

North Herts District Council

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

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Prepared by Rob Shipway. RS Regeneration, on behalf of North Herts District Council



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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 Herts. This is the basis that the figure of the circa 14,400 new dwellings is set out in Chapter 4 (Local Growth Strategy) to this report is arrived at¹. 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 such a long period – up to 15 years – is by no means a straightforward matter, however. 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 speculation.

More than this, however, the precise nature of what is needed in a range of services – indeed, perhaps all services – has and most probably will 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 – not forgetting also that expectations of what communities feel they need to be provided with – is also constantly shifting.

To this mix must be added the historic infrastructure that has been identified but never provided – what some call 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.

What this IDP hopefully achieves is the 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 stake 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 currently and will continue to be 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 necessary 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 is one that involves the local planning authority working closely with infrastructure providers to determine requirements over time. Such engagement is an important process in itself 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 cut-off date on March 31st 2016 has been selected, and this document examines infrastructure need from that date until the end of the plan period – 2031]*
- 1.7 Further to this, 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 from the outset to set out precisely what an IDP represents (and equally what it does not).

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.

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 should only reasonably address that element of need directly associated with growth

1.14 There is one exception to this, however, and this relates to the **provision of transportation infrastructure**. 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 of these 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 follow 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 also required to support different scales of development within an area:
- 1.20** 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;
- 1.21** 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
- 1.22** 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

- 1.23** A few words of explanation are needed to explain the geographies of this IDP. 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.
- 1.24** The reason for doing this is twofold. Firstly, the effect of new development may be felt 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 away from the site through Community Infrastructure Levy (if CIL is introduced)².
- 1.25** 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
- 1.26** There is therefore no common currency 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

- 1.27** This document has been prepared for North Herts District Council and is intended to support the delivery of the Council's emerging Local Plan. Whilst as already noted 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 Community Infrastructure Levy charging schedule.
- 1.28** 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 living document, and will require updating, periodically, to take account of further updates to the plans and programmes on which it is based.

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 (s106) in this report should be considered interchangeable as appropriate.

2. Profile of North Hertfordshire

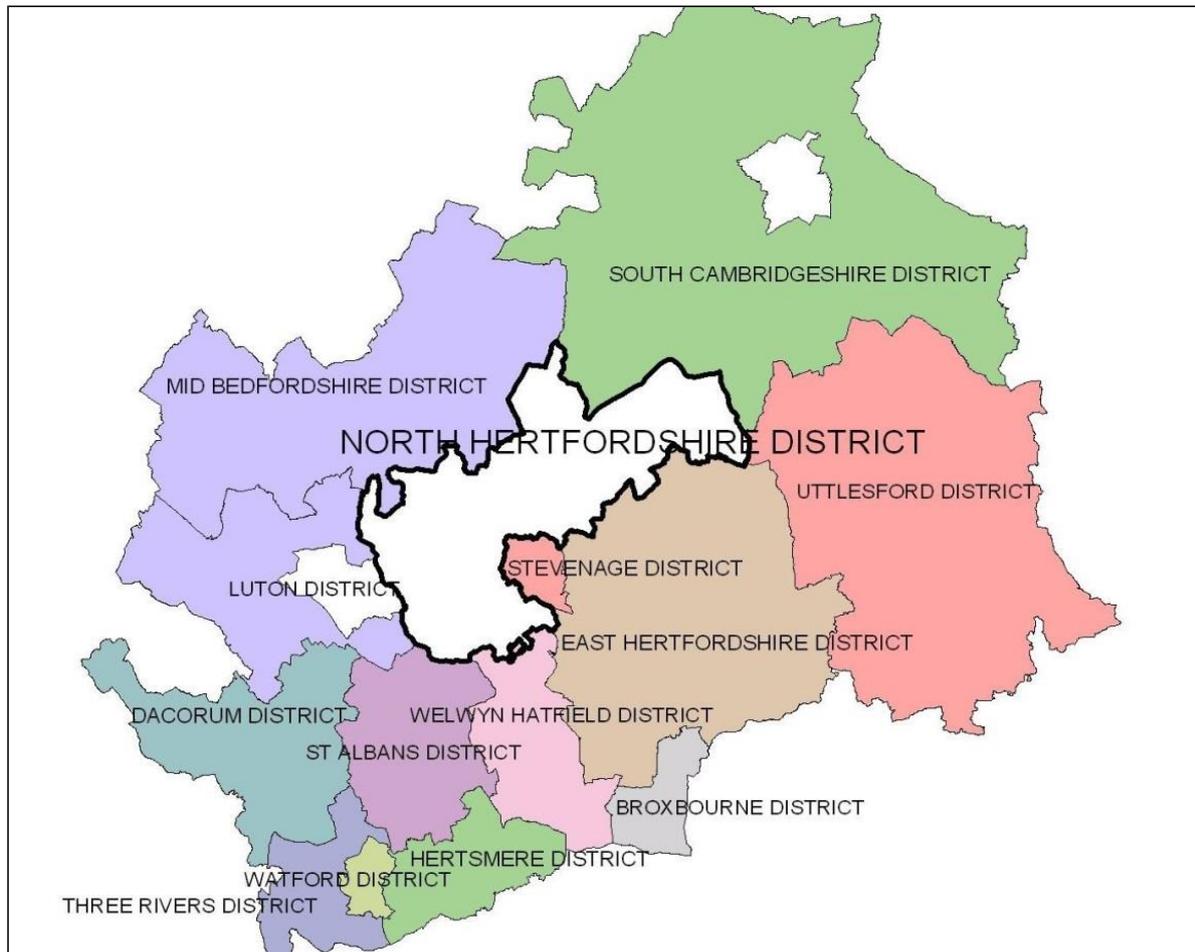


Figure 1: Map of the district and its neighbours

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, with 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, London and Cambridge and to 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 speaking north/south corridors and radial route 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 This section sets out the context in which the Infrastructure Delivery Plan has been prepared.

National Policy Framework - Infrastructure Planning

- 3.2 The National Planning Policy Framework (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. (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

- 3.4 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 (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 (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 (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 (paragraph 73).

- Support the provision of high quality communications infrastructure including high speed broadband (paragraph 42).

Viability

- 3.5** 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*”.
- 3.6** 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.
- 3.7** 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
- 3.8** The NPPG states that these principles will also be relevant for CIL.

Viability

The Local Plan Viability Assessment

- 3.9** 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.
- 3.10** 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 affordable housing albeit that negotiation against any affordable housing targets which are set may be required in certain instances.

The 2016 countywide Viability Study

- 3.11** 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.
- 3.12** 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.
- 3.13** 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 later in 2016 and may prove influential in future infrastructure planning.

The Community Infrastructure Levy

- 3.14** 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.
- 3.15** Since then, the CIL Regulations 2010 have been amended no less than 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.
- 3.16** 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.
- 3.17** 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.
- 3.18** 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.
- 3.19** 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

3.20 In November 2015 the government established a review panel to consider the potential for further changes to the CIL regime. The panel is yet to publish its findings but is thought considering whether measures requiring a proportion of levy receipts to be passed to parish councils is encouraging communities to support development. In the interim it is perhaps worth noting that London Mayoral CIL, introduced in 2012 to secure CIL contributions towards Crossrail, is set to pass its £300m target by March 2016 more than two years ahead of schedule.

3.19 The District Council is expected to make a decision about whether or not to introduce CIL later in the year once the outcome of the government's review is known.

Hertfordshire Planning Framework

3.20 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), the collaborative working on infrastructure need that continues to take place, the presence of large town 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)

3.21 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.

3.22 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)

3.23 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'.

3.24 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.

3.25 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

3.26 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

3.24 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.

3.25 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

3.26 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

3.27 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.

3.28 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 2012/21 onwards).

The LEP EU Investment Strategy

- 3.29** 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.
- 3.30** 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.
- 3.31** 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

- 3.32** 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

- 3.33** 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.
- 3.34** The study concentrated on the growth areas and key centres for development change (KDCs) 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.
- 3.35** 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 little 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.
- 3.36** 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

3.37 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

3.38 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

3.39 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.

3.40 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.

3.41 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.

3.42 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

3.43 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.

- 3.44** 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.
- 3.45** 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.

Methodology

- 3.46** 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 formed the basis of some of the work undertaken for this IDP.
- 3.47** 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

- 3.48** It is acknowledged that there are gaps in the evidence gathered, as 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 in 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 (looking at water and sewerage needs well beyond typical plan periods to 2051 – see Chapter 12)) but few if any are likely to follow this route.
- 3.49** For many providers it is difficult to predict what may happen in 20 years time due given unforeseen and unpredictable changes in 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.

- 3.50** 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.
- 3.51** 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

- 4.2 An explanation of the differences between Objectively Assessed Need (OAN) figures, Local Plan targets and the number of dwellings for being assessed for future infrastructure needs in this IDP is required. The OAN figure for North Herts for the plan period 2011 - 2031 is 14,400 dwellings. Currently the current plan target is 16,550 which comprises 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 This IDP is based on dwelling numbers and prospective sites that were originally determined in March 2016. At that time the emerging growth strategy for testing through the Local Plan evidence base identified potential allocations together with completions at around 17,500 dwellings. Since then overall Local Plan housing targets have been reduced by around 600 dwellings as certain sites have been excluded from the overall growth strategy, the Council's Objectively Assessed Need for housing has been reviewed, whilst for other sites potential capacity has been reviewed. These changes have been made too late to reflect this in IDP testing but this IDP is based on a higher figure than in the Local Plan. This may mean a slight over inflation of overall infrastructure need, albeit within tolerable limits.
- 4.4 The other point to note (as covered in detail in 4.7 below) is the fact that the IDP examines only that part of the Local Plan housing growth target that has yet to be delivered, so for the purposes of the IDP, all development that has taken place before 31st March 2016 (and indeed all proposed development under construction at that date and development sites consented but yet to commence where planning obligations have been entered into) are not considered. This means that the IDP is concerned with the infrastructure needs of around 14,400 new dwellings yet to (but expected to) be delivered within the plan period.
- 4.5 To illustrate this further a breakdown of the IDP calculations is as follows:

Development characteristic	Numbers
Dwellings completed/consented up to 31.03.16	3035
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	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)	864
Greenfield extensions to the 4 district's 4 major settlements and east of Luton and at Stevenage (See Table 4.4)	9763
Village allocations (see Table 4.5)	2145
Total	17457
Of which numbers to be planned for in terms of meeting their infrastructure needs (overall total minus completions and permissions to 31.03.16)	14422

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

Completions/consents

- 4.6** The completed/consents figure comprises completions and permissions from the Local Plan commencement date of 2011 up to 31 December 2015 (2473 dwellings) plus a further 562 dwellings from the proposed allocations that have been permitted subject to s106, totalling 3035 dwellings in all.
- 4.7** This IDP has chosen the date of 31st March 2016 as the cut-off point for the purposes of future infrastructure planning for development being forward within the Plan period. It takes the view that up to then, infrastructure providers - given the knowledge they would have had of proposed developments to that date - 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" tally includes a number of significant sites, including 330 dwellings north of Newmarket Road Royston (where there is currently a resolution to grant planning consent subject to a 106 agreement).
- 4.8** Of course there can be no guarantee that such factoring in has taken place and should that be the case, then this will merely add to the infrastructure deficit in both this and other districts in Hertfordshire identified in the 2009 HHS study summarised in Chapter 3.
- 4.9** Infrastructure providers will be urged to ensure proper provision is made to address such deficits as well as plan for new growth and there is some evidence - as shown in, for instance, in the education and healthcare chapters - that service providers are taking a more holistic approach to the planning and delivery of new infrastructure. New and ongoing funding programmes are identified in Chapter 13 (The Funding and Delivery of Infrastructure). When and if introduced, CIL will give the District Council a measure of control over directing funding towards any notable omissions in infrastructure provision.

Urban Capacity Sites in the district's 4 major settlements (Baldock, Hitchin, Letchworth, and Royston) plus windfalls and broad locations

- 4.10** For the purposes of infrastructure planning an important distinction is drawn between urban capacity sites (those to be located within the main fabric of a major settlement) and major greenfield extensions, and the following sections provided a clear distinction between the two.
- 4.11** There are three reasons for doing this:
- 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 instance, a new primary school within an existing town may become necessary because of the collective impact of a large number of small housing developments whereas in a large greenfield development one (or possibly more) primary school will be required as a consequence of that development alone
 - 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, with the availability of CIL (if introduced) coupled with the restrictions that have been introduced on the use of s106 agreements (see Chapter 13) 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 developers. An additional consideration is that sites in urban areas are more likely to be exempted from contributions by virtue of the fact that prior approvals will be in place

Windfall sites and broad (but unidentified) locations

- 4.12** Another factor to consider is the question of the allowance for windfalls and broad allocations for as yet unidentified sites. 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.
- 4.13** In the absence of other criteria for identifying the location for such growth the IDP assigns windfalls (1100 dwellings) and unspecified broad locations (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 is then added in to establish the following assignment:

Settlement	Total	Phasing		
		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

- 4.14** The above figures 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 ‘safest’ locations.

Urban Capacity sites in the district's 4 major settlements

- 4.15** 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 unspecified 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

- 4.16 Major development expected take place in greenfield extensions beyond existing major settlement boundaries and at Stevenage/Luton is set out with phasing detailed:

Location	Total	Phasing		
		To 2021	2022 - 26	2027 - 31
Baldock (Blackhorse Farm)	2500	100	1150	1250
Baldock (sites at Clothall Common and Farm)	495	300	195	0
Hitchin (Highover Farm)	700	150	500	50
Hitchin (Grays Lane/Lucas Lane Area)	115	39	76	0
Hitchin (Land N of Pound Farm)	84	0	34	50
Hitchin Priory Field	300	0	60	240
Letchworth (Letchworth North)	900	0	400	500
Letchworth (Land East of Kristiansand Way)	120	120	0	0
Luton (Luton North West)	1050	50	500	500
Luton (Luton East)	350	30	150	170
Luton (Luton North East)	700	60	300	340
Royston West (Land W Ivy Farm)	279	130	149	0
Royston (North of Lindsay Close)	40	0	40	0
Royston (Land S of Newmarket Road)	300	0	180	120
Stevenage (Roundwood)	330	230	100	0
Stevenage (Mendip Way Great Ashby)	600	50	500	50
Stevenage (North)	900	0	275	625
Total	9763	1259	4609	3895

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

- 4.17 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 in the urban capacity column for the reasons that they are likely to be treated differently in infrastructure planning terms, as set out in 4.11 above (although the list does include several small sites where infrastructure need can be considered cumulatively with other (nearby/larger) greenfield sites.

Development within villages

- 4.18 The anticipated development in the district's villages (net of permissions and completions) is as set out below, together with phasing:

Village settlement	Total (No. sites)	Phasing		
		To 2021	2022 - 26	2027 - 31
Ashwell	33 (1)	33	0	0
Barkway	173 (3)	33	0	140
Codicote	315 (4)	90	98	127
Graveley	8 (1)	0	8	0
Ickleford	331 (5)	120	162	49
Kimpton	13(1)	13	0	0
Kings Walden	36(2)	0	36	0
Knebworth	638(4)	50	344	244
Pirton	58(1)	58	0	0
Preston	21(1)	0	21	0

Village settlement	Total (No. sites)	Phasing		
		To 2021	2022 - 26	2027 - 31
Reed	22 (1)	0	22	0
St Ippolyts	52(2)	32	20	0
St Paul's Walden	81(2)	81	0	0
Therfield	24(2)	24	0	0
Weston	40(1)	40	0	0
Wyndley	300(1)	100	200	0
Totals	2145 (32)	674	911	560

Table 4.5: Village allocations (all of which are currently unconsented)

Overall phasing

4.19 Taking all the above into account the overall phasing within the plan is as follows:

Category	Total	Phasing		
		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

- 4.20 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 is the impact of traffic flows on adjoining roads.
- 4.21 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.
- 4.22 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.
- 4.23 Two tables setting out the significance of these interrelationships is set out below:

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

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

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

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

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

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

4.24 To consider Table 4.8 further, the following developments are taken into account in the preparation of the IDP.

Authority	Local Plan status	Commentary
Central Bedfordshire Council	The authority undertook a 'Call for Sites' consultation earlier this year and received 830 submissions. It is currently undertaking a technical assessment of these submissions, a task it will complete later this year	Whilst a number of sites adjoin or are close to the boundary of Central Beds and North Herts it is too early to say how many (if any) will be brought forward as part of the Central Beds local plan growth strategy
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
Welwyn Hatfield Borough Council	Within the emerging local plan the Borough Council is expected to bring forward 220 dwellings at Welwyn, all to be delivered by 2020, and 154 at Woolmer Green, 4 of which are expected to be delivered by 2020 and 154 between 2023 – 27.	The Local Plan is intended for publication in early autumn

Table 4.9: Development in adjoining districts relevant to the IDP

Employment Growth

- 4.25** The impact in terms of infrastructure need associated with economic growth in the district is taken into account in certain 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.
- 4.26** 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)
- 4.27** The phasing of the delivery of new employment development is difficult to predict as it is often related to future economic cycles and the investment decisions of businesses who will base their investment decisions on a variety of unknowable factors. In the absence of any other compelling reasons this IDP assumes that the employment space (and the likely jobs created) will be delivered pro rata over the plan period, giving the profile below:

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 4.10: Quantum and phasing of employment land to 2031 (additional land/jobs) (note: figures do not precisely add up due to rounding)

5. Transport

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:

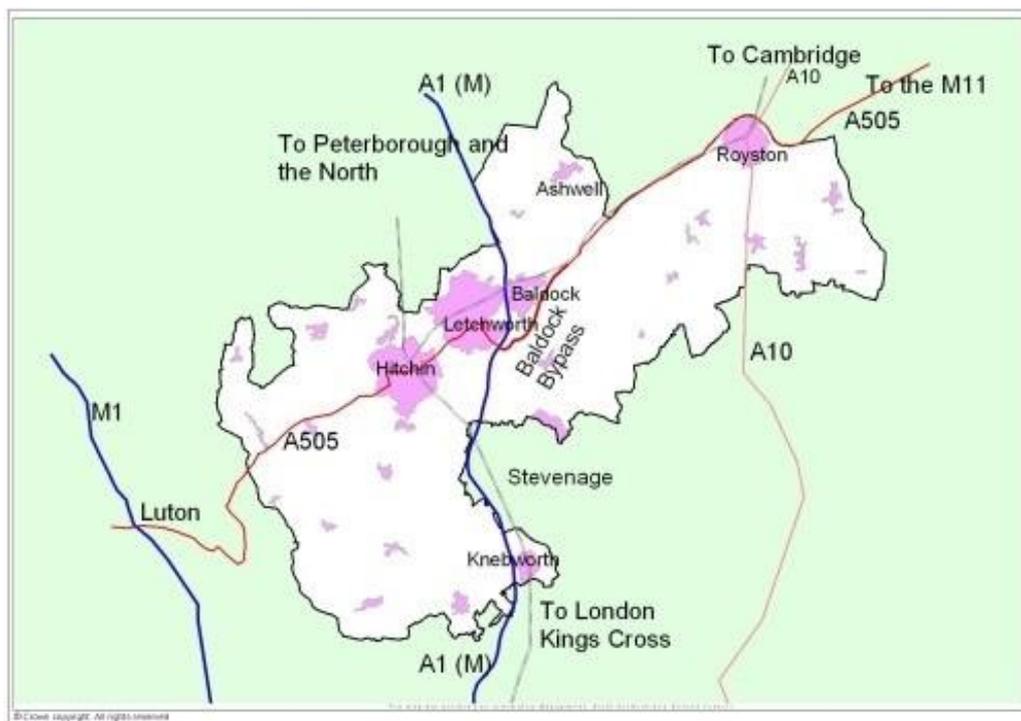


Figure 2: key features relating to transport infrastructure in North Herts

- 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) is 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 is 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 the consequences this will have on 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 details 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 'daughter 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 daughter documents contain measures which are critical to achieving the aims of LTP3; in particular, the aim of reducing car use. The measures listed are extensive, and many do not have timescales or costs associated with them; however, they are an important consideration for future infrastructure planning.

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
- 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, and the investment priority will be focused on a small handful) but 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 A 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 last bullet point in 5.45 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 or 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 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/Willian 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
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

Scheme	Details	Costs (£000)
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
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

Scheme	Details	Costs (£000)
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 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.

6. Education including extended schools

General

- 6.1 Education provision in the North Herts takes many forms, including pre-school education, primary education, secondary education, further education 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 – where requested to do so
- Resourcing the shared maintenance, improvement to, and provision of, the built school environment, and securing value for money

- 6.3 In coming to a view about the most appropriate strategy in response to development growth proposals, HCC is looking for a solution which takes into account each of these elements.

School Planning Context

- 6.4 HCC has a duty to secure sufficient school places in North Herts and indeed the county as a whole, 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. It 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 the picture nationally. The rise is not consistent across the county, with some areas experiencing substantial increases in the primary aged population, whilst in some more rural areas demand is less pressing or currently 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 a 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 are 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 around the 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** The County Council remains responsible for providing the site and meeting all associated capital and pre/post-opening costs, in instances where the new school provision is meeting basic need. 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 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** Early education (nursery) provision will usually be sought as part of the on site provision. From September 2013 the county council also has a statutory responsibility to provide 15hrs early education to eligible 2 year old children across Hertfordshire. In September 2017 a new extended entitlement of an additional 15 hours free childcare will be introduced for working parents in Hertfordshire.

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 there are 10 in North Herts which 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** 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 area 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	Surplus/deficit of Free Early Education places for 2, 3 & 4 year olds 2016 / 2017
NH1 Royston and villages	104
NH2 Baldock Ashwell and Weston	207
NH3 Letchworth North	77
NH4 Letchworth North East	3
NH5 Letchworth South	- 88
NH6 Oughton and villages	153
NH7 Hitchin North East	61
NH8 Hitchin South and villages	- 23
NH9 Graveley and Great Ashby	61
NH10 Knebworth and Woolmer Green	114

Table 6.1: Data on Children’s Centres in North Herts

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, a new development of about 2,500 new homes would create the requirement for a new children’s centre based on an anticipated figure of 800 children aged 0 - 5 years. Given the given the number of new dwellings that remain to be constructed over the period between 2011 - 2031 is around 14,400 new dwellings there may be the requirement for up to **six new Children's Centres** to be provided within the major locations for

growth within the district, and the council will continue to work with HCC to take this forward.

Primary Education Service Planning

6.46 There are a total of 48 primary schools 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 on an area specific basis:

Location	Current capacity	Ability to cope with housing growth
Letchworth	Very limited	None: additional school places required
Baldock Town	Limited	None: additional school places required
Baldock Villages	Some capacity	Some capacity, but additional places required in time
Royston Town	Limited	Currently expanding two first schools to meet demand but additional school places required with further growth
Royston Villages	Some capacity	Some capacity, but additional places required in time
Hitchin West	Some capacity	Some capacity, but additional places required in time
Hitchin South and North	Limited	None: additional school places required
Hitchin Villages South	Some capacity	Some capacity, but additional places required in time
Knebworth	Very limited	None: additional school places required
The Waldens, Kimpton, Breachwood Green	Some capacity	Some capacity, but additional places required in time
Codicote	Very limited	None: additional school places required
Stevenage North West	Deficiency	None: additional school places required
Stevenage North East	Deficiency	None: additional school places required

Table 6.2: Existing primary school capacity

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	At least one new 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 2 fe to meet the needs of growth elsewhere in the town
Baldock Villages	Most probably need will be met by expanding existing schools
Royston Town	2 fe of new first school capacity required plus the expansion of existing schools; however, the emerging local plan notes that it may be more appropriate to meet needs through two smaller 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 primary school required at Highover Farm plus expansion of existing schools. The emerging local plan seeks at least 1 fe primary school with the need to understand the potential to expand nearby Highover JMI to determine whether a 2 fe school is required
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 2 fe primary school to overcome the constraints of an over capacity and constrained 1 fe 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
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

Location	Possible growth related primary provision to 2031
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
Stevenage North East	New primary school required. The emerging local plan considers a 2 fe 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 relatively short term only	Additional school places required from 2022/23
Baldock	At capacity	Additional secondary provision required as a result of housing growth
Royston	Surplus in upper school. Sufficient capacity in the middle schools in the relatively short term	Additional school places in the middle schools required from 2020/21
Hitchin	Deficient (although expansion planned to meet short term demand)	Additional secondary school places required
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 (completion scheduled for 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	Future demand can initially be met but 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

Location	Possible growth related primary provision to 2031
Baldock	Future demand can initially be met but expansion may be required in the longer term, to involve the expansion or relocation of the existing school; the emerging local plan notes however that at least 6 forms of entry are needed to accommodate secondary age requirements for the development North of Baldock, the potential expansion of Knights Templar School in addition and some potential short or medium term need in the south of the town pending long term arrangements
Royston	Future demand can initially be met but expansion may be required in the longer term
Hitchin	The possible expansion of existing schools although there are constraints with 2 of the 3 school sites
Luton expansion in North Herts	Provision of 4FE of additional provision in the form of an 'all through' school
Stevenage	Secondary education needs to be considered in relation to Stevenage. Stevenage's local plan reserves a school site to the east of the town. The County Council is known to have historically sought a further new school in the north of the town (although the definitive location of this facility is uncertain) though assumptions about future pupil yields are critical to establishing the case of need.
Knebworth	There is no secondary school within this settlements and in the emerging local plan the district council considers the case for establishing a new secondary school (possibly an "all through" school) and will wish to explore this further with the education authority

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	Likely 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.
- 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 in any event 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** The main source of funding for additional school places which used to be available was capital funding known as Basic Needs funding but this is no longer available. This now means that the main sources 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 introduction of CIL introduces some uncertainty with the forthcoming limitations on s106 as the County Council 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.
- 6.71** Even with the 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 for larger development sites (of 500 dwellings or more, the equivalent of 1fe) education 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 project or type of infrastructure).
- 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 'rule of 5' considerations and the fact that such development will also be required to pay CIL. Viability considerations are likely to be significant.
- 6.74** For all other development CIL (when introduced) can 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 factors which may influence the provision of education facilities, including:

- Possibly building in a 5% tolerance in school place planning: 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 will be 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 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 6.15 and 6.16 above Hertfordshire County Council's calculation equates to a pupil yield (number of pupils generated within new development) 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. This is very high nationally, 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.

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. 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

6.78 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.

- 6.79** 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.
- 6.80** 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.

7. Healthcare

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 April 2017.
- 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. 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. A separate CCG (the Cambridgeshire and Peterborough CCG) covers Royston and its locality.
- 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 is made up of six locality groups covering each area, each with an allocated health budget. GPs are elected by the local practices to lead and represent the local area. 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 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 to the above, public health functions have now transferred to local authorities (in Hertfordshire's case, the County Council) 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.
- 7.14** In addition 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 of the 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
Nevells Road	27	No	- 2425
Garden City	16	Yes	1614
Sollershoot East	15	Yes	1600
Royston and Eastern Villages			
Royston Health Centre ¹	32	No	- 5571
Barley Practice (including	20	No	-1809

Name of Practice	Patients/sq.m.	Spare capacity?	No of additional patients that could be accommodated
the branch Market Hill Surgery, Royston)			
Roysia Surgery	24	No	-2053
Southern Villages			
Whitwell	13	Yes	1360
Knebworth Medical Practice	33	No	-5000
Marymead (Knebworth Branch in Stevenage) ²	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 are 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 ¹	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 ³	2100	5040	2.5	0 ²	-2.5
Royston	996	2390	1.1	-0.9	-2.0
Stevenage	1830	4392	2.2	0 ²	-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

Notes:

¹ 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 dwelling³. Were the NHS to adopt the Local Plan standard this would reduce the overall GP requirements by around 25%

² GMS requirements will need to be considered in relation to existing GP capacity or shortfall in both Luton and Stevenage

³ 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

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 As noted below the exact provision of new GMS services will be determined by a range of factors and (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 as follows:

- 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

³ This ratio should not be confused with average household size. Changes in household formation mean that an unchanged population in 2031 would require more homes than in 2011.

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 this, 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 HNHS 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) use a slightly different formula). This calculation is based on a formula adopted across the NHS Midlands and East (Central Midlands) team to provide consistency for all the 25 local authorities it works with and as part of the single operating model of best practice it has 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 (<i>again</i> 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

7.34 Using this formula, for the development anticipated in the growth strategy detailed in the emerging Local Plan (see Table 4.1 in the Local Plan Growth Chapter (Chapter 4) 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 7.3: 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 an application for a new health centre at Knebworth which will help fulfil 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 Recently NHS England have indicated that their latest preference is for 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 7.4: 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

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

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 change 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 felt 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** with national action on obesity, smoking, alcohol and other major health risks, workplace incentives to promote employee health and cut sickness-related unemployment, and the advocacy of stronger public health-related powers for local government and elected mayors.
 - **giving patients greater control of their own care**, including the option of shared budgets combining health and social care, support for unpaid

carers and improved partnerships with voluntary organisations and local communities

- **more care being delivered locally**, which will involve breaking down traditional barriers between GPs and hospitals, between physical and mental 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 nurses, other community health services, hospital specialists and perhaps mental health and social care to create integrated out-of-hospital care (the Multispecialty Community Provider); or the integration of hospitals and primary care providers (Primary and Acute Care Systems) combining for the first time general practice and hospital services
- **The redesign across the NHS of urgent and emergency care services** to integrate A&E departments, GP out-of-hours services, urgent care centres, NHS 111, and ambulance services
- **Smaller hospitals being granted new options** to help them remain viable, including forming partnerships with other hospitals further afield, and partnering with specialist hospitals to provide more local services
- **Clinical Commissioning Groups being given the option of more control** over the wider NHS budget, enabling a shift in investment from acute to primary and community services
- **An improved focus on health technology** coupled with expansions in research and innovation (including by developing new 'test bed' sites for worldwide innovators, and new 'green field' sites where completely new NHS services will be designed from scratch).

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

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 one year Operational Plan for 2016/17, organisation-based but consistent with the emerging STP.

7.58 The December 2015 guidance identifies 9 'must dos' for every local system, all of which are highly relevant to the provision of health infrastructure in the future, a summary of which listed in the table overleaf:

The 9 'must dos' for 2016/17 for every local system in responding to the Forward View:

1. Develop a high quality and agreed STP, achieving locally critical milestones for accelerating progress in 2016/17 towards achieving the aims of the Forward View
2. Return the system to aggregate financial balance. This includes secondary care

providers delivering efficiency savings

3. Develop and implement a local plan to address the sustainability and quality of general practice, including workforce and workload issues
4. Get back on track with access standards for A&E and ambulance waits, ensuring more than 95 percent of patients wait no more than four hours in A&E, and that all ambulance trusts respond to 75 percent of Category A calls within eight minutes
5. Improvement against and maintenance of the NHS Constitution standards that more than 92 percent of patients on non-emergency pathways wait no more than 18 weeks from referral to treatment, including offering patient choice
6. Deliver the NHS Constitution 62 day cancer waiting standard, including by securing adequate diagnostic capacity; continue to deliver the constitutional two week and 31day cancer standards and make progress in improving one-year survival rates
7. Achieve and maintain the two new mental health access standards, ensuring more than 50 percent of people experiencing a first episode of psychosis will commence treatment within two weeks of referral, and continuing to meet a dementia diagnosis rate of at least two-thirds of the estimated number of people with dementia
8. Deliver actions to transform care for people with learning disabilities, including implementing enhanced community provision, reducing inpatient capacity, and rolling out care and treatment reviews in line with published policy.
9. Develop and implement an affordable plan to make improvements in quality

7.59 Future health infrastructure provision also needs to reflect the publication in April 2016 of the *General Practice Forward View* which acknowledges underinvestment in GP services and defines the following actions to address it, including:

- accelerating funding for primary care
- expanding and supporting GP and wider primary care staffing
- reduce practice burdens and help release time
- develop the primary care estate and invest in better technology
- provide a major programme of improvement support to practices

7.59 In responding to the General Practice Forward View and the quest to secure a steady improvement in the quality of primary care provision the ENHCCG's Primary Care Strategy (April 2016) recognises the following challenges set out overleaf:

The challenges in providing primary healthcare (from ENHCCG's Primary Care Strategy, Apr 2016)

- The population is a growing and ageing one. More people are living with multiple long-term physical and mental health conditions which place increasing demands on general practice and community services. There are also ever-increasing demands on hospital emergency departments and unscheduled admissions
- There has been an increase in the 0-17 age group becoming significant service users
- One in four of the population will need treatment for mental health problems at some point in their lifetime and the majority of these will be managed in general practice

- A variety of information and technology systems used across health and social care services do not connect with each other meaning delivery of care is not as efficient, effective and safe as it could be
- Some premises are not fit for purpose and do not meet the minimum standards that all patients should expect in 2016. Patients are frequently left frustrated as it is often difficult to get appointments when needed
- There is a shortage of staff in general practice and recruitment is difficult. This affects the ability to provide consistently high quality care and access to services
- There are variations across east and north Hertfordshire in areas such as access to general practice services, A&E attendances, hospital admissions, outpatients' appointments, long-term conditions management and cancer screening and outcomes

Infrastructure Funding and Delivery

The phasing of new infrastructure

- 7.60** The health infrastructure needed as a result of growth in North 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 gives the following phasing profile below:

Category	Total (£m)	Cost Phasing		
		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

The funding and delivery of health infrastructure

- 7.61** Infrastructure funding and delivery is considered in detail in Chapter 13 so this chapter considers the headline issues associated with funding and delivering growth.
- 7.62** 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 (when introduced).
- 7.63** 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.
- 7.64** The future introduction of CIL introduces some uncertainty with the forthcoming 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.

- 7.65** Even with the eventual introduction of CIL s106 will however remain relevant for 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 'rule of 5', the rule which prevents the collection of more than 5 obligations towards a project or type of infrastructure).
- 7.66** Given this it might mean that 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.
- 7.67** For the health infrastructure needs arising from all other development CIL (when introduced) can 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.

8. Social Infrastructure

- 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 has an Indoor Sports Facilities Study which was published in February 2016.

Sports Halls

- 8.4 Indoor multi-sport sports halls are a key facility 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 (i.e., the size of one badminton court including surrounding safety area) and include specifically designed sports halls, such as leisure centres and school sports halls. Additionally, there are “activity halls” venues not specifically design for sports but where sporting activities can take place, 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, with 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, and their accessibility and overall condition. Like many other local authorities, the district council utilises Sport England’s Sports Facilities Calculator (SFC) to calculate future needs. Taking all relevant factors into account, the SFC calculates **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 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 but within a 15-minute drive time and a further three pools within a 20-minute drive.

- 8.9** The Council is investing 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, and this will be costly.
- 8.10** Sport England's Sports Facilities Calculator 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 very high with 18.72 sq.m. of water space per 1000 people, compared with 12.65sq m per 1000 people in England. The district has sufficient capacity to meet some demand from neighbouring local authority areas.
- 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 above 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 and the expansion of others, but these are matters to be considered in detail in future.

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 Study 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** Research suggests that 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, but given demand in the district is higher than average and the likely impact of future growth, whilst no additional provision can be identified at present this is something that needs to be kept under review.

Indoor Bowls

- 8.16** There is just one pay and play bowls facility at Riverain in North Hertfordshire, providing 6 rinks, although 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 just across the district boundary 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 additional indoor tennis facility despite the growth in the district being contemplated.

Squash Courts

- 8.18** There are a total of 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 of which two are glass backed. The other squash courts in the authority area 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. 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 at the present 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 (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 will be 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 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
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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. Taking into account the total population in the district of 126, 186 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	Floorspace (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

Library	Tier	Floorspace (sq.m.)	Current provision	Additional provision required
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
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. They are 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, particularly when CIL is introduced within the district.

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** Flexicare and Extra Care: 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** Accommodation for independence: 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** Supported Living and residential accommodation: 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** Transition services: In 2016-17 130 young people will 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** Short Breaks: 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** Residential: 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** General Housing: 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** Specialist provision: 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: 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** Residential Care: 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** Recovery services: 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** Move-on Accommodation: 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 one 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 purse 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 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 for any new or expands 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 are wanting 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. 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.
- 8.72** 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.
- 8.73** There is a Village Halls Handbook on the North Herts website that provides detailed information on the location of all the village halls, their accessibility and the facilities that each has to offer.

Existing Provision

- 8.74** There are eleven community centres, four town halls and thirty four 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 and CIL.

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

8.82 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.

8.83 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

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 at:

<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 at:

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 website:

www.herts.police.uk

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 in the light of 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 wholetime 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.

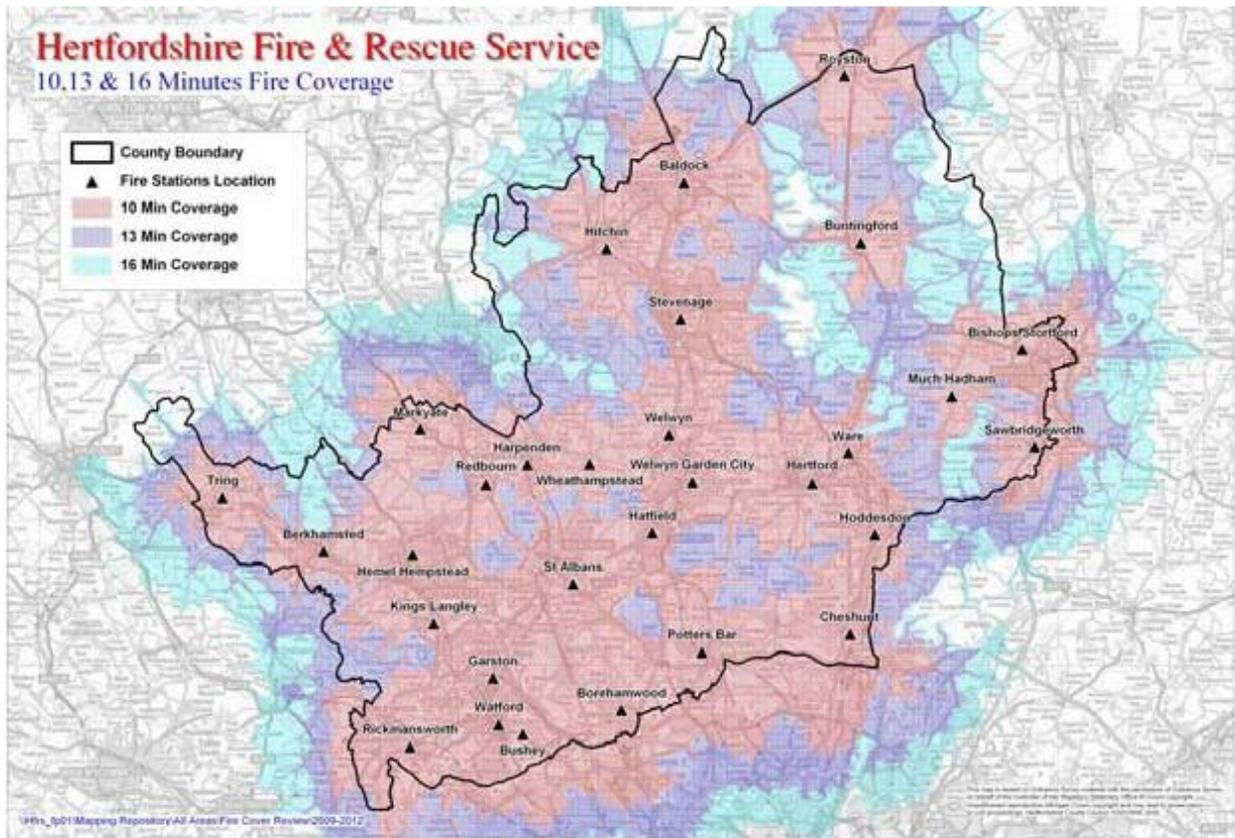
9.21 Planned growth and future plans for development within the district appear to be covered by the Fire Authority's ten-minute attendance standard using the existing Fire and Rescue Service resources within the district (this includes areas of possible growth in and around Stevenage).

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. As of now however 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

- 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** An important document is North Hertfordshire Green Infrastructure Plan (GIP) prepared in 2009. This has a more strategic role than the Green Space Management Strategy (see 10.8 below) 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 Green Infrastructure Plan 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 overleaf identifies the highest priority projects identified in the Green Infrastructure Plan:

Location	Scope of works	Cost band (Low/Med/High) or Major Project
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)
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.

The Green Space Management Strategy

- 10.8** The Council published a Green Space Management Strategy in 2014 and covering the period 2014 – 19, replacing the 2009 version which had set in motion a proactive approach for the management of green space. 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
- 10.9** 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.
- 10.10** 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.
- 10.11** 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

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

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

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 ¹	18 ¹	Very wide range of enhancement works	500
Grand Total			2,024

Table 10.2 Open Space Investment Priorities

¹Note: 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

Outdoor sports facilities

- 10.14** The other key aspect of green infrastructure is that of outdoor sports facilities. North Herts have produced two reports examining this issue, a Playing Pitch Strategy Assessment report and a separate Action Plan, both released in 2016. The Action Plan covers the period 2015 - 2025
- 10.15** 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 and 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.
- 10.16** The Action Plan takes the outcomes from the Playing Pitch Assessment and explores future provision which can then inform the emerging local plan as well as this IDP. Some of the conclusions in this report are addressed in the Social Infrastructure Chapter (Chapter 8).
- 10.17** 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.
- 10.18** 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

- 10.19** 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.
- 10.20** Further to this, contributions may also be sought to enhance existing green infrastructure where demand from population growth has the potential to impact upon service provision.
- 10.21** 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). These are areas which will all need further exploration.

11. Waste and Recycling

Background

- 11.1 The Hertfordshire Waste Local Plan (WLP) is comprised of 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. The document should also 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 utilises Works Road as a depot and 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 EHC 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 areas of search 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.
- 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 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 previously they have 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 stations 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, rather than through CIL.

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 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

Location	Supply issues
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 about five years ago 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 is 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 of this, 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 Code for Sustainable Homes.

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 (i.e. once planning permission is granted). 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 constrain 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

Name of Facility	Capacity
Whitwell WWTW	No current or anticipated capacity issues
Breachwood Green WWTW	No current or anticipated capacity issues
Thefield 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
Thefield	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 concluded 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 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 the autumn of 2016 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 10Mbs 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

Key contextual considerations relating to infrastructure funding

- 13.1** Before embarking on a detailed consideration of infrastructure funding and delivery it is important to establish a certain level of context. This is necessary because this IDP - like all others produced by other local planning authorities in support of their local plan - is not in any sort of position to identify where the infrastructure associated with future growth set out in the emerging local plan will be certain to be funded.
- 13.2** There are good reasons for this, as set out below, but it is important to state that the IDP represents the starting point and not the end of a journey to secure the funding necessary to ensure the appropriate infrastructure identified within it is delivered. What the IDP does seek to provide is an honest assessment of need based on the emerging local plan and 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. The following table 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 paint the full picture	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 seen many such changes recently (for instance the extension of free nursery education to all 3 and some 2 year olds) and new programmes (such as the Roads Investment Strategy). 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 (and most probably increases in demand for) provision are bound to come about
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

Nature of limitation	Comment	Impact
Competitive bidding for some public funds creates uncertainty	Certain public funding programmes (e.g. Growth Deal) are competitive in nature and cannot be guaranteed through 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
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

Nature of limitation	Comment	Impact
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

- 13.4** 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 dwindled away,
- 13.6** Government funding for new infrastructure through its own direct programmes or through arm's length companies like Network Rail and Broadband UK has ebbed and flowed over the years. At present there is access (through competitive funding) to growth related infrastructure (e.g. the Local Growth Deal) and some (although limited) schools funding through the Priority Schools Rebuilding Programme.
- 13.7** Government direct/indirect funding for provision such as health, the emergency services, social and green infrastructure and utility provision is 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.
- 13.8** The government has freed up Network Rail and Highways England to make them arm's length companies who will then (subject to government approval) access the

financial markets for borrowing, and it will be interesting to see particularly with the latter what difference this will make to roads investment.

- 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, but 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 scaling back of s106 obligations, which took place in April 2015.
- 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 (if introduced) 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 be 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. With such scale of development there is a strong possibility that the sites in question will be defined in the CIL Charging Schedule and CIL rates will be low or zero

Scale of development	CIL (if introduced) or S106
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 tend to be significant for such developments. If not defined in the Charging Schedule and the impositions of s106 requirements reflected in CIL rates, viability issues could be significant
Development sites under 200 dwellings	Possibly entirely CIL

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 (for Hertsmere Borough Council in south western Hertfordshire, when it introduced CIL, this residual S106 was established through viability work to be £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.

Governance

- 13.15** Given the above 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
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

Key Governance Issue	Comment
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 13.3: Key governance issues

13.16 Other decisions on governance the district council considers 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 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?

Key governance area	Potential decision to be made
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 13.3: decision making relating to governance

The next early years of infrastructure delivery to 2021

13.17 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 around 2,400 new dwellings can be expected to be delivered. This represents around 17% of the additional total growth expected over the plan period.

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

- infrastructure providers will need to work hard to articulate their needs and make the case for funding from a variety of sources, in particular were CIL to come on stream
- infrastructure providers should also strive to make the maximum use of any spare capacity currently in the system through appropriate resource management systems
- the district council will need to secure the early introduction of CIL if it decides to introduce it
- 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 the most deserving causes
- the district council needs to respond speedily to the outcomes of the North Herts viability study and the County Council led study into viability issues (see Chapter 3) particularly the latter if there is strong evidence 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 particular explore the opportunities for securing funding through later rounds of the LEP's Growth Deal funds
- Likewise, in any refresh of the LEP's Strategic Economic Plan, 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 in particular 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 press its case for priority to be given to the A1(M) Growth and Transport Plan and A1/M11 Growth and Transport

Plans, and then advance their case for transportation projects to be funded through this means

- Innovative funding measures should be supported
- The publication of the Herts Water Study later this year will create 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 must be taken
- Finally, whilst the introduction of new technologies will never be a substitute for the provision of much needed new infrastructure to support emerging communities, every opportunity should be taken to ensure they play their part in keeping down costs of new provision as well as making maximum use of any existing provision

Appendix 1 - Infrastructure Delivery Schedule

The tables below and overleaf set out details of the known infrastructure projects required to support the Local Plan over the years 2011- 2031. As further schemes are identified they will be added to the schedule.

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Woolgrove Road/Cambridge Rd/William Rd Hitchin	Signal controlled system at junction	323	CIL or s106	HCC, NHDC	2022 - 26
Transport: Pirton Road/A505/Upper Tilehouse St/Wratten Rd Hitchin	Change to a signal controlled junction	842	Probably pooled s106	HCC, NHDC	2022 - 26
Transport: Cadwell Ln/Wilbury Way/Woolgrove Rd Hitchin	Connect Wilbury Way and Cadwell Road to N of industrial area, plus redesign of Cadwell Land Junction	5838	S106 or possibly CIL	HCC, NHDC	2022 - 26
Transport: Upper Tilehouse St/A602/Paynes Park Hitchin	Change to a signal controlled junction	1485	CIL or possibly pooled s106	HCC, NHDC	2022 - 26
Transport: Hitchin Road/Arch Rd Hitchin	Change of junction priorities	18.8	CIL	HCC, NHDC	2017 - 21
Transport: A602/B656/Gosmore Rd/St John's Rd Hitchin	Widening approach arms and signalling	1221	CIL	HCC, NHDC	2017 - 21

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Upgrading pedestrian crossings at 3 locations across Hitchin	3 key junctions (at Bedford Road/Fishponds Road, and the Stevenage and London Road approaches to the Hitchin Hill roundabouts) as identified in the UTP. Involves upgrading and where possible new Toucan crossings	487	CIL	HCC, NHDC	2017 - 21
Transport: General footway improvements across Hitchin to improve pedestrian links to industrial areas	Includes new lighting and signing	20	CIL	HCC, NHDC	2017 - 21
Transport: Cycling – general initiatives around Hitchin	Includes advance stop lines, improved signage and covered parking in the town centre	48.79	CIL	HCC, NHDC	2017 - 21
Transport: 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	CIL	HCC, NHDC	2017 - 26
Transport: Hitchin integrated strategy for marketing sustainable modes	A strategy to bring together public transport, cycling, walking and highway schemes	375	CIL	HCC, NHDC	2017 - 21
Transport: Upgrade bus stops in Hitchin	Including Kassel kerbing, shelters level boarding etc. Allowance here is for 10 stops	210	CIL	HCC, NHDC, Bus Operators	2017 - 21

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Traffic calming measures on Stotfold Road Hitchin	To reduce vehicle speeds	110	CIL	HCC, NHDC	2017 - 21
Transport: Improve signalised junctions and pedestrian phasing in Hitchin	4 key junctions identified: In the UTP 1. Cadwell Lane / Woolgrove Road / Grove Road / Wilbury Way; 2. A505 Cambridge Road / Woolgrove Road; 3. Bancroft / Hermitage Road; 4. Queen Street / Hermitage Road)	100	CIL	HCC, NHDC	2017 - 21
Transport: Improved road signage throughout Hitchin	Tackling poor signage	140	CIL	HCC, NHDC	2017 - 21
Transport: Junction improvements along the A505/A602 corridor Hitchin	To deal with capacity issues along these routes in the town	50	CIL	HCC, NHDC	2017 - 21
Transport: Improve Caldwell Lane junction Hitchin	Safety improvements	125.8	CIL	HCC, NHDC	2017 - 21
Transport: Investigation of vehicle speeds Hitchin	To determine whether traffic calming measures are required	154	CIL	HCC, NHDC	2017 - 21
Transport: Shared surface scheme for Hitchin town centre	3 roads (Hermitage Road, Brand Street and Bancroft) identified for partial/total space sharing	1100	CIL	HCC, NHDC	2017 - 26

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Car park real time information Hitchin	Matrix to identify available spaces	68	CIL	HCC, NHDC	2017 - 21
Transport: A1(M) J9 Letchworth Gate/A505 Letchworth	Signalised entries to the roundabout	800	Roads Investment Strategy/Growth Deal/CIL/s106	HCC, NHDC, Highways England	2022 - 26
Transport: A1(M) J8/A602 Letchworth	Signalised entries to the roundabout and associated work	800	Roads Investment Strategy/Growth Deal/CIL/s106	HCC, NHDC, Highways England	2022 - 26
Transport: Station Road/Royston Rd/Clothall Rd Baldock	Signal optimisation with mini roundabout	20	CIL	HCC, NHDC	2017 - 21
Transport: Promotion of bus shuttle to Lister Hospital from Letchworth and Baldock	Involves promotional campaign to increase awareness	20	CIL	HCC, NHDC, Bus Operators	2017 - 21
Transport: Letchworth Station forecourt improvements	Segregation of activities, increased cycle provision, improved crossings	500	CIL	HCC, NHDC, Network Rail	2017 - 21
Transport: Leys Avenue/Gernon Road/Town Centre signing Letchworth	Improving existing arrangements and enhancing traffic flows	405	CIL	HCC, NHDC	2017 - 21
Transport: Letchworth Gate link improvements Letchworth	Scheme to ease peak congestion, increase safety and improve pedestrian crossings	3850	S106/CIL, possibly Growth Deal	HCC, NHDC	2022 - 26

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Speed limit compliance Wilbury Road (west of Cowslip Hill) Letchworth	Improved road markings	3.5	CIL	HCC, NHDC	2017 - 21
Transport: Clothall Road Baldock	Promotion of safer routes to school	30	CIL	HCC, NHDC	2017 - 21
Transport: 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	CIL	HCC, NHDC	2017 - 21
Transport: Letchworth and Baldock Town Centre parking review	Supply and demand issues between commuters/residents, charging structures etc	100	CIL	HCC, NHDC	2017 - 21
Transport: Crossing north of railway station Royston	Pelican crossing proposed	80	CIL	HCC, NHDC	2017 - 21
Transport: Royston Town Centre	Three town centre enhancement schemes	468	CIL	HCC, NHDC	2017 - 21
Transport: Railway crossing improvements Royston	Improvements in crossing from Green Drift to South Close/Orchard Road	17.5	CIL	HCC, NHDC	2017 - 21
Transport: Completion of final phase of town-wide cycling network Royston	Various proposals to link work undertaken to date with southern half of Royston and A505	400	CIL	HCC, NHDC	2017 - 21
Transport: A505 N of Royston	Cycling improvements along and across the A 505	190	CIL	HCC, NHDC	2017 - 21

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Transport: Toucan crossing Newmarket Road Royston	New crossing facility	24	CIL	HCC, NHDC	2017 - 21
Transport: Bus infrastructure Royston	Improvements to bus infrastructure including bus stops throughout Royston	15	CIL	HCC, NHDC, Bus Operators	2017 - 21
Transport: Promotion and co-ordination of bus services including to outlying areas Royston	Aim would be to increase bus mode share	40	CIL	HCC, NHDC	2017 - 21
Transport: Enhanced Royston bus station	Short term enhancements pending potential longer terms redevelopment	150	CIL	HCC, NHDC	2017 - 21
Transport: Old North Road modifications Royston	Modifications of road from York Way roundabout to A505 roundabout	90	CIL	HCC, NHDC	2017 - 21
Transport: Traffic calming measures Royston	Green Drift, Tannery Drift and Newmarket Road area	60	CIL	HCC, NHDC	2017 - 21
Transport: Review town centre parking Royston	Signage, pricing, controls etc	20	CIL	HCC, NHDC	2017 - 21
Transport: Sustainable transport promotional activities Royston	All sustainable passenger transport modes	50	CIL	HCC, NHDC	2017 - 21
Transport – cycleways Royston	New cycleways associated with major new development (10.8km from the 7 largest schemes)	540	S106	HCC, NHDC	2022 - 31

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Education	6 new children's centres or equivalent nursery provision	2880	s106, CIL	Academy/Free School/other (HCC as last resort)	3 2022 – 26, 3 2027 - 31
Education	29fe of primary provision through expansion of existing schools together with new schools as appropriate	106960	s106, CIL	Academy/Free School/other (HCC as last resort)	5fe before 2021, 13fe 2022 – 26, 11fe 2027 - 31
Education	29fe of secondary schools through expansion of existing schools together with and 2 or possibly 3 new minimum 6fe schools	88900	S106,CIL	Academy/Free School/other (HCC as last resort)	5fe before 2021, 13fe 2022 – 26, 11fe 2027 - 31
Health	Accommodation (surgeries/clinics) for an additional 17 GPs	8950	s106, CIL	GP practices, reimbursed by NHS England	Accommodation for 3 by 2021, 7 in 2022 – 26, 7 in 2027 - 31
Health	Additional premises/facilities for Acute secondary care services	37500	s106, CIL	Healthcare providers incl community and foundation NHS Trusts	17 % of new provision by 2021, 44% in 2022 – 26, 39% in 2027 - 31
Health	Additional premises/facilities for Mental Health secondary care services	2920	s106, CIL	Healthcare providers incl community and foundation NHS Trusts	17 % of new provision by 2021, 44% in 2022 – 26, 39% in 2027 - 31
Health	Community secondary care services	3930	s106, CIL	Healthcare providers incl community and Foundation NHS Trusts	17 % of new provision by 2021, 44% in 2022 – 26, 39% in 2027 - 31

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Social Infrastructure	New Indoor Sports Hall provision – equivalent of 10 badminton courts	2895	NHDC, private finance	NHDC, private operators	2 court equivalents by 2021, 5 2022 – 26, 4 2027 - 31
Social Infrastructure	New swimming facilities – equivalent of 6.26 lanes (332.52 sq.m. of additional water space)	4965 (cost is for a 6 lane pool)	NHDC, private finance	NHDC, private operators	2022- 26
Social Infrastructure	3 new community centres	3000	CIL, s106	NHDC	3 in 2027 - 31
Social Infrastructure	Refurbishment of Royston Town Hall	650	CIL, s106	NHDC	2022 - 26
Social Infrastructure	General fund for the refurbishment/expansion of other community centres	3000	CIL, s106	NHDC	£0.5m by 2021, £1.3m 2022 – 26, £1.2m by 2027 - 31
Emergency Services	Safer Neighbourhood Team Base	150	CIL	Herts Constabulary/Police and Crime Commissioner	2022 - 26
Green Infrastructure	Improvements to 7 Churchyards and cemeteries	220	NHDC	NHDC	2017 - 21
Green Infrastructure	Improvements and enhancements (including improved accessibility) to 18 allotment sites	500	NHDC	NHDC	2017 - 21
Green Infrastructure	Renovations and improvements to 7 outdoor play sites	384	NHDC	NHDC	2017 - 21
Green Infrastructure	Improvements/new changing rooms/pavilions for 11 outdoor sports facilities	420	NHDC	NHDC	2017 - 21

Infrastructure Category	Infrastructure Item	Estimated cost of Delivery (£000)	Funding Sources	Delivery Partners	Timescale for Delivery
Green Infrastructure	Enhancement works to 18 town parks and gardens, neighbourhood parks, amenity greenspace and countryside parks	500	NHDC	NHDC	2017 - 21