travel, and opportunities for wildlife migration	Examples: river and canal banks, road and rail corridors, cycling routes, pedestrian paths, rights of way and permissive paths
Cemeteries and Churchyards	Providing areas for quiet contemplation and burial of the dead, often linked to the promotion of wildlife conservation and biodiversity	
Allotments	Opportunities for people to grow their own produce as part of the long term promotion of sustainability, health and social inclusion	

Table 10.3 Types of open space and their primary uses, with examples

10.10 The study has important links with the Green Space Management Strategy 2014 – 19 (see below) in identifying recently completed projects and in turn it updates the schedule of outdoor sports facilities set out in the 2016 Playing Pitch Strategy (see Chapter 8, social infrastructure).

10.11 The overall conclusion from the Open Space Review and Standards is as follows:

- there are 585 open spaces within the district covering an area of approximately 2,343.18 hectares of 6% of the entire district
- since 2009 there has been a net increase of 58.32 hectares with the identification of 36 new spaces, although 5 spaces have been lost
- over half the sites are less than 1 hectare in size
- when compared to the district's overall population, the total amount of open space equates to 18.38 hectares per 1000 persons, of which just over half is natural and semi natural greenspace
- significantly higher open space provision in the district's rural areas than the 4 towns, with the lowest level of provision in Letchworth Garden City followed by Baldock

10.12 Open space provision per category is as follows:

Category	Overall provision (ha)	Provision/1000 persons
Parks and gardens	59.49	0.73
Amenity Greenspace	369.26	2.9
Provision for children and young people	12.8	0.1
Outdoor sports facilities	544.52	4.28
Natural and Semi-Natural Greenspace	1196.61	9.41
Green Corridors	59.04	0.46
Cemeteries and Churchyards	36.55	0.29
Allotments	32.4	0.25

Table 10.4 Level of open space provision by category

10.13 Investment priorities identified in the study are cross referenced with other evidence based studies as follows:

Category	Investment priorities identified within
Parks and gardens	The Green Space Management Strategy 2017-2021 and accompanying Action Plans
Amenity Greenspace	As above
Provision for children and young people	As above
Outdoor sports facilities	The Playing Pitch Strategy 2016
Natural and Semi-Natural Greenspace	The Green Space Management Strategy 2014 and accompanying Action Plans
Green Corridors	As above (in addition, biodiversity priorities are identified in the Hertfordshire Environmental Forum 'A Local Biodiversity Action Plan' (2006))
Cemeteries and Churchyards	As above
Allotments	As above

Table 10.5: Open Space Investment Priorities

10.14 The key recommendations of the Open Space Review and Standards are as follows:

- with the provision of approximately 18.30 hectares of open space per 100 residents, the district has a good level of provision which would be challenging to recreate within new development proposals over the Plan period
- the main requirement is to maintain the quality and quantity of open space in accordance with the needs of the local community, with the standards set out in the report setting the standards for open space requirements arising out of new development and with planning obligations potentially being used to secure improvements to the quality of existing open space provision when required
- priorities are to deliver improvements through s106 receipts, CIL (if taken forward), grant funding and local authority funding where available; maintain current levels of provision and address deficiencies in provision through a plan-led approach, work in partnership with key agencies to manage access and protect biodiversity within open spaces; and continue the programme of prioritized improvements (as identified in Table 10.2).

The Green Space Management Strategy

10.15 The Council published a Green Space Management Strategy¹⁸ in 2016 and covering the period 2017 – 19. The purpose of the strategy is to:

- highlight the value and role of parks and green spaces in meeting corporate and community needs
- provide the justification and evidence base to maximize the extent and highlight the investment opportunities and secure funding through planning obligations to provide continued investment for green space at reduced cost to the Council
- provide a framework to work in partnership with key stakeholders such as Groundwork Hertfordshire and the Countryside Management Service along with volunteers to deliver improvements and external funding opportunities to green space
- provide clear policies that prioritise essential green space investment requirements for the next five years.
- develop a sustainable five year investment programme for green space, based on sound policies, that reduces the Council's revenue and capital spend whilst still providing essential short term enhancements for green space

¹⁸ <https://www.north-herts.gov.uk/home/parks-and-open-spaces/green-space-strategy-and-action-plans>

10.16 The strategy has been produced against the background of significant reductions in the both the capital and revenue spending available for the local authority to commit towards the creation and maintenance of greenspace, and the understanding that this would require the authority to continue to place reliance on external funding for such actions. The strategy notes that over the previous 4 years (2009 – 14) the authority had overseen investment totaling £3.42m on 58 separate projects, much of it secured through partnership working with third parties such as the Countryside Management Service, Groundwork Hertfordshire and community groups.

10.17 Looking forward over the report's timeframe of 2014 – 19 the strategy notes the challenges associated with delivering new green infrastructure and maintaining existing provision but has cause for optimism for securing funding through a range of funding sources. (The Strategy is under review and in time it is likely that investment priorities will be updated).

10.18 Against this background the strategy notes the importance of setting priorities for investment in:

- town park and gardens
- neighbourhood parks
- amenity greenspace
- grass verges/green corridors
- countryside parks
- allotments
- churchyards and cemeteries
- outdoor play provision
- outdoor sports facilities
- education grounds and playing fields

10.19 Many of these open space typologies have detailed action plans which are available on the district council's website.

10.20 To respond to the above challenges, the strategy identifies future investment in the following key open space areas, shown overleaf:

Investment Area	No Projects	Key investments	Cost (£000)
Churchyards and cemeteries	7	New pathways and roadways, garden of remembrance, feasibility study for crematorium	220
Allotments	18	Various improvements and enhancements, improved accessibility	500
Outdoor play provision	7	Renovations, and outdoor fitness centre, water splash park feasibility study	384
Outdoor sport facilities	11	New and/or improved changing rooms and pavilions	420
Town parks and gardens, neighbourhood parks, amenity green space, countryside parks ¹⁹	18 ¹	Very wide range of enhancement works	500
Grand Total			2,024

Table 10.2 Open Space Investment Priorities

Outdoor sports facilities

10.21 The other key aspect of green infrastructure is that of outdoor sports facilities. A Playing Pitch Strategy Assessment report was completed in August 2015 although it has never been formally adopted. The PPS and Action Plan covers the period 2015 - 2025

10.22 The Playing Pitch Assessment looks at existing pitch supply as well as demand across a range of sports, including football, hockey, cricket, rugby union, tennis, bowls, BMX and skate parks and golf and includes a review of artificial grass pitches (AGP) as well youth/mini pitches for younger ages. Socioeconomic factors affecting participation rates and national strategies for securing greater involvement in a range of sporting activities are described.

¹⁹ 1 scheme in Baldock, 9 in Hitchin, 6 in Letchworth, 1 in Royston and 1 in Great Ashby. Works include renewals (e.g. boundary fences, car parks) enhancements (e.g., accessibility) and increased biodiversity

10.23 In terms of responding to additional need the Action Plan is not specific about the precise requirements to meet future growth within the district and further work will need to take place to establish this. A number of outdoor sports facilities are reported to have spare capacity and with others additional investment in existing facilities (as yet not detailed) will mean that capacity will be improved.

10.24 One specific requirement will be for two additional Artificial Grass Pitches (AGPs) to meet latent demand for hockey in the district. No costs are provided in the Playing Pitch Action Plan; however, Sport England's Facility Costs calculator for the 2nd quarter of 2016 identifies the cost of a sand filled AGP with fencing and sports lighting at £760,000 and therefore a total cost of provision at £1,520,000.

Infrastructure Funding and delivery

10.25 The district council will work with landowners/developers and service providers to deliver the above facilities to ensure that new developments are well served by a diverse range of newly created green infrastructure and the development of new and improved outdoor sports facilities.

10.26 For green infrastructure, contributions may also be sought to enhance existing green infrastructure where demand from population growth has the potential to impact upon service provision.

10.27 As noted previously, green infrastructure provision has the ability to attract funding from sources such as the Heritage Lottery Fund and grants from bodies such as Natural England and Herts LEP; in other circumstances (or indeed in tandem) such infrastructure can be funded through planning obligations or CIL (if introduced in the district).

10.28 The funding of outdoor leisure facilities can potentially be secured through the following:

- Capital funding by the District Council
- Education funding (say for 1 or more AGP on a school site is public offpeak access can be secured)
- Commercial investment where user charges can be levied to meet initial investment costs over time (the most obvious opportunity being g but possibly also AGPs)
- Local authority bonds
- Public funding programmes such as Heritage Lottery Fund, the Sport England's Community Asset fund (launched December 2016), Parklife Funding (for more intensive use of AGPs)
- S106
- CIL (if introduced)

11. Waste and Recycling

January 2018 Update

A few very minor changes

Background

- 11.1** The Hertfordshire Waste Local Plan (WLP) comprises the Waste Core Strategy and Development Management Policies document (2012) and the Waste Site Allocations document (2014). The Waste Core Strategy & Development Management Policies document (November 2012) sets out the spatial vision, objectives and strategic issues for waste planning in Hertfordshire and contains the policies to inform decisions for waste planning applications.
- 11.2** The Waste Site Allocations document (WSA) (July 2014) identifies suitable sites to accommodate facilities for sustainable waste management within the county. It includes maps and waste site briefs for Allocated Sites and identifies Employment Land Areas of Search (ELAS), reflecting the spatial vision set out in the Waste Core Strategy & Development Management Policies.
- 11.3** The Waste Core Strategy and Development Management Policies document and Waste Site Allocations document are both in conformity with the National Planning Policy for Waste (NPPW) (October 2014).
- 11.4** The National Planning Policy for Waste also outlines the need for effective waste planning as part of local development and opportunities for co-location (sharing facilities).
- 11.5** In addition to the Waste Local Plan, the county council has produced a Supplementary Planning Document for the Employment Land Areas of Search. This document provides more detail on the areas identified in the Site Allocations document and should be used by applicants wishing to develop waste management facilities on them. It is intended that the document be referenced by district and borough councils when looking at non-waste related development within the ELAS.

Waste Management Infrastructure

- 11.6** The Waste Disposal Authority (WDA) has existing waste management infrastructure in place for the collection and disposal of Local Authority Collected Waste (LACW) in North Hertfordshire.
- 11.7** Two HWRCs are provided within the NHDC area at Black Horse Road, Letchworth Garden City and Beverley Close, Royston.

- 11.8** The WDA has commissioned the use of Bury Mead Road Waste Transfer Station facility for use by NHDC until March 2018 with further extensions possible. However, this facility is limited in size and therefore is not suitable for long term future needs.
- 11.9** North Herts District Council as the Waste Collection Authority (WCA) currently uses a site at Works Road as a depot and a site at Radwell as a transfer station for dry recyclables. However, both are provided under contract until 2018 limiting potential future competition and both sites are recognised as not being wholly suitable for current and future needs being currently at capacity. Therefore, planned provisions should include infrastructure to replace and/or combine both facilities.
- 11.10** Negotiations are underway to secure interim arrangements post 2018 for recycling transfer from the East Herts Council depot, however additional operating costs are anticipated due to additional travel requirements to Buntingford.
- 11.11** Provision of suitable infrastructure for long term depot facilities would ensure that NHDC can continue to operate efficiently and reduce budgetary risks associated with contractor provided infrastructure or infrastructure located outside of the district and not within optimal locations for operational efficiencies.
- 11.12** While local authorities follow the principles of the waste hierarchy to encourage waste prevention and reuse it is an inevitable fact that costs associated with waste will grow as the number of homes and businesses increases in the district.
- 11.13** NHDC and HCC deliver a wide range of frontline services to residents and businesses. Many of these services, such as waste collection and street cleansing, are statutory (we have to provide them). These are supported and augmented by other depot-based services such as grounds maintenance, tree maintenance, fleet, commercial services (like trade waste) along with technical and administrative support.
- 11.14** These services are delivered on the county's streets and in its communities and therefore require a large and complex fleet of vehicles, staff, support equipment and consumables all of which need a place to operate from, be maintained and safely and securely stored. This therefore requires a significant and growing need for space. Rationalising and combining some of these services in a single Northern Waste Transfer Station (NTS) will place the local authorities in a strong position to deal with growth and change across the waste industry.

Planned Provisions

- 11.15** The following facilities are considered necessary to meet the needs of the future population of Hertfordshire.
- 11.16** With regard to the disposal of LACW; the county council (as Waste Disposal Authority) produced the Municipal Waste Spatial Strategy which identifies three optimum strategic locations for waste treatment and transfer facilities:
- A1 / A414 junction in the centre of the county
 - A10 / A602 junction in the east of the county
 - A1 / A505 junction in the north of the county

- 11.17** These strategic locations will support sufficient treatment and transfer capacity to meet the needs of the county and manage waste closer to the point of arising. The county council are currently working with Veolia Environmental Services (VES) to identify a suitable disposal method for LACW. In the meantime, interim disposal arrangements are in place with energy recovery and landfill facilities.
- 11.18** VES have proposed the provision of an Energy from Waste (EfW) facility at Ratty's Lane, Hoddesdon. Subject to planning, the facility is anticipated to be available from early 2021 for at least 30 years and is designed to deal with all of Hertfordshire's local authority collected residual waste. At the time of writing a planning application for this facility has been submitted but not determined.
- 11.19** To support the EfW facility a Northern Waste Transfer Station facility (NTS) is required within or close to the A1 / A505 junction. From a waste collection perspective, the NTS would be within 'tipping distance' so collection vehicles would not need to travel far to dispose of waste.
- 11.20** It is considered that a larger, more modern Household Waste Recycling Centre is needed to serve the Hitchin, Letchworth Garden City and Baldock areas in order to increase capacity and improve usability.
- 11.21** Organic Waste Treatment Facilities (OWTF) are required to serve North Hertfordshire and East Hertfordshire (post 2025) with the ability to treat approximately 30,000 tonnes of organic waste per annum. Should separate food waste collections be introduced by the WCA it is anticipated that existing merchant Anaerobic Digestion and windrow facilities will provide sufficient capacity to treat this waste. The need for additional OWTF capacity in the medium to long term will be kept under review.
- 11.22** North Hertfordshire District Council has a requirement for a depot and dry recycling transfer station to provide surety for the medium to long term in enabling NHDC to have a suitable operational hub for its statutory services that can meet the anticipated growth of the district.
- 11.23** The NPPW 2014 states that the co-location of waste management facilities should be considered. The development of a NTS provides an opportunity to co-locate a transfer station (including dry recycling), HWRC and potentially a depot on the same site.

Funding and Delivery

- 11.24** The day to day costs of waste disposal and collection are funded through HCC's revenue budget and NHDC's Core Budget respectively. Funding sources for new facilities varies. Bins and recycling boxes (for households) have been funded by contributions from the county council held Waste Infrastructure Capital Grant (WICG) and NHDC's capital budgets. Waste disposal, facilities such as HWRCs and Waste Transfer Stations are funded by HCC's capital budget, while waste reprocessing facilities e.g. windrow composting tend to be privately funded and operated.

11.25 As the population of North Hertfordshire grows the Capital costs of vehicle provision and container provision also continue to grow, in turn impacting on revenue budgets. Optimal infrastructure arrangements can have significant positive impacts on budgets and environmentally when waste miles can be reduced.

12. Utilities

12.1 This section sets out what new utilities or upgrades to existing utilities will be required to support housing growth in the district.

Gas

12.2 National Grid owns, operates and maintains the high pressure gas transmission system across the country. It also owns and operates lower-pressure distribution gas mains in the East of England. It does not however supply gas, but it does provide the networks through which it flows. In the UK gas is delivered to seven reception points (called beach terminals) by gas producers operating offshore facilities from over 100 fields beneath the sea around the British Isles. This is then distributed around the UK via a network of high pressure pipes, which is then distributed to the consumer through a lower pressure distribution network. The levels of pressure are classified as low, intermediate, medium and high.

12.3 New gas transmission infrastructure (pipeline) developments are periodically required to meet increases in demand and changes in patterns of supply. Generally speaking, network developments to provide supplies to the local gas distribution network are a result of overall demand in a region rather than site specific developments. whereas reinforcements and developments of the local distribution network are generally as a result of more localised demand.

12.4 A National Grid high pressure gas pipe passes south of the A505 from Royston to Letchworth, which is then distributed via the smaller distribution network. The pressure throughout the district is recorded by National Grid as:

- Letchworth: Low Pressure / Medium Pressure / Intermediate Pressure
- Baldock: Low Pressure / Medium Pressure
- Hitchin: Low Pressure / Medium Pressure
- Royston: Low Pressure / Medium Pressure
- Stevenage: Low Pressure / Medium Pressure
- Rural Areas: Exact locations will vary

12.5 There are no gaps in provision currently identified by National Grid.

12.6 National Grid has examined the growth proposals including the strategic site allocations and have concluded that at present there is sufficient capacity in its system to accommodate the proposed development. However they have previously advised that there will be need to be capacity upgrades at Baldock as well as North and East Stevenage, and satisfactory capacity elsewhere.

12.7 National Grid also state that as the national grid connections process works on a first come first serve basis there is no guarantee that this capacity will

still be available at the time an official connections request is sent in. The district council will wish to continue to engage with National Grid to ensure no supply connections arise.

Infrastructure Funding and Delivery

- 12.8** No costs have been provided by National Grid for capacity upgrades although it is known that a new primary pumping station would cost in the order of £8m and local reinforcements in the order of £3m.
- 12.9** The utility companies have indicated that charges vary by network in terms of cost of connection per dwelling and that there will also be a large variation depending on what needs to be done for any particular scheme. It is anticipated that the costs of reinforcements and substations are likely to be between the developer and the utility providers, as has traditionally been the case.

Electricity

- 12.10** National Grid owns, operates and maintains the 400kV and 275kV national electricity transmission network.
- 12.11** The local electricity network is operated by UK Power Networks at three principal voltage levels - 133kV / 33kV / 11kV - distributed through a network of cables. Electricity is disseminated around the network by a series of substations, which transform the power to enable it to be used by various different users. There are four “Grid Substations” serving North Hertfordshire. These are located at:
 - Wymondley
 - Stevenage
 - Letchworth
 - Baldock
- 12.12** The grid substations distribute a network of 33,000 volts supplying a number of primary substations, which in turn then supply a more local 11,000 volt network. Particularly heavy users such as manufacturing industries are supplied at 33,000 volts. In distribution (secondary) substations, transformers reduce the 11,000 volt supply to 230 volts for small scale customers such as homes and shops. Larger users such as farms take electricity at 415 volts. A typical secondary substation serves 200 to 300 houses.
- 12.13** Historically, electricity infrastructure was designed with significant spare capacity. In recent years, and with an ever- increasing demand for electricity, the margins of spare capacity have been greatly reduced. In most areas new network and reinforcement are required to accommodate new development zones. Existing provision for the towns in outlined in Table 12.1 below:

Location	Supply issues
Royston	Royston is in an area that requires major capital investment to provide a significant increase in capacity. The normal supply is derived from a single 132kV circuit. For a fault or outage on this circuit supply is maintained from a single 33kV circuit from

Location	Supply issues
	Letchworth Grid. This alternative supply is one of the limiting factors on the capacity available for Royston
Baldock and Letchworth	Letchworth is supplied from the Letchworth Grid and three 33/11kV primary substations in Letchworth. Baldock has an 11kV network supplied from East Letchworth Primary Substation. Significant load growth in Baldock is likely to require a new primary substation within the Baldock area, connected to Letchworth Grid. Increasing the loading on the Letchworth Grid may compromise the capacity available to provide an enhanced alternative supply to Royston
Hitchin	Hitchin is linked to the Wymondley Grid. Electricity is then supplied and distributed to Hitchin by two primary substations, namely North Hitchin Primary and South Hitchin Primary. The Wilbury Way / Cadwell Lane employment area in Hitchin is served by North Hitchin Primary Substation, which has limited capacity
Stevenage	Like Hitchin, Stevenage is served by the Wymondley Grid. Stevenage Grid operates near capacity and therefore load growth will need to be dealt with by a combination of load transfer to Wymondley Grid and any new network. The substation at Verity Way (serving Great Ashby) built in 2010 is now at capacity

Table 12.1: Existing electricity provision to Hertfordshire's towns (also includes Stevenage)

- 12.14** Electrical supply planning is reactive although demand is modelled to an extent on 'natural growth' in energy demand. UK Power Networks modelling is updated annually and gives an estimate of the future loads in the network and indicates where and when the network may reach capacity and whether further works, such as upgrading of a sub-station, will be required.
- 12.15** UK Power Networks has advised that there are numerous projects currently being undertaken to expand the existing electricity network infrastructure with a view to increasing capacity and supplying new potential demands.
- 12.16** Given this the exact infrastructure required to support the delivery of the growth locations is unknown at this stage, and therefore future infrastructure provision needs to be taken forward in discussion with UK Power Networks through the planning process.
- 12.17** It is worth noting that whilst housing numbers provide an indication to the network capacity required, the network solution can be significantly altered by the size and location of commercial and industrial loads. These can take up available capacity within much shorter time scales than major housing developments and may result in additional reinforcement being required, with consequent cost and timescale implications. The main areas that look likely to incur reinforcement are:
- Hitchin – Wymondley: The grid will require reinforcement to meet load growth associated with either Stevenage or Hitchin. UK Power Networks have already increased the capacity of the Wymondley Grid from 45MVA to 90MVA but further increases may be needed;

- North Hitchin Primary: this will require reinforcement for any significant load growth in the employment area;
- Royston: the housing numbers indicated for Royston can be accommodated within the 132kV and 33kV infrastructure. Some 11kV reinforcement may be required. Any significant industrial load (> 3 MVA) could require extensive reinforcement;
- Letchworth/Baldock – Both areas are supplied from Letchworth Grid (132/33kV) and 11kV distribution is provided by three primary substations in Letchworth. Load growth to the north of Letchworth can be accommodated by developing the 11kV network. Load growth in Baldock is likely to need a new Primary Substation which may be located at Letchworth Grid with a potential cost of approximately £8 million.

12.18 In terms of additional costs of provision of infrastructure below primary substation level, UK Power Networks have stated that if a new local substation is required, this is likely to cost in the region of £2.5 million and the cabling is likely to cost around £5 million per kilometre.

Renewable Energy

12.19 Government policy aims to reduce dependence on fossil fuels and encourage greater use of renewable energy sources which are viewed as being more sustainable in the long term. There are a number of potential sources of renewable energy including wind, solar, water, geo-thermal and waste to name but a few.

12.20 Whilst the council is not aware of any large scale renewable energy projects for the district, and there are no specific local plan policies, it will welcome renewables to be incorporated into new developments to address the issue of climate change and promote sustainable development, in accordance with the national energy policy statements.

Drinking Water

12.21 North Herts is supplied with drinking water by Affinity Water, which operates 3 different regions, Central, Southeast and East. Affinity Water Central covers a large area including North Herts as well as the rest of the county and North London. Central region is made up of six water resource zones, with North Herts falling within WRZ3. These zones are set up to act as a 'water grid', similar to the concept in power supply.

12.22 Within each of the six zones there are a number of available ground and surface water resources, and treatment works capable of preparing the water for potable supply. The grid in each zone therefore allows water to be moved via the strategic mains to anywhere in the zone if required. This allows movement of the water to wherever it is needed and as a consequence, the company can assume that every property within the zone in question has an equally low likelihood of interruption to supply in the event of a burst main for example.

- 12.23** Affinity Water produces a Water Resources Management Plan (WRMP), to understand the supply and demand balance in each of its WRZs over 25 years. As part of its WRMP Affinity Water is required to consider future growth of both the domestic (household) and commercial demand for water. For the domestic demand forecast, it is required to undertake an assessment of the number of new properties as well as the population change over its planning period (25 years).
- 12.24** The current WRMP (2015-2020) indicates that across the six zones a water deficit exists over the plan period. This means that the total water available to put into supply is less than the total forecasted demand for each zone.
- 12.25** For this reason, Affinity Water will maintain a headroom of additional resource above expected peak demand in each water resources zone. If headroom becomes reduced, then additional resource/infrastructure provision requirements are investigated and implemented at a zone level. At this time, resource provision is sufficient to meet demand in the NHDC area. A continuous slight over-provision is maintained to meet peak demand. As development continues this is under constant review.
- 12.26** By its very nature, the WRMP is a strategic plan, and the area it covers encompasses dozens of local authorities. It is not therefore possible to undertake assessments with regard to specific infrastructure to supply particular developments when only limited information is known. This process is managed by a developer submitting a budget request to Affinity Water's Developer Services team when there is sufficient information about the development (e.g. number of dwellings, type of dwellings, access road locations etc) to enable the company to run its models to determine the most cost-effective way to supply the development, and any infrastructure enhancements required.
- 12.27** The current WRMP sets out how Affinity Water plan to meet future potable water demand and the required interventions needed to cater for future growth. Options for WRZ3 include:
- *Metering: community integrated Automated Meter Readers (AMRs) & water efficiency*
 - *Water audits Commercials (process and non-process)*
 - *Leakage reduction – pressure management with new Pressure Reducing Valves (PRVs)*
 - *Additional Water Efficiency for households*
 - *Leakage reduction by Acoustic Leak Detection (ALC) 2015-40 (7.91 Ml/d)*
 - *Dual flush WCs for households*
 - *Peak licence scheme in west Luton (Greensand)*
 - *Source optimization in south east Royston*
 - *Third party licence in Luton*
 - *Airport water efficiency - Luton*
- 12.28** With regard to new homes, Affinity Water is looking to North Herts to enforce Part G

of the Building Regulations (April 2010, as amended March 2016) to help manage domestic customer consumption. The company remains concerned that whilst new homes meet the conditions set out by Part G, residents remove the water efficient devices after they have moved in, increasing their household demand for water. It believes that a partnership between local authorities, residents and Affinity Water is essential to help educate domestic and commercial customers about their use of water and how all parties can work together to protect this vital resource, and this is therefore a key success measure of its Water Savings Programme. It should be noted that the local authority is adopting the tighter 110 litres per person per dwelling water efficiency standard as sought in the government's optional technical standards.

- 12.29** In overall terms Affinity Water predict no major constraints to supplying North Herts with drinking water although this could change in the future, for example if the Environment Agency enforce further sustainability reductions.
- 12.30** Water companies have a duty to supply water for domestic purposes to customers under Section 52 of the Water Industry Act 1991, and are hence obliged to connect developments to the network once planning permission has been received. Any localised upgrades to existing supply networks are likely to be funded from the usual water developer requisitions and investment processes.
- 12.31** At a site level each property will need appropriate infrastructure laid once development is formally agreed. A decision on whether network strengthening is also required (at a partial cost to the developer) is dependent on a number of factors, and this modelling work is not usually undertaken until a high level of certainty is known about the likelihood of development going forward. For this work Affinity Water has suggested that it would be best to assume that if network improvements are required they will be agreed and organised between the developer and themselves, and that this work will be designed, agreed and undertaken as part of the formal planning permission process.
- 12.32** Affinity Water has advised that the design and construction of necessary water supply infrastructure only tends to proceed when a higher level of site detail is known, and the likelihood of development is almost certain. Fortunately, the design and installation of water infrastructure is relatively fast and therefore does not need to be of major concern in advance of determining future growth options.
- 12.33** Water supply issues in terms of the provision of infrastructure is not seen as a constraint to development. However, the Environment Agency recommends that water efficiency measures are put in place to limit water use.

Waste Water

- 12.34** Thames Water and Anglian Water are the sewerage undertakers for the district. Thames Water covers the Thames Basin which drains to the south including the southern villages, Stevenage and any expansion of Luton in the district whereas

Anglian Water cover the Anglian river basin, which includes the major settlements of Baldock, Hitchin, Letchworth & Royston and the villages of Ashwell, Graveley, Ickleford, Pirton, Reed, St. Ippolytes and Wymondley.

12.35 Effluent is collected via these companies' network of sewers and then treated at a number of sewage treatment works that are distributed around the county. There are separate sewerage systems for foul and surface water, although the foul systems are influenced by storm water due to infiltration and mis-connections.

12.36 As part of the water industry management process both Anglian and Thames Water are required to develop an Asset Management Plan (AMP). This is reviewed with the economic regulator (Ofwat) and used to determine the customer bill limits and thus the level of capital investment over successive five-year periods. The previous AMP (AMP5) ran from 2010 – 2015, AMP6 runs from 2015 – 2020 and early planning is taking place for AMP7 which runs from 2020 - 25.

Thames Water – Existing facilities and future planning

12.37 Thames Water has responsibility for a number of treatment works and pumping stations in the district. These are set out in Table 11.2 below:

Name of Facility	Capacity
Barkway STW	No current capacity issues; however, the proposed growth from 2027 – 31 may require an upgrade
Weston WWTW	No current or anticipated capacity issues
Kimpton WWTW	No current or anticipated capacity issues
Whitwell WWTW	No current or anticipated capacity issues
Breachwood Green WWTW	No current or anticipated capacity issues
Therfield STW	No current capacity issues; quality upgrade may be required by 2021
Harpenden STW (outside district boundary)	Limited spare capacity
East Hyde WWTW (Outside district boundary)	Growth upgrade currently planned to take place before 2021
Rye Meads	Growth upgrade currently planned to take place before 2021

Table 11.2 The district's waste water and sewage treatment works

Investment planning

12.38 Recent and current investment planning by Thames Water has been as follows:

- AMP5 (2010 – 2015): Groundwater quality upgrade at Whitwell WWTW; investigations at Weston WWTW, but no upgrade required
- AMP6 (2015 – 2020): Rye Meads STW and East Hyde STW being planned (for Rye Meads see also 12.40 onwards below)
- AMP7 (2020 – 2025): Investment to be determined

12.39 Thames Water has the following comments about future growth locations:

Location	Comment
Stevenage	Integrated assessment of development by the relevant planning authorities needed
Luton	No assessment currently undertaken – Thames Water will need to review sewerage infrastructure needs in conjunction with development proposed within Luton itself
Barkway	Further investigations needed to determine whether sewer capacity upgrade needed with this planned level of growth
Kings Walden	No issues anticipated
Kimpton	No issues anticipated
Knebworth	Further consideration of sewerage capacity needed and issues with the foul sewer system needs reviewing as the village does not have a dedicated surface water system
Codicote	Further investigations needed but it is anticipated that a sewer upgrade is needed given the level of growth
Therfield	No issues anticipated
Weston	Further investigations needed (including with Anglian Water who have responsibilities for some of the sewer network)
St Pauls Walden	Anticipated that a major sewer upgrade will be required

Table 11.3 Thames Water comments on future growth locations in respect of sewage treatment

Rye Meads

12.40 The Rye Meads Water Cycle Study undertaken in 2008/9 (updated by Thames Water, the Environment Agency and Stevenage BC in 2015) considered the impact of planned growth on Rye Meads STW and included that capacity of the treatment plant was likely to become an issue within the development plan timescales. However, the situation has changed since the report was produced and the forecast dates of when it was envisaged that capacity issues would arise, which were a “best estimate” at the time, have been reviewed and put back by Thames Water. This was due to many reasons including:

- A significant reduction in the number of new dwellings completed in the last 6 years compared to the number planned at the time of the study.
- Reduction in flows received at the treatment works due to the cessation of trade and business discharges.
- Variations in the projections of water use that were used within the calculations.
- Changes to the Planning Policy of Central Government.

12.41 As a consequence of the above, Thames Water consider that it has become necessary to provide a formal update on the current position. They stress that it is important to understand that new dwellings do not in themselves create sewage; people do, so understanding population migration and occupancy rates in the catchment will be an important consideration as well as further changes to industrial and business discharges. The impact of changes to weather patterns also needs to be acknowledged.

12.42 Rye Meads STW currently treats a population equivalent (pe) of 396,000. This is residential population plus trade/business discharges converted to a residential equivalent. The constraint that is limiting the treatment capacity at Rye Meads STW

is within the main treatment area – the Activated Sludge Plant (ASP). Although this is not leading to a failure of the discharge consent it does now fall within the range for which investigations are undertaken and options for resolution determined.

- 12.43** An upgrade to the existing assets by constructing additional treatment tanks has been considered by Thames Water; however, given the uncertainties around the scale and phasing of new dwellings planned to drain to Rye Meads STW from the 7 constituent Local Authorities, such a solution is not considered feasible at this time.
- 12.44** Thames Water has investigated alternatives and considers the most cost beneficial solution would be to make a change in how the plant is operated. The solution proposed is to dose the incoming sewage with an iron solution to encourage the settlement of solids within the Primary Settlement stage thus relieving the load on the ASP. This solution will provide an interim increase in capacity of approx. 47,000 pe, which should be sufficient for all potential growth planned within the catchment until at least 2026. This solution is currently planned for delivery by mid-2017.
- 12.45** The longer term plan for capacity at the STW post 2026 will be appraised by Thames Water and developed as details of the proposed scale and phasing of development sites becomes clearer. To obtain this better picture Thames Water has confirmed that they will continue to work with and support the local planning authorities as their Local Plans are formalised and adopted.
- 12.46** Thames Water continue to monitor incoming flows, their chemical make-up, the pe of the incoming loads, the performance of the plant, the cost of operating the plant and the daily volumetric effluent flows discharged to the river. Additionally, they will continue to work with the Environment Agency to understand what future water quality consents changes may be necessary for Water Framework Directive compliance.

Anglian Water – existing facilities and future planning

- 12.47** Like Thames Water, Anglian Water has responsibility for a number of treatment works and pumping stations in the district. These are set out in the Table 11.4 below:

Name of Facility	Capacity
Ashwell STW	No current or anticipated capacity issues
Barley STW	No current or anticipated capacity issues
Hexton STW	No current or anticipated capacity issues
Hitchin STW	No current or anticipated capacity issues
Holwell STW	No current or anticipated capacity issues
Letchworth STW	No current or anticipated capacity issues
Newnham STW	No current or anticipated capacity issues
Sandon STW	No current or anticipated capacity issues
Ashbrook STW	Capacity issues, investment will be needed with growth
Royston STW (outside district boundary)	Capacity issues, investment will be needed with growth

Table 11.4: Summary of Anglian Water Sewage Treatment Works in the district

Investment planning

12.48 Recent and current investment planning by Anglian Water has been as follows:

AMP5 (2010 – 2015):	Upgrade to Letchworth STW
AMP6 (2015 – 2020):	No investment identified within this period
AMP7 (2020 – 2025):	Investment to be determined through forthcoming Business Plan

12.49 Anglian Water have yet to identify specific investment needed in respect of planned growth levels and specifically in relation to the need for investment in Royston and Ashbrook STWs as specific costs are dependent upon the location of any proposed development and whether mitigation within the network is required.

The funding of new infrastructure

12.50 In general, upgrades to water recycling centre (also referred to as sewage or wastewater treatment works) where required to provide for additional growth are wholly funded by water companies through their Asset Management Plans.

12.51 Foul network improvements (on-site and off-site) are generally funded/part funded through developer contributions via the relevant sections of the Water Industry Act 1991. The cost and extent of the required network improvement are investigated and determined when water companies are approached by a developer and an appraisal is carried out. There are a number of payment options available to developers. Options include deducting the revenue that will be raised from the newly connected dwellings (through the household wastewater charges) over a period of twelve years off the capital cost of the network upgrades. The developer then pays the outstanding sum directly to the water companies.

12.52 As water companies seek contributions directly from developers in accordance with the provisions of the Water Industry Act 1991 they would not expect there to be provision within planning obligations sought by the District Council in accordance with planning legislation.

Service Planning

12.53 Where upgrades to sewerage and sewage treatment infrastructure are required, it is important that the timing of this work is not underestimated. It can take 18 months to three years to deliver local upgrades, with more strategic upgrades taking 3 to 5 years to deliver from the point of certainty about development occurring.

12.54 As the requirement for sewerage network upgrades is dependent on variables including the scale, location and timing of development and the relationship with other developments within the same catchment it is not possible to identify all upgrades that may be required to support growth at an early stage in the plan making process. Consequently, in relation to the sewerage network the water companies may rely on the use of Grampian conditions to ensure that any

necessary sewerage upgrades required to support growth are delivered ahead of the occupation of development. Failure to provide the upgrades required could result in adverse impacts such as sewer flooding and pollution of water courses.

- 12.55** Given the strategic nature of sewage treatment works, it will be necessary for water companies to work with other local authorities in Hertfordshire under the Duty to Co-operate to ensure that new infrastructure or upgrades to existing infrastructure can be taken forward in a co-ordinated and timely manner.
- 12.56** Further to this, where specific upgrades to waste water treatment works are required to deliver certain sites, it will be important for the land owner/ developer to work with Thames Water and Anglian Water to deliver the necessary infrastructure at an appropriate stage in the development process and to ensure that the funding is in place to secure this.

The Hertfordshire Water Study

- 12.57** The need for a comprehensive and long term study looking at the infrastructure needs of growth to 2051 on the county's water supply and sewerage treatment system was identified in 2014 and a brief issued in 2015. It arose out of the following concerns:
- the limited long term planning that is currently taking place in the county in respect of future water and sewerage need, with the overwhelming focus at the moment on the short term;
 - the limited capacity there currently is in the system coupled with the need to continue to improve aging infrastructure even before future growth is factored in;
 - the fact that with the current drive to review and adopt local plans to 2031/32 the location and characteristics of housing and employment growth over that period are now becoming gradually clearer;
 - the strong desirability of planning for water supply and sewerage treatment beyond 2031, given that factors associated with the location of growth and impact of need beyond that date might have ramifications for how growth is planned for in earlier years; and
 - the fact that this is not just a question of planning the requisite amount of new infrastructure, but there are also a significant number of wider factors that relate to water and sewerage, including (but not limited to); water consumption (and the drive to reduce it); limitations of water supply (with particular issues around abstraction); the drive for improved water quality standards; and climate change
- 12.58** The study partners are 9 of the county's 10 districts (including North Herts), Chiltern Borough Council in Buckinghamshire, the Water Companies active in the county, the Environment Agency, Hertfordshire LEP and the County Council. Partners are providing financing for the project or, in some cases, making in kind contributions.
- 12.59** The objectives of the study are to:

- **map** water and particularly sewerage assets and the extent to which those assets are (or can be expected to be in future) under stress before growth is factored in
- **feed** in to modelling work data on catchments, sub catchments and topography, all of which are absolutely critical to defining infrastructure pathways to and from both known sites and the potential locations of as yet unidentified sites
- **define** growth characteristics - both the anticipated quantum and its location
- **model** the impact of growth on the current system and the pressures it can be expected to give rise to
- **review** findings; where are the short and long term pressures? Would different growth patterns make better use of the existing water and sewerage infrastructure capacity? Is investment needed urgently in some locations and not in others? What could change to maximise the capabilities of the system and direct invest most wisely? Finally, and most crucially, are there any long term “showstoppers” – locations where there are absolute limits to growth in water and/or sewerage terms, or where infrastructure upgrades would come at a prohibitive cost?
- **publish** outcomes that will be of value to water companies, local planning authorities and other public and private bodies alike

12.60 The study is due to be completed in 2018 and will inform future iterations of this IDP. Principal outputs from this work are likely to:

- assist with any local and county level assessment of existing and reasonably foreseeable infrastructure constraints or challenges;
- assist with any assessment of environmental constraints;
- clarify and address areas of uncertainty, and explore options for resolving issues arising with particular regard to the local planning process;
- assist local authorities; public sector agencies, service providers and water companies in future service planning;
- further assist and facilitate water companies in participating in the local planning process and planning authorities in the water resource management planning process;
- assist with bids for growth related funding;
- inform the implementation of local plans in the context of the LEP Strategic Economic Plan; and
- inform the next round of water resource plans and long term strategies for water resource use and management

Costs of Provision

12.61 The investment plans of water companies are based on a five-year cycle. In general, infrastructure funding comes from investment through the AMP process. The capital funding required for strategic infrastructure will be sourced from the expenditure approved by Ofwat.

- 12.62** Continued liaison between local authorities and water companies is required, particularly as Local Plans develop to ensure sufficient lead in time for the funding approval and delivery of sewage treatment works upgrades and strategic network upgrades.
- 12.63** It should be noted that sewerage undertakers have limited powers under the Water Industry Act 1991 to prevent connection of new dwellings ahead of infrastructure upgrades and therefore rely heavily on the planning system to ensure infrastructure is provided ahead of development, through either appropriate phasing or planning conditions.
- 12.64** Where there is no existing local infrastructure in the locality of a development, or the route of such infrastructure would be required to cross land owned by a third party, the provision of water and wastewater services to new homes is subject to the requisitioning process described in sections 90 to 99 of the Water Act 2003.
- 12.65** The difference between the costs of infrastructure upgrades (including reinforcement to the existing network to ensure adequate capacity) and the predicted revenue from the new customers can be passed onto developers from water companies using Requisitioning Agreements. The amount charged is referred to as the “relevant deficit”, and can be paid over a 12 year period, or immediately following the work, one lump sum discounted to a net present value.

Summary

- 12.66** The district council will seek to ensure that there is adequate surface water, foul drainage and sewage treatment capacity to serve all new developments. Developers will be required to demonstrate that there is adequate capacity both on and off the site to serve the development and that it would not lead to problems for existing users. In some circumstances this may make it necessary for developers to carry out appropriate studies to ascertain whether the proposed development will lead to overloading of existing infrastructure.
- 12.67** Where there is a capacity problem and no improvements are programmed by statutory undertaker, the council will require the developer to fund appropriate improvements which must be completed prior to occupation of the development.

Flood Defences

- 12.68** The Environment Agency is responsible for the delivery of flood defences across the country and has responsibility for managing flood risk from main rivers, reservoirs and the sea.
- 12.69** Locally, Hertfordshire County Council is the Lead Local Flood Authority (LLFA) and as such the regulatory body responsible for consenting any works that might affect flow within an Ordinary Watercourse under s23 of the Land Drainage Act 1991. These powers also include enforcement action where works are undertaken without

consent or riparian owners have not fulfilled their riparian duties. As risk management authorities under the Land Drainage Act 1991 district councils have powers to carry out flood risk improvement works.

- 12.70** As part of its statutory duties HCC has produced a 'Local Flood Risk Management Strategy for Hertfordshire' and the 'Hertfordshire Interim SuDS Policy Statement' (November 2012).
- 12.71** At present a need for new flood defences in the district has not been identified. However, the provision of flood defences will be reviewed when taking forward the growth proposals set out in the local plan.
- 12.72** All new development coming forward in the district will however be required to provide sustainable urban drainage systems (SuDs) on site to reduce the risk of flooding. There is also the potential for new development to reduce existing flood risk to existing communities and built up areas.

Telecommunications

- 12.73** In June 2013 HM Treasury published 'Investing in Britain's Future', which set out the government's commitment to investing in the growth of the UK's digital economy. As part of their strategy the government intends to:
- invest up to £250 million, locally match-funded, to extend superfast broadband provision from current coverage plans so that 95 per cent of UK premises will have access to superfast broadband by 2017
 - explore with industry how to expand coverage further, using more innovative fixed, wireless and mobile broadband solutions, to reach at least 99 per cent of premises in the UK by 2018
 - invest in clearing high-value spectrum to support the growth in demand for next generation mobile services and a further auction of 4G spectrum; and introduce a new system of departmental charges for Government spectrum access to ensure the public sector is playing its part in the efficient use and management of valuable spectrum
- 12.74** In response to this announcement the Connected Counties programme has established a target of making fibre broadband available to over 90% of homes and businesses in Buckinghamshire and Hertfordshire by 2016, equating to approximately 734,500 such establishments across the two counties.
- 12.75** The programme is being jointly funded by the two County Councils with the help of both LEPs (£5.31m including £1.61m from HCC) BT (£8.6m) and the government's Broadband Delivery team BDUK (£4.15m). The public funds will only be spent in areas where there is no existing or planned fibre service delivery by any commercial supplier.
- 12.76** Fibre broadband is faster and more reliable than the current technology (ADSL)

delivering broadband by fibre optic cable rather than copper wire. This can either be delivered to a street cabinet or directly to a property.

- 12.77** Installation of fibre broadband enables the provision of superfast broadband, which allows for much quicker uploading and downloading and the operation of multiple applications. There is no universally accepted definition of 'superfast' although the EU, Ofcom and the UK government all define this as speeds of 30 Mbps and above.
- 12.78** To access superfast broadband the user's exchange will need to be enabled, the roadside cabinet the user's line connects to will need to have been upgraded and the user will need to have entered into a contract with an appropriate Internet Service Provider (ISP) - of which there are several - offering fibre broadband to the property.
- 12.79** Progress rollout is encouraging with county-wide fibre coverage of at least 90 per cent rollout achieved of March 2016, with coverage to reach 95% by September 2017 and 98% by June 2018.
- 12.80** Even with the rollout of upgrades to enable superfast broadband there will be around 10% of users in Bedfordshire and Hertfordshire which will not be able to secure it because of excessive distances to fibre optic cable. However, the Digital Economy Bill (set to go into law some time during spring 2017) will grant consumers and businesses the legal right to high-speed broadband thanks to a new Broadband Universal Service Obligation. The government is currently planning to set a minimum speed of 10Mbps for the service.

Infrastructure Funding and Delivery

- 12.81** Aside from the establishment costs set out in 12.75 there are no specific calls for public funding for utilities infrastructure as it is usually the case that capital costs falling on providers are recouped via service charges from developers or end users. Investment by a range of public and private bodies in superfast broadband should however be noted.

13. Infrastructure Funding & Delivery

January 2018 Update

There are significant changes to this Chapter in four specific areas:

Firstly, new sources of finance that have emerged since the drafting of the 2016 IDP are summarised, as these are considered to have a considerable bearing on the future funding of new infrastructure. They cover new government programmes, opportunities around borrowing for new infrastructure, and methods of capturing for public investment a share of the commercial gains achieved in land value uplifts

Secondly, the Chapter attempts to assign all infrastructure costs in the IDP to specific locations within the district. There are a total 22 in all, comprising the district's main towns, development on the edge of Luton and Stevenage, and a number of villages, the locations where growth is expected to be focused.

Thirdly, this Chapter seeks to explore how the entire spectrum of infrastructure need identified in this IDP – a total figure of just over £293m – could potentially be funded, through alternative funding packages that could be put together. Whilst there is an element of speculation around this exercise (as it involves a range of future assumptions both around funding programmes beyond those currently available, and the level of developer contribution) it establishes a strong case for ensuring all future infrastructure needs can be funded.

The additions to this Chapter includes some sensitivity testing work around future infrastructure need. This can be expected to change over the lifetime of the Plan, and to add some additional context to these deliberations, the expanded chapter now contains a short section on 'future proofing' – what the rapid and far reaching technical, behavioural and cultural changes society is currently encountering might mean in terms of future infrastructure need.

Key contextual considerations relating to infrastructure funding

- 13.1** It is necessary to establish the context for the IDP, since it is not possible for IDP to guarantee that all the infrastructure associated with future growth set out in the emerging local plan has – at present at least – the certainty of funding.
- 13.2** There are good reasons for this. The IDP represents the starting point of a journey to secure the funding necessary to ensure the delivery of the infrastructure identified within it. To achieve this, it provides an assessment of need based on the emerging local plan, using advanced techniques to define as precisely and as accurately as possible future requirements. This work has involved a detailed engagement of those with responsibilities for defining infrastructure need and ensuring its delivery, and 'future proofing' those needs as far as it is possible to do so.

13.3 Inevitably however there are limitations in what can be achieved in a single document at this stage in the development cycle, given a significant number of uncertainties and unknowns that exist between now and the end of the plan period. Table 13.1 below sets out the uncertainties which impose limits on how much can be known about future infrastructure needs, and how these can be delivered:

Nature of limitation	Comment	Impact
Information provided by infrastructure providers may not be fully informative.	In framing the IDP the district council is heavily reliant on infrastructure providers/funders submitting accurate and complete data on future infrastructure needs, and the authority cannot be certain that this always is the case.	Further additional information from infrastructure providers in the future will most probably increase infrastructure needs identified, and help refine precise requirements.
Government policy towards infrastructure provision may change.	Legislative changes may lead to new requirements for the provision of infrastructure, fresh programmes for funding it and a shift in responsibilities for delivering it as well as increasing demands for the delivery of new categories of infrastructure provision not previously considered necessary.	There have been many recent legislative changes and new programmes. The consequences of future changes are uncertain, but the probability is that there will be an overall increase in requirements, and an inevitability that changes in provision will occur.
Infrastructure providers may change their approach.	Though infrastructure provision is largely determined by national policy cross referenced by local need, who the infrastructure providers are and how they plan for, fund and deliver new infrastructure are also important considerations.	This is a rather uncertain area but there have been big historic changes (the move significantly away from the historic direct public funding of schools to private funding including developer contributions) and further future changes cannot be ruled out and may possibly have an impact on overall need, and certainly affect funding and delivery considerations.
Competitive bidding for some public funds creates uncertainty.	Certain public funding programmes (e.g. Growth Deal) are competitive in nature and cannot be guaranteed and CIL (if it is introduced in the district) will almost certainly give rise to competition between providers to secure access to the revenues available.	Whilst this leads to funding and delivery uncertainties the very presence of an agreed growth strategy in an adopted local plan does enhance the potential to secure such funds.
The short term nature of most infrastructure planning cycles.	Most infrastructure providers plan future infrastructure over a short term period (typically 5 years) and this makes identifying infrastructure needs towards the end of the plan period problematic.	This is almost certainly the biggest single limitation impacting on the IDP. The typical 5-year cycle of infrastructure planning is simply not compatible with the local plan cycle (typically 15 – 20 years) and means that at least part of the evidence supporting the IDP is reliant on supposition and conjecture.
Developer contributions are largely reactive.	Developer contributions through s106 agreements are individually negotiated and such negotiations rarely commence until a development scheme is brought forward by a developer.	Whilst the infrastructure needs of a particular development scheme can be defined the success in securing developer contributions cannot be guaranteed and this has an impact on funding and delivery, although it is possible to look at an historic track record of achievement.

Table 13.1 The limitations in defining infrastructure funding and delivery (to be continued)

Nature of limitation	Comment	Impact
There cannot entirely be certainty for the future in terms of infrastructure need – requirements might change quite radically over time.	Infrastructure needs are established through the prism of what we judge to be appropriate now, not in 10 to 15 years' time. The reality then may be entirely different, and it is difficult to plan for this.	In 15 years' time driverless cars may be well established, the majority of the public may work from home, a high proportion of GP consultations may be on line and there may be the emergence of 'virtual classrooms'. All of these and more may have fundamental implications for infrastructure needs in ways in which we can largely only speculate about, but to take transportation as an example these changes could have a fundamental impact on highway infrastructure needs, particularly if they have the effect of suppressing demand or making better use of existing roadspace.
In some instances, an unconstrained response to infrastructure demand may not be appropriate.	This is a specific issue to meeting highway demand where there is a level of recognition (in the emerging Hertfordshire 2050 Transport Vision and proposed Growth and Transport Plans) that simply building new and widening existing roads is unlikely to be the answer.	There is some recognition that simply meeting increasing highway demand through mitigation works may be inappropriate – the measures may simply stimulate increased demand or transfer the issue to another location, rendering them largely ineffective. Better solutions are likely to take the form of demand management or measures to encourage road users to switch to more sustainable modes.
Infrastructure measures can only realistically be identified in the IDP if they are fully identified and costed.	The IDP needs to avoid being a wish list of unspecified projects; generally speaking only fully informed schemes can be included, and the onus must be on providers/funders to identify precise requirements.	Whilst the IDP contains detailed costed measures of infrastructure need there are equally circumstances where providers identify a broad wish for a particular item or type of infrastructure without either providing details of requirements or a reasoned justification as to why it should be included in the document. To maintain credibility IDPs need to be very specific about future needs and back this up with evidence of precisely what is needed when. Infrastructure providers who fail to provide such evidence should be asked to come back with further details for consideration in subsequent IDP iterations.
The IDP seeks to identify capital costs only, not running costs.	It is not normal practice for an IDP to seek to identify revenue costs associated with the provision of new infrastructure.	Whilst acknowledging that long term running costs are an important consideration and there is the risk of failure of certain infrastructure schemes if such costs are not met, the provision of such funding from providers must be taken on trust, much in the same way as there is an expectation that providers will tackle any historic underprovision.

Table 13.1 The limitations in defining infrastructure funding and delivery

Funding Sources – traditional sources

- 13.4** Traditional funding sources for new infrastructure comprise public funds, private funds and developer contributions.
- 13.5** Public funds are those made available by public infrastructure investors themselves or by governments and their agencies. Whereas historically the funding of infrastructure such as schools was met entirely by the providers themselves, as already noted, capital funding by bodies such as local authorities is likely to be limited and is only usually contemplated when there are failures to secure funding by other means. Other bodies such as the police service until recently had capital programmes to deliver future needs but access to such funds has significantly reduced.
- 13.6** Government funding for new infrastructure through its own direct programmes or through proxy bodies such as Network Rail and Broadband UK has ebbed and flowed over the years. There has been a steady stream of such programmes over the past few years although recently - as explored later in this chapter - there has been a significant expansion of competitive funding programmes announced in the 2016 and 2017 budgets.
- 13.7** Government direct funding for provision such as the emergency services, social and green infrastructure and utility provision is at present either extremely limited or in most cases non-existent, although two notable exceptions are the resources made available for superfast broadband rollout and sea and flood defences. Funding for some activities is available through programmes like the Heritage Lottery Fund, although there are high levels of competition for this. Health funding is more complicated; as noted earlier in the IDP, government funding for primary healthcare provision is generally not available, although secondary healthcare continues to be funded through government direct funding and private finance initiatives.
- 13.8** The government has freed Network Rail and Highways England to make them arm's length companies who are now able (subject to government approval) access the financial markets for borrowing.
- 13.9** Private funding is limited and is usually achieved through investment commitments on the back of public investment or occasionally as match funding (e.g. BT's contribution to superfast broadband rollout, some energy companies into renewable energy initiatives). Within the health service ophthalmologists and pharmacies are privately funded, and although many GPs fund their own premises this is essentially public funding as they receive compensatory payments from NHS England who themselves seek to secure developer contributions.
- 13.10** Developer contributions are in transition, with the gradual rollout of CIL across the country (although as noted North Herts District Council has yet to make a decision about its introduction) and the restrictions introduced to the pooling of s106 planning obligations, which took place in April 2015 (although the government announced in November 2017 that it now plans to remove some of these).

13.11 In recent years the use of s106 agreements has become critical to the funding of a range of new infrastructure (particularly schools, transportation and health facilities). The advantage with s106 is that it is possible to translate development numbers into investment needs and identify from that a cost to be secured from the development promoters.

13.12 CIL (should it be introduced) creates some uncertainty with the recently introduced limitations on s106 as the County Council and NHS England as major infrastructure providers/facilitators cannot be certain whether they will achieve access to similar levels of developer contributions via CIL, although they will be able to make a case for CIL revenues to the district council as charging authority under whatever governance arrangements are adopted. There will however be a period of time between the limitations imposed on s106 and the possible introduction of CIL in the district.

13.13 Even with the possible introduction of CIL, s106 will however remain relevant for the securing of site related infrastructure through developer contributions, and there is an emerging consensus that it will remain relevant for larger sites, with an important interplay with CIL (if introduced) along the following lines:

Scale of development	CIL (if introduced) or S106
Development sites of over (say) 500 dwellings	There is likely to be a focus on the use of s106 to secure financial contributions given such development will give rise to significant site related infrastructure which s106 agreements will still be able to fund, although there is a major caveat as the Regulations make clear is that no more than 5 obligations are able to be collected for any single item or type of infrastructure (albeit some of those restrictions are now being removed). With such scale of development there is a strong possibility that the sites in question will be defined in the CIL Charging Schedule as having low or even zero rates
Development sites between say 200 - 500 dwellings	Most probably a mix of CIL and s106, with some site related infrastructure but also some more generic infrastructure (e.g. some education, health and transport provision). The 'rule of 5' restriction will most likely remain significant for such developments even if some pooling restrictions are removed. If in the Charging Schedule any impositions in the form of s106 requirements are not reflected in CIL rates, viability issues could be significant
Development sites under 200 dwellings	With such developments CIL is likely to be significant, particularly at the lower end of the restrictions given that ministers have ruled that 'tariff style' s106 contributions should not be charged on sites of 10 units or less, where there is a maximum combined gross floor space of 1,000 square metres

Table 13.2: Scale of development in relation to s106 and CIL (if the latter is introduced)

13.14 Given this it might mean that most of the infrastructure needs of the district's proposed urban extensions and some of the larger urban capacity/windfalls/village developments will be funded via s106, assuming this source of funding continues to remain available. However, in circumstances where potential CIL and s106 contributions are sought from the same development, in setting its CIL (if introduced) it will be necessary for the district council to factor in a residual s106/S278 amount to account for site specific non-CIL costs (likely to be in the order of £2,000 per unit). The amount of s106/S278 may vary depending on the approach taken for the use of s106 following the introduction of CIL.

Funding sources – emerging opportunities

13.15 Beyond these essentially traditional methods of securing funding for new infrastructure new opportunities have been emerging. When combined to some existing funding programme what this represents is a range of potential sources which the district council could seek to explore and hopefully draw on to assist the process of ensuring that new development is provided with all the infrastructure it needs. These essentially fall into two separate categories:

- New government funding programmes
- Borrowing, loans and land value capture to pump prime growth and infrastructure investment, with repayment secured through enhanced land values and development returns

13.16 Table 13.3 below sets out what are perhaps the key opportunities:

Source	Details
Public Funding programmes	
Local Growth Deal	An ongoing annual funding programme administered by the LEP (albeit the annual renewal of this fund appears suspended)
National Productivity Investment Fund (NPIF)	A competitive bidding programme for Government Funds made available through the National Productivity Plan. An initial £22bn identified in autumn 2016 has now been increased to £31bn in the November 2017 budget, all for programmes running from 18/19 – 2022/23. A proportion of this will be spent on infrastructure, particularly transport. Significant infrastructure programmes forming part of the NPIF are highlighted below
NPIF: Home Building Fund	A fund administered by Homes England, offering both development finance loans funding and infrastructure finance loans to developers available for draw down up to 31 st March 2021. Initially set at £3bn, this has been expanded to £4.5bn, with extra funds to help SMEs
NPIF: Housing Infrastructure Fund	A £2.3bn capital grant fund to unlock development and promote growth. Initially confirmed in July 2017 (with the first round of bids submitted by September 2017) this has subsequently expanded in the November 2017 budget by £2.7bn to support growth in high demand area, bringing the total investment available to £5bn

Table 13.3: Emerging sources of infrastructure funding (to be continued)

Source	Details
Public Funding programmes (continued)	
NPIF: Small sites: Infrastructure and remediation	A £630m grant fund for remediation and infrastructure to accelerate the building of homes on small and stalled sites
NPIF: Local Authority house building: additional investment; and Land Assembly Fund	Two funds of £1bn and £1.1bn £1.1bn respectively. Not infrastructure funds in their own right, but will help to secure infrastructure
Road Investment Strategy (RIS) and Roads Programme	The government's funding programme for investment in the Strategic Road Network through RIS 1 (2015 – 20) with a programme being developed for RIS 2 (2020 -25) ²⁰
Borrowing, loans, land value capture	
Local Government Bonds	The potential to issue Local Government Bonds, established by the UK Bonds Agency in July 2016
A 'Warrington style' bond	As for Local Government Bonds but by an individual district (Warrington BC issued a bond of £150m in 2015, much of it for town centre regeneration)
Public Works Loan Board (PWLB) funds	Similar to bonds but government money (through the National Loan Fund). Rates are at an all-time low (50 year loans are currently charging around 3.0% p.a)
Business Rates Supplements to create infrastructure investment	Allowable under Supplements Act 2009. Max 2p limit on supplement, subject to ballot of those affected
Land Value Capture	The concept of monetising and capturing for public infrastructure purposes the increase in land values that arise from major public investment (typically major public transport schemes)
Other Tax Changes, Land value Tax	Long term possibilities involve the devolution of currently national tax raising mechanisms to local authorities (e.g. income taxes and property taxes, VAT) and/or powers to develop new funding mechanisms ²¹ . The potential of a more general Land Value Tax has also been mooted in some quarters

Table 13.3: Emerging sources of infrastructure funding

13.17 The November 2017 budget contained a number of infrastructure related funding pronouncements, some relevant to infrastructure planning in the district (with others not currently relevant but may become some if the initiatives announced eventually move into the mainstream):

- **Transforming Cities Fund:** £1.7bn from the NPIF to support intra city transport by improving connectivity, reducing congestion and utilising new technology. For cities and combined authorities with elected metro mayors. Of some indirect relevance to North Herts (Cambridgeshire and Peterborough will be beneficiaries) but of greater relevance if fund extended to other areas in future

²⁰ Unlike RIS1 RIS2 will “map” local and regional housing and growth ambitions and make support for new homes one of the programme's key objectives

²¹ Appears likely in the first instance to be limited to mayoralties and combined authorities

- **Digital Rail upgrades:** £84m for start of the art in cab signaling across a variety of services
- **National Infrastructure Commission Study on Freight:** To be published in 2019, will look at tackling urban congestion, decarbonising and new technologies such as truck platooning
- **5G rollout:** £160m for investment in the next generation of mobile communications
- **Local Full-Fibre Networks:** A £190m Challenge Fund that local areas around the UK will bid for to encourage faster rollout of full fibre networks by industry
- **Sustainable investment in energy:** £557m made available to support low carbon electricity and protect it from energy market volatility through Contracts for Difference (CFD), a private law contract between a low carbon electricity generator and the Low Carbon Contracts Company (LCCC), a government-owned company
- **Improvements in Delivery efficiency:** The government will use its purchasing power to drive the adoption of modern methods of construction such as offsite manufacturing, with a presumption in favour of this construction technique from 2019 where it represents best value for money. Potentially this will drive down infrastructure costs where new buildings are required over time
- **National Infrastructure Commission pipeline of projects:** In December 2017 the NIC set out a 10 year projection of public and private investment of around £600bn over this period
- **Measures to support growth in the Cambridge – Milton Keynes – Oxford Corridor:** To support the projected 1m new homes by 2050 and the infrastructure to support it, the government expects authorities and delivery bodies on the corridor to use both existing powers and new powers announced in the budget to capture rising land values from the additional public investment; also, to consider the introduction of a Strategic Infrastructure Tariff (in addition to CIL)
- **Local Infrastructure Rate:** The government is intending to support the offer of up to £1bn of discounted borrowing to local authorities to support infrastructure projects that are high value for money, with rates proposed at gilts (rate government borrows at) + 0.6%, with repayment between 3 – 50 years.

13.18 Additionally the government has also announced that it is consulting on changes to CIL, the main changes proposed being:

- removing restrictions on Section 106 pooling towards a single piece of infrastructure where the local authority has adopted CIL, in certain circumstances (such as where the authority is in a low viability area or where significant development is planned on several large strategic sites) to remove the complexity that pooling restrictions can generate
- speeding up the process of setting and revising CIL to make it easier to respond to changes to the market, particularly in areas of high value uplift (such as around stations)

- allowing authorities to set rates which better reflect the uplift in land values between a proposed and existing use
- changing indexation of CIL rates to house price inflation, rather than build costs

Important principles to recognise in focusing and maximising transportation infrastructure opportunities

13.19 Table 3.13 provides a detailed summary of the main funding sources available to support infrastructure delivery but in assessing the relevance to North Herts, there are a number of important considerations:

- **Multiple funding packages of major transportation infrastructure schemes appear to be the way forward:** a number of major transport schemes are now funded in this way and in the right circumstances (e.g. where developer contributions to a project are limited by viability considerations) it can be applied to other schemes as well
- **Local authority capital programme funding is likely to make only a small contribution to meeting the overall infrastructure bill:** capital programmes have shrunk markedly over the years
- **There should be an assumption that government funding schemes will be enduring, despite the short-term nature of current programmes:** a current feature of such programmes is not only their variety (programmes are available to tackle a wide range of disparate issues) but that they are essentially short term in nature, with many seemingly ‘one off’ (e.g. the Home Building Fund); some repetitive but seemingly arbitrarily announced programmes; or others apparently cyclical in nature but which do not look ahead more than 5 years (the Growth Deal, The Road Investment Strategy).

13.20 The relatively short term time horizon of infrastructure planning may well continue, with few funds seeking to address infrastructure needs in the longer term. It is clearly the way in which the government wishes to approach such an issue, and one that seems unlikely to change.

13.21 Long term infrastructure planning is therefore anticipated to be predicated on a rolling programme of government funding initiatives and on balance, for the purposes of this IDP, it is assumed that this is likely to be the case, with funds available in particular for the following three categories of investment:

- **ensuring the long term and timely supply of new housing** to support growth (in line with the objectives contained within the 2017 Housing White Paper) and to that end, unlocking any sites that are potentially threatened from being brought forward through issues in delivering infrastructure that is required but for which there is no obvious funding – so an enduring fund for this purpose
- **keeping Britain moving:** funds continuing to be made available over the long term to tackle congestion and delay – and increasing importantly, measures

that will reduce pollution and ensure the UK is able to deliver the Air Quality Plan

- **supporting economic development and regeneration and increasing productivity:** so, measures which will promote both the government's Industrial Strategy and its Productivity Plan

13.22 At the same time **bonds, loans and mechanisms to capture land value uplifts are set to play an increasing role in transportation infrastructure funding.** At present the contributions these sources make towards funding new infrastructure is modest, but that could change over time, particularly as the cost of borrowing is at a long-term low. For projects where viability restricts developer contributions and public funding programmes are overly competitive, these sources of funding may prove critical in determining whether a vital piece of infrastructure is or is not funded.

Sensitivity testing

13.23 The above section represents the most likely scenario of delivering the necessary infrastructure but there are possible alternative scenarios which may influence delivery, and it is worth noting them and assigning values to them. Key factors which may influence the headline figures could potentially include the following:

Area of sensitivity	Nature of potential factor	Potential impact	Likely significance
Education provision	HCC as local education authority is 'funder of last resort' should it prove impossible to secure all the necessary education contributions from s106/CIL	Difficult to assess – there is the potential for HCC to make up any funding balance, but no obvious likelihood that this will be necessary	Low
Education provision	HCC adopts a lower rate of pupil yield – currently this is 1fe ²² /500 pupils; many other local authorities adopt a lower pupil yield. 1fe/850 dwellings could be considered	Would cut the education infrastructure bill by around 40%	Medium – may be some justification for this, but the County Council continues to assert the view that its current pupil yield is appropriate to Hertfordshire's circumstances

Table 13.4: Sensitivity testing (to be continued)

²² fe = form of entry

Area of sensitivity	Nature of potential factor	Potential impact	Likely significance
Charging a CIL (if introduced) on the district's 6 strategic sites	The IDP assumes that a zero CIL will be charged on these sites, on the expectation that s106 requirements will be such as to render a CIL charge unviable. But if detailed viability work suggests that this is not the case a CIL should be charged	Taking into account exemptions, a modest CIL charge of £50/sq.m. on housing development would raise an additional charge of around £21.5m ²³ over the Plan period, or around 7.4% of the total infrastructure bill	Probably low, as s106 requirements relating to the strategic sites are likely to be reasonably onerous
Residual s106 on non-strategic sites	Again, for the IDP an assumption has been made that s106 agreements will not be entered into on the non-strategic sites if CIL is introduced (on viability grounds and because of the 2015 restrictions introduced on planning obligations); however it is possible that this is not the case	Experience elsewhere suggests local authorities in Hertfordshire ²⁴ are still entering into planning obligations on occasions and for modest amounts with a CIL in place; an assumption of £1,000 a dwelling would net £6.72m ²⁵ over the Plan period	Low – case for doing so in the district is unproven and sums involved are relatively small
Enhanced s106/CIL rates	Paragraphs 13.24 – 13.26 below considers the ongoing pan Hertfordshire research on developer contributions, which may conclude that developers could make an enhanced contribution to infrastructure costs without threatening viability	Should a sufficient case be made for setting higher charges, and these were in the order of the rates set out in paragraph 13.26 then the combined contributions secured from s106 and CIL would represent around 110% of the total infrastructure bill identified in the IDP ²⁶	Currently low, but an interesting initiative that is worth following
Switching from secondary to primary healthcare infrastructure	Currently the lion's share of health infrastructure (83% locally) is secondary healthcare provided on a largely sub-regional basis and funded nationally. If as there is a significant move towards shifting provision to make it more locally/community based (and locally financed) then the funding model would be via developer contribution, the same as for GP provision	The IDP estimates that just over £44m of healthcare infrastructure need is secondary healthcare, nationally funded. If a significant proportion of this were needed to be funded locally from developer contributions, then this would put pressure on development finances	Medium – this is something that needs to be watched and factored in if necessary to future infrastructure planning

Table 13.4: Sensitivity testing

Maximising developer contributions

²³ Calculation derived as follows: 7700 new homes on major strategic sites assessed in the IDP (see Chapter 4); average dwelling size 80 sq.m; £50/sq.m. CIL charge; 30% reduction in total bill (allowance for affordable housing, self builds) – total CIL revenue £21.56m

²⁴ An example is Hertsmere BC

²⁵ Calculated from an average overall charge of £1000/dwelling on 6722 dwellings comprising urban capacity sites, windfalls, village allocations and non-strategic greenfield extensions as assessed in the IDP

²⁶ S106 contributions would amount to around £230m. CIL to around £93m

13.24 Emerging research²⁷ commissioned by the County Council on behalf of the pan-Hertfordshire member group on infrastructure planning - HIPP - is due to be published in 2018 and is likely to draw the conclusion that much more can be expected from developers through the contributions they make to the cost of new infrastructure through s106 agreements - and, in time, through CIL if and when it is introduced.

13.25 This emerging work is expected to conclude that developer contributions can be maximised if the following principles are adopted in funding models to establish the financial contributions that can be expected to be secured towards new infrastructure:

- the land value input to the viability model is based on existing use values plus a modest uplift (of say 20%) rather than other factors such as market value or acquisition price
- developer profit levels are pegged at say 20% (or potentially lower) and are taken as profit on scheme cost rather than profit on scheme value
- an 'open book' approach to viability²⁸
- efforts are made to reduce build costs, potentially through substituting modern methods of construction (factory built components assembled on site) rather than traditional construction techniques

13.26 With these principles in place it may be possible to consider elevated levels of developer contributions by way of s106 agreements – and, if and when introduced, CIL. Viability studies will establish the appropriate level in due course but for sensitivity testing purposes below the following average levels of enhanced contributions are proposed:

- s106 agreements: an average of £30,000 per dwelling
- CIL - £250/sq.m.
- Employment and retail - £100/sq.m.

Future gazing – what the current revolutionary changes will mean for infrastructure funding

13.27 This section concludes with some future gazing, considering what is happening in terms of technological, cultural and behavioural changes that are taking place and how it might affect infrastructure requirements in the future. No answers are provided; instead these are factors that need to be noted for now and given further consideration as infrastructure planning and delivery advances to meet the growth enshrined in the plan.

13.28 We have termed these changes 'revolutions' given the fundamental changes in the way we live, work and play that are likely to occur in the future, even if this only happens partially by 2031.

²⁷ Being undertaken by Chris Marsh Associates and SQW

²⁸ As now required by 6 London Boroughs (as at November 2017)

'Revolution'	Possible Impact
The Digital Revolution	The 'Queen of Revolutions' making many other changes possible e.g. use of algorithms, virtual offices, doctor's appointments, home learning environments, home shopping etc
The Algorithmic Revolution ²⁹	Sets up autonomous cars, truck tethering, drone technology for deliveries, roadspace management, in cab train signalling
The Power Revolution	From electric cars (especially when power by new generation lithium-sulphur batteries), micro generation using solar panels, ground source heat pumps etc, rollout of Smart Meters
The Sharing Revolution	Moving away from direct ownership of objects into 'as needed' facilities such as Uber, Airbnb
The Employment Revolution	Changes such as working from home, 3D printing of a range of artefacts, the growth in the 'Gig Economy'
The Internet of Things Revolution	Interconnections via the internet of computing devices embedded in everyday objects, enabling them to send and receive data

Table 13.5: The technological, cultural and behavioural changes that are likely to affect future infrastructure planning

13.29 It is worth noting that the impact of these changes infrastructure planning are not certain – some may perhaps come to nothing - and any changes may furthermore not be linear and as such not guaranteed to reduce requirements in the short term

- for instance, the move to electric cars may temporarily lead to higher than current levels of grid derived energy use until more efficient local/home power generation and battery technology reverses this
- similarly, in setting up the UK's roads for autonomous driving vehicle engineers may err on the side of caution and set high vehicle separation tolerances, initially actually reducing road space, until the technology is fully proven and roadspace capacity dramatically increases.

13.30 The overall trend in the long term will be the ability to undertake a range of tasks without having to take up space in somewhere other than the home, meaning fewer journeys and less need to occupy a work station, a doctor's surgery or even perhaps a classroom; almost certainly this will either mean a reduction in infrastructure requirements, or less pressure on existing facilities.

Governance

13.31 Given the complexity of these matters it will be important to consider infrastructure funding and governance arrangements, particularly if CIL is introduced. The district council has yet to announce its governance arrangements but is considering such arrangement on the following key principles:

Key Governance Issue	Comment
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²⁹ The 2017 Budget confirmed the UK government's intention to allow driverless cars to operate on the public highway from 2021

Key Governance Issue	Comment
The body that will make decisions on CIL investment (if it is introduced) and other infrastructure funding priorities	This could be an existing body within the district (e.g. Cabinet) or a bespoke arrangement, possibly involving outside bodies, although accountability would remain with the charging authority
The plan/strategy on which CIL (if introduced) and other infrastructure expenditure decisions will be based	This could be an overall vision and strategy although it could be more 'business plan' in format to allow for profiling and allocations of CIL expenditure (if CIL is introduced). The plan/strategy will provide the linkage between actual CIL income expenditure and the CIL Regulation 123 list (the list a CIL charging authority is obliged to published defining what it intends to spend CIL on)
A review mechanism	As CIL expenditure (if CIL is introduced) is likely to involve a rolling programme of receipts and expenditure a review mechanism will be essential. This could potentially be in the form of an annual delivery plan
The potential allocation of CIL (if introduced) to different funding pots	It is potentially the case that CIL income (if CIL is introduced) will need to be allocated to discrete pots, possibly as many as 4: for projects identified in the business plan; for administering CIL (a pot that the regulations require to be capped); for contingencies (possibly) and for locally determined CIL to be passed to local councils or spent in neighbourhoods (required by regulations to be ringfenced)
An accounting and monitoring mechanism	A means of assessing funding bids for new infrastructure against objectives determined through the business plan/strategy and also a means of ensuring funds made available for new infrastructure are being spent in a timely and appropriate fashion
Appropriate contingency arrangements	The inherent nature of infrastructure planning means that calls for funding for projects not currently identified as investment priorities will most probably arise as well as projects with funding allocated that for some reason not being pursued. It will almost certainly be necessary to build in contingencies into the business plan to allow for such eventualities
A possible project bidding process	Infrastructure providers may need a mechanism to allow them to put forward their projects for funding in a way that allows such bids to be assessed against predetermined criteria and against other bid submissions. This will need to happen on a regular cycle and most probably, this will need to take place on an annual basis
Procedural and management Protocols, contracts, memoranda of understanding etc	Various arrangements to enable the body making investment decisions to engage contractually with infrastructure providers and to work with others. A specific contractual arrangement regarding locally directed CIL (if introduced) will have to be entered into with each parish council (who under the CIL regulations will receive a proportion of CIL equating to either 15% or 25% depending on whether they have a neighbourhood plan in place or not)

Table 13.6: Key governance issues

13.32 Other decisions on governance the district council will need to consider are as follows, particularly if CIL is introduced:

Key governance area	Potential decision to be made
Governance body	<ul style="list-style-type: none"> • Will this just comprise representatives of the charging authority? • Or will there be external partners? If so, what will their role be? • Will the governance body be granted formal powers or will it be advisory? • Is it expected that the governance body will develop a role in defining the Regulation 123 list, including subsequent revisions? • In parished authorities such as North Herts will local councils be part of the governance arrangements?
Infrastructure providers	<ul style="list-style-type: none"> • Will infrastructure providers have a formal role as members of the governance body or will they be outside of the process? • Will there be any specific arrangements for the County Council as the major provider of infrastructure?
Scope of governance arrangements	<ul style="list-style-type: none"> • Will governance relate just to the charging authority's administrative area? • Or will there be a potential willingness to develop arrangements across boundaries to deliver sub regional infrastructure? • At the local level will there be a willingness to devolve a greater proportion of CIL revenues to the area or neighbourhood level?
Funding mechanisms	<ul style="list-style-type: none"> • Will there be a willingness to consider the deployment of CIL as part funder of infrastructure with other funding sources? • Will there be a willingness to use CIL as a pump priming mechanism for stalled projects? • Will there be an expectation that CIL revenues be spent in the locality in which they are raised, or will there be a willingness to pool CIL with adjoining charging authorities?

Table 13.7: decision making relating to governance

The next early years of infrastructure delivery to 2021

13.33 Particular attention needs to be given to the next 5 years of infrastructure delivery to ensure that it is delivered in a timely fashion and this forms a platform for future growth. Over the next 5 years, as identified in Chapter 4, it is estimated that nearly 2,500 new dwellings can be expected to be delivered. This represents around 17% of the additional total growth expected over the plan period.

13.34 To maximise the delivery of the early infrastructure the following steps will need to be taken:

- infrastructure providers will need to articulate their needs and make the case for funding from a variety of sources, particularly should a CIL be introduced;
- infrastructure providers should also strive to make the maximum use of any spare capacity within existing infrastructure through appropriate resource management systems;
- if CIL is put in place, governance arrangements for the CIL income stream will need to be established quickly so that it can be allocated to priority projects;
- the district council will need to respond to the evidence contained within its viability studies and the County Council led study into viability issues (see elsewhere in this Chapter) particularly if the latter uncovers strong evidence to suggest that local authorities have been under ambitious in seeking developer contributions through s106 and in setting CIL rates (if CIL is introduced);

- the authority should in explore the opportunities for securing funding through the various funds supported within the National Productivity Investment Fund, and later rounds of the LEP's Growth Deal (assuming this fund is refreshed);
- more generally when the LEP's Strategic Economic Plan is refreshed, the authority should stress its case for access to growth related infrastructure investment;
- the maximum use should be made of s106 agreements to contribute to the cost of new infrastructure, and the County Council specifically should be supported in its attempts to secure funding for school and transportation schemes and other infrastructure it has responsibility for;
- in terms of transport, the authority should continue to promote priority funding to be given to the A1(M) Growth and Transport Plan, and then advance the case for transportation projects to be funded through this means;
- Innovative funding measures should be supported, and the new opportunities for the use of borrowing, bonds and land value uplifts should be investigated;
- The publication of the Herts Water Study (looking at water and sewerage needs to 2051) has created the opportunity to establish arrangements to build capacity in sewerage infrastructure provision in particular as well as addressing any shorter term issues, and opportunities to make this happen need to be taken;
- Finally, every opportunity should be taken to ensure where new technologies are introduced, they work to reduce the costs of new provision as well as maximising use of any existing provision.

A strategy for funding all the infrastructure identified in this IDP

13.35 The ensuing paragraphs examine the total cost of infrastructure identified in the IDP and then seek to assign this both by location and timeframe (in 5 year tranches).

13.36 It then seeks to look at potential scenarios for funding the total cost of infrastructure over the plan period. This analysis needs to be read in conjunction with the examination of the district's 6 strategic housing sites explored in Chapter 4.

Overall assessment of infrastructure need

13.37 The Table below provides an overall summary of infrastructure need by service as set out in the Infrastructure Delivery Schedule in Appendix 1:

Category	Total Cost (£m)
Transport	23.308
Education	198.740
Health	53.3
Social Infrastructure	14.51
Emergency Services	1.5
Green Infrastructure	2.024
Total	293.382

Table 13.8: Total infrastructure need to 2031 (as identified in the Infrastructure Delivery Schedule) (by service)

13.38 Evidence of infrastructure has been drawn together on the following basis:

Calculation of Infrastructure Need	
Key Calculation	Analysis Undertaken
Start date for calculations	A start date of 31 st March 2016 was identified in this IDP
Growth on which infrastructure need is calculated	14,422 new dwellings between the start date and 2031 plus 32.8 ha of new employment space
Profiling infrastructure need over time	Calculating infrastructure need over 5 year tranches; namely 2017 - 21; 2022 – 26; 2027 - 31
Profiling infrastructure need spatially	In accordance with Chapter 4 (The Local Plan Growth Strategy), which categorises growth and thus infrastructure need by development category and also by Local Plan defined locations
Specific review of infrastructure needs for the district's 6 strategic greenfield sites	Identification of the specific infrastructure needs associated with these sites, including costs and timing (as set out in Chapter 4)
Review of service infrastructure need evidence	Drawn from published evidence (e.g. Transport Strategy) and dialogue with infrastructure providers

Table 13.9: How infrastructure need requirements have been drawn together

Assigning infrastructure growth by location

Deducting Infrastructure need that cannot be assigned to specific locations

- 13.39** As explored in paragraphs 13.41 – 13.47 below, not all infrastructure need can be assigned to a specific location. For the formula based infrastructure requirements (for education and health infrastructure) it is not possible to assign windfall development costs, reducing the assignable costs by 13% for these infrastructure categories. This gives rise to assignable infrastructure costs by location as follows:

Category	Total Cost (£m)
Transport	23.308
Education	172.654
Health	46.522
Social Infrastructure	14.51
Emergency Services	1.5
Green Infrastructure	2.024
Total	260.518

Table 13.10: Assignable Infrastructure costs to specific locations

Further considerations on the assignment of infrastructure need:

- 13.40** For a number of infrastructure categories - transport in particular - infrastructure need is calculated on the basis that specific items of infrastructure are required to offset the impact of development (in the case of transport, the impact of that development on the transportation network). Depending on circumstances, infrastructure requirements may vary considerably. Two otherwise identical housing schemes of 1000 dwellings may give rise to significantly different infrastructure requirements depending on where each is located, particularly for instance if one is sited in a location where there is significant highway capacity, and the other is not.³⁰
- 13.41** For education and health, infrastructure requirements from the point of view of calculating infrastructure needs are unvarying, in that the same infrastructure requirements will arise for two identically sized schemes wherever they are located

³⁰ It is worth noting that this consideration applies to s106 agreements but not to CIL where the link between infrastructure need and financial contribution is broken.

and whatever the specific differences between them. It is assumed that they will require the same access to educational facilities, GP surgeries and secondary healthcare such as acute care and mental health facilities.

- 13.42** Whilst it could be argued that the particular nature of new development should be taken into account (e.g. a predominantly flatted development should give rise to fewer school places being required) for the purposes of calculating requirements for the IDP neither the Local Education Authority or NHS England make any distinctions.
- 13.43** Additionally, for GP surgeries and schools, needs are not always met through provision of a single facility for each discrete location. A large town may for instance have multiple primary schools, whereas for a small village, schoolchildren may have to travel beyond their settlement as the metrics of providing a school in that location do not work; moreover, secondary age children of relatively substantial settlements may be required to travel. A similar consideration arises in the case of GP practices.
- 13.44** What this means is that although infrastructure requirements for schools and GP surgeries are calculated on a formula basis for each on the North Herts geographical locations, the relevant infrastructure may be sited elsewhere. The position is also complicated by the fact that the need for new educational provision is not determined in isolation, but is considered alongside existing provision – including whether extant schools are full or have spare capacity, whether or not they are physically capable expansion, or whether they are poorly sited in locational terms. The same consideration will apply to GP surgeries.
- 13.45** An added complication is the fact that some schools are now responsible for their own admission policies, whilst GPs are independent contractors who in part at least will be making independent decisions on where to locate new GP practices (although these will need to be approved by NHS England).
- 13.46** A final consideration concerns the North Herts Transport Strategy (October 2017). The assignment of infrastructure costs within the IDP took place before the outcomes from the Transport Strategy had been assimilated; the Strategy proposes a radical shift away from highway investment towards other modes such as cycling, walking and public transport, as well as measures to promote transport behaviour changes. Some of the transportation infrastructure costs identified in the September 2016 IDP and therefore in this study will need to be reallocated away from highway schemes to other infrastructure projects, although the headline transportation infrastructure cost of £23.808m remains unchanged.
- 13.47** Further work is needed however to translate the changed priorities for transportation investment set out in the Strategy into detailed schemes. For the moment this assignment of infrastructure costs and, more generally, the IDP (and Infrastructure Delivery Schedule) are working to the needs set out in September 2016. Changed priorities will be reflected in future iterations of this IDP, when it is also possible (but not certain) that the quantum and costs of transportation interventions will rise.

13.48 Taking this infrastructure figure of £260.518m identified in Table 13.10 which can be assignable to specific locations, costs (by service) attributable to 22 settlements in North Herts where growth is anticipated are the identified both in total and in 5 year tranches:

Location (settlement)	Total housing growth	Housing growth assigned to 5 year tranches			Transport	Education	Health	SI	ES	GI	Totals
		2018 - 22	2023- 27	2028 - 31							
Ashwell	33 (0.2%)	33 (100%)	0	0	0	0.464	0.125	0	0	0	0.589
Baldock	3086 (25%)	570 (18%)	1396 (45%)	1120 (37%)	0.965	43.449	11.707	8.86	0	0.892	65.873
Barkway	172 (1.4%)	32 (19%)	35 (20%)	105 (61%)	0	2.421	0.653	0.6	0	0	3.674
Codicote	315 (2.55%)	190 (60%)	71 (23%)	54 (17%)	0.3	4.435	1.195	0	0	0	5.93
Graveley	8 (0.06%)	0	8 (100%)	0	0	0.112	0.030	0	0	0	0.142
Hitchin	1009 (8.3%)	289 (29%)	614 (61%)	106 (10%)	9.267	14.206	3.828	0.6	0	0.28	28.181
Ickleford	199 (1.6%)	0	159 (80%)	40 (20%)	0.2	2.801	0.755	0.6	0	0	4.356
Kimpton	13 (0.11%)	13 (100%)	0	0	0	0.183	0.049	0	0	0	0.232
King's Walden	16 (0.13%)	0	16 (100%)	0	0	0.225	0.061	0	0	0	0.286
Knebworth	598 (4.9%)	154 (26%)	305 (51%)	139 (23%)	0.6	8.420	2.269	0.6	0	0.18	12.069
Letchworth	1517 (12.4%)	287 (19%)	750 (49%)	480 (32%)	6.676	21.359	5.755	0	0	0.452	34.242
Lower Standon (Ickleford)	120 (0.9%)	120 (100%)	0	0	0.2	1.690	0.455	0	0	0	2.345
Luton	2100 (17%)	330 (16%)	950 (45%)	820 (39%)	1.0	29.567	7.967	1.0	1.5	0	41.034
Preston	21 (0.17%)	0	21 (100%)	0	0	0.295	0.080	0	0	0	0.375
Reed	22 (0.18%)	0	0	22 (100%)	0	0.310	0.083	0	0	0	0.393
Royston	759 (6.2%)	384 (50%)	333 (44%)	42 (6%)	3.550	10.686	2.879	0.65	0	0.22	17.985
St Ippolyts	52 (0.4%)	12 (100%)	0	40	0	0.732	0.197	0	0	0	0.929
St Paul's Walden	41 (0.3%)	41 (100%)	0	0	0	0.577	0.156	0	0	0	0.733
Stevenage	1830 (15.0%)	450 (25%)	880 (48%)	500 (27%)	0.4	25.766	6.942	1.0	0	0	34.108
Therfield	12 (0.1%)	0	0	12 (100%)	0	0.169	0.046	0	0	0	0.215
Weston	40 (0.3%)	40 (110%)	0	0	0	0.563	0.152	0	0	0	0.715
Wymondley	300 (2.5%)	100 (33%)	200 (67%)	0	0.15	4.224	1.138	0.6	0	0	6.112
Totals	12263	3045 (25%)	5738 (47%)	3480 (28%)	23.308	172.654	46.522	14.51	1.5	2.024	260.518

Table 13.11: Local Plan assignable infrastructure costs assigned to 22 settlements where growth is anticipated, by services and also in 5 year tranches

Key: SI = Social Infrastructure; ES = Emergency Services Infrastructure; GI = Green Infrastructure

13.48 A final table relating to assignable infrastructure costs considers growth in settlements by 5 year tranches, as shown in Table 13.12 below:

Settlement	2018 - 22	2023- 27	2028 - 31	Total (£m)
Ashwell	0.589	0	0	0.589
Baldock	11.785	33.68	20.408	65.873
Barkway	0.584	0.615	2.461	3.674
Codicote	3.678	1.295	0.957	5.93
Graveley	0	0.142	0	0.142
Hitchin	5.458	20.039	1.804	28.181
Ickleford	0	3.645	0.711	4.356
Kimpton	0.232	0	0	0.232
King's Walden	0	0.286	0	0.286
Knebworth	2.788	6.832	2.459	12.069
Letchworth	8.429	17.136	8.677	34.242
Lower Standon (Ickleford)	2.345	0	0	2.345
Luton	8.006	18.39	14.638	41.034
Preston	0	0.375	0	0.375
Reed	0	0	0.393	0.393
Royston	10.418	6.754	0.814	17.985
St Ippolyts	0.204	0	0.725	0.929
St Paul's Walden	0.733	0	0	0.733
Stevenage	9.678	16.97	7.463	34.108
Therfield	0	0	0.215	0.215
Wesion	0.715	0	0	0.715
Wymondley	1.92	4.192	0	6.112
Totals	67.562	133.351	59.605	260.518

Table 13.12: Assignable infrastructure costs by settlement, including by 5 year tranches

How the infrastructure costs identified in the IDP could be funded

13.49 This chapter concludes with an exploration of how all the infrastructure needs identified within the IDP could potentially be funded. There is an element of speculation with this analysis, given the limitations around defining infrastructure funding and delivery identified in the start of this chapter in table 13.1. Notwithstanding this it is possible to make an assessment of funding growth related infrastructure based on a number of reasoned (and credible) assumptions – and look to several alternative scenarios for meeting the funding gap identified.

Identifying the infrastructure funding gap

13.50 The starting point of this assessment is to identify the infrastructure gap - the residual sum that remains when likely and certain sources of development funding is discounted:

- **likely sources secured from developer contributions:** whilst it is not possible to be certain about this, there are some reasonable assumptions to be made around contributions secured from s106 agreement. For the 6 strategic housing sites identified in Chapter 4, we have made the assumption that infrastructure needs associated with such sites will be met 100% through s106
- **the assumption that CIL will be introduced** and in the main charged on the district's non strategic sites

- **certain sources around government/service funding:** these sources are extremely limited for the reasons set out elsewhere in this chapter. The only funding that is expected to meet this criterion is the £44.4m identified in this IDP for the provision of secondary healthcare; there is at present in effect a guarantee that centralised funding will be secured for this either through the government (Department for Health capital funding) or through the NHS (through private finance initiatives)

Additional evidence in the calculation of infrastructure funding opportunities and analysis of bridging the funding gap

13.51 Other factors which will have potential implications for future infrastructure provision in the district are as set out in Table 13.13 below:

Review of infrastructure funding opportunities	
Key Calculation	Analysis Undertaken
Review of service providers' capital investment evidence	As provided by infrastructure providers and also available in published evidence and included in the IDP
Review of potential government funding programmes	Obtained from research and included in the IDP – includes direct government programmes and finance made available through other bodies (e.g. Herts LEP)
Review of funding likely to be provided by developers through s106 agreements	This has needed to factor in both the April 2015 restrictions imposed on the pooling of planning obligations and the future viability work to be undertaken as part of establishing CIL. This may mean that if a CIL is adopted, the ability to secure funding towards infrastructure through s106 agreements may be diminished if not eliminated on a number of development sites/locations (although the government is consulting on the removal of pooling restrictions on some sites) ³¹
The potential funding generated from a CIL (assuming CIL is introduced)	A calculation of likely revenues generated through CIL over the Plan period
Whether there are any additional public sources of infrastructure funding beyond the programmes identified above	Scoping out other potential sources of funding through a review of potential opportunities
Potential sources of private finance borrowing	Including bonds and loans

Table 13.13: Review of infrastructure funding opportunities

Evidence base for infrastructure funding analysis

13.52 Additionally this analysis draws on the following district evidence base as shown in Table 13.14 overleaf (this is in addition to overall national guidance contained within the NPPF):

³¹ There is the additional factor that if an item or type of infrastructure is identified in the authority's Regulation 123 list (the list identifying what infrastructure the authority may seek to fund through CIL) a contribution to the funding of that infrastructure through s106 cannot be sought

Category	Key areas of evidence
Transport	LTP 3 and supporting (daughter) documents. Includes highway schemes, Walking and Cycling, Intra-link Strategy, Inter-urban Route Strategy, Rural Transport Strategy
Transport	Transport Vision 2050 (emerging as LTP4)
Transport	North Herts District Council Transport Strategy (October 2017) (Markides Associates)
Transport	HCC Bus Strategy 2011 – 31
Transport	Urban Transport Plans for Baldock and Letchworth (2007) Hitchin (2011) and Royston (2010)
Transport	The Roads Investment Strategy: RIS1 2015/16 – 2019/20 and RIS2 (as emerging) 2020/21 – 2024/25
Transport	Network Rail Control Period 5 (2014 – 2019) and CP6 (2019 – 24)
Transport	The 2016 Rail Strategy (Herts County Council)
Transport	Local Transport Bodies (Local Major Schemes)
Transport	Thameslink, Southern and Great Northern (TSGN) franchise (July 2015)
Transport	Growth and Transport Plan for North Hertfordshire – Evidence Packs
Transport/Economic Development	Herts LEP Strategic Economic Plan and Growth Deal announcements
Education	Meeting the Rising Demand for School Places (Primary and Secondary)
Education	Early Years, Primary and Secondary School Planning (written advice provided by Hertfordshire County Council)
Health	NHS Five Year Forward View: NHS Planning Guidance 2016/17 – 2020/21
Health	Herts and West Essex Sustainability and Transformation Plan 2016 – 2021 'A Healthier Future' (December 2016)
Health	Formula for the capital costs associated with primary and secondary healthcare provision from NHS England and East and North Herts CCG
Social Infrastructure	Indoor Sports Facilities Study (February 2015) and Assessment Report (2016)
Social Infrastructure	Open Space Review and Standards (2016)
Social Infrastructure	'Inspiring Libraries' 2014 – 2024 (2014)
Waste and Recycling	HCC's Waste Site Allocations document (2014)
Potable Water	Affinity Water's Water Resources Management Plan (WRMP14) 2015 – 2040 (2014) Anglian Water
Waste Water	Thames Water and Anglian Water's Asset Management Plan AMP6 (2015 – 2020) and emerging AMP7 (2020 – 25)
Broadband	Connected Counties (Herts and Bucks) superfast broadband rollout
General	Masterplanning work associated with the district's strategic housing sites

Table 13.14: The infrastructure planning evidence base

13.53 When all the above factors are taken into account, the Infrastructure Funding Gap to be filled by public and private funding sources beyond those already identified or anticipated is as follows:

Factor	Financial figure identified (£m)	Reference in the IDP/calculation
Infrastructure Need (£m)		
Total Infrastructure cost	293	This Chapter (Table 13.10)
Infrastructure Funding Contributions		
s106 on strategic sites – assumption that entire IDP requirements can be met via this means	139	See Chapter 4, specifically Tables 4.12 – 4.18
CIL contribution from windfalls and unidentified broad locations/urban capacity sites/village allocation/other non-strategic greenfield extensions	37.6	Not applicable. But note: (1) Calculation is based on a charge of £100/sq.m. on 70% of all such development; and (2) If CIL is not introduced, then s106 agreements could be sought in respect of such development, albeit it is not certain that the same funding contribution could be achieved, given pooling restrictions
Secondary healthcare costs met by Dept for Health	44.4	See Chapter 7 and 13.49 above
Overall Total from anticipated funding contributions: £221m		
Infrastructure Funding Gap to be bridged	£72m	

Table 13.15: calculating likely infrastructure funding contributions and isolating the funding gap

The feasibility of bridging the funding gap

13.54 With the calculations around growth related infrastructure need and the assumptions around developer contributions within this IDP, developer contributions are calculated to meet around 75% of total infrastructure costs; the question then arises as to whether this gives rise to any specific issues around delivering the infrastructure required.

13.55 Whilst it is not possible to provide a definitive answer, the following conclusions are pertinent:

- the presence of a funding gap in infrastructure planning is far from unusual, and it can in fact be regarded as the norm; demonstrating a funding gap is a requirement for any local authority proposing the introduction of a CIL and there does not appear to be any evidence that any of the 220+ local authorities who have so far engaged in the preparation for or adoption of a CIL have failed to achieve this
- the gap at 25% is relatively small, and could potentially be filled by seeking higher rates of CIL or negotiating increased s106 contributions than the relatively cautious assumptions that have been taken both in the IDP and in separate viability work
- there is in any event – and as noted in the IDP - a plethora of alternative means of bridging the funding gap than developer contributions and, as has equally been noted, public funding programmes specifically targeting infrastructure funding gaps to unlock development and free up stalled projects

13.56 On this basis it is not considered that the infrastructure funding gap identified in the IDP is in any sense unbridgeable.

Potential options for bridging the Infrastructure Funding Gap

13.57 This chapter concludes by considering ways in which the infrastructure funding gap of £72m could be bridged. Three options are identified in Table 13.16 - essentially these are variants around opportunities set out earlier in this chapter:

- Tapping into government programmes³²
- Selective use of bonds, loans and techniques for capturing land value uplifts secured through infrastructure investment

Infrastructure Funding Gap	£72m
Bridging the Gap Option 1: Government Programmes	Ensuring delivery of housing supply £ 30m
	Congestion busting/air quality £ 12m
	Productivity improvements £ 30m
Bridging the Gap Option 2: Government programmes + Bonds, Loans and Capturing Land Value uplifts	Ensuring delivery of housing supply £ 15m
	Congestion busting/air quality £ 10m
	Productivity improvements £ 15m
	Bond/loan/capturing land value uplifts £ 32m
Bridging the Gap Option 3: Bonds, Loans and Capturing Land Value uplifts	Bond/loan/capturing land value uplifts £ 72m

Table 13.6: Potential options for bridging the anticipated North Herts growth related infrastructure funding gap

13.58 Whilst it is difficult at present to be specific about the eventual route to be taken to bridge the anticipated funding gap, it is clear that there are likely to be alternative options for those involved in infrastructure planning and delivery to pursue.

³² Government programmes (and also, potentially bonds/loans) are going to be important as a number of transport schemes are needed in any event in a 'Do Nothing' scenario – it would be unreasonable for new development to be asked to meet the cost of this through s106/CIL